

DEUTSCHE internationale Zeitschrift

für zeitgenössische Wissenschaft

Nº93
2024



DIZZW 2020

DEUTSCHE internationale Zeitschrift
für zeitgenössische Wissenschaft



DIZZW 2020

DEUTSCHE internationale Zeitschrift
für zeitgenössische Wissenschaft

ISSN (Print) 2701-8369

ISSN (Online) 2701-8377

**Deutsche internationale Zeitschrift
für zeitgenössische Wissenschaft**

• • •

№93 2024

**German International Journal
of Modern Science**

• • •

№93 2024

Deutsche internationale Zeitschrift für zeitgenössische Wissenschaft ist eine internationale Fachzeitschrift in deutscher, englischer und russischer Sprache.

Periodizität: 24 Ausgaben pro Jahr
Format - A4

Alle Artikel werden überprüft.
Freier Zugang zur elektronischen Version des Journals

German International Journal of Modern Science is an international, German/English/Russian/Ukrainian language, peer-reviewed journal.

Periodicity: 24 issues per year
Format - A4

All articles are reviewed.
Free access to the electronic version of journal.

- Edmund Holst (Salzburg) AT
- Michaela Meissner (Köln) DE
- Klara Amsel (Liège) BE
- Briana French (Cambridge) GB
- Joleen Parsons (Manchester) GB
- Dragomir Koev (Sofia) BG
- Stanislav Štěpánek (Praha) CZ
- Valeriya Kornilova (Kyiv) UA
- Dmitriy Aksenov (Lviv) UA
- Valentin Bragin (Moscow) RU
- Mirosław Bednarski (Warsaw) PL
- Daniela Villa (Florence) IT
- Mattia Molteni (Rome) IT
- Sylwia Krzemińska (Ljubljana) SI
- Käte Kraus (Vienna) AT
- Eleonora Lehmann (Berlin) DE
- Alexander Dressler (Marseille) FR
- Zdzisław Małecki (Warsaw) PL
- Adrián Borbély (Budapest) HU

- Edmund Holst (Salzburg) AT
- Michaela Meissner (Köln) DE
- Klara Amsel (Liège) BE
- Briana French (Cambridge) GB
- Joleen Parsons (Manchester) GB
- Dragomir Koev (Sofia) BG
- Stanislav Štěpánek (Praha) CZ
- Valeriya Kornilova (Kyiv) UA
- Dmitriy Aksenov (Lviv) UA
- Valentin Bragin (Moscow) RU
- Mirosław Bednarski (Warsaw) PL
- Daniela Villa (Florence) IT
- Mattia Molteni (Rome) IT
- Sylwia Krzemińska (Ljubljana) SI
- Käte Kraus (Vienna) AT
- Eleonora Lehmann (Berlin) DE
- Alexander Dressler (Marseille) FR
- Zdzisław Małecki (Warsaw) PL
- Adrián Borbély (Budapest) HU

Artmedia24

Anschrift: Industriestraße 8,74589 Satteldorf
Deutschland.

E-mail: info@dizzw.com

WWW: www.dizzw.com

Chefredakteur: Reinhardt Roth

Druck: Einzelfirma Artmedia24, Industriestraße
8,74589 Satteldorf Deutschland

Artmedia24

Address: Industriestrasse 8,74589 Satteldorf Germany.

E-mail: info@dizzw.com

WWW: www.dizzw.com

Editor in chief: Reinhardt Roth

Printing: Artmedia24, Industriestrasse 8,74589 Sat-
teldorf Germany.

Der Redaktionsausschuss der Zeitschrift ist nicht
verantwortlich für die veröffentlichten Materialien.

Für den Inhalt der Artikel sind die Autoren
verantwortlich

Die Meinung der Redaktion spiegelt nicht unbedingt
die Meinung der Autoren wider.

Bei Nachdrucken muss die Zeitschrift zitiert werden.

Das Material wird im eigenen Wortlaut des Autors
veröffentlicht.

Editorial board of journal is not responsible for the
materials published there.

Authors are responsible for the content of articles.

Opinion of editorial board may not coincide with the
opinion of authors.

In case of materials reprinting - link to journal is re-
quired.

Materials are publishing in author's edition.

Edition: № 93/2024 (November) – 93th

Passed in press in November 2024

Printed in November, 2024

Printing: Artmedia 24, Industriestrasse 8,
74589 Satteldorf, Germany.

© Artmedia24

© Deutsche internationale Zeitschrift für zeitgenössische Wissenschaft / German International Journal
of Modern Science

CONTENT

BIOLOGICAL SCIENCES

<i>Elshad Gurbanov, Sanubar Aslanova</i> GLOBAL WARMING, COP-29 AND AZERBAIJAN 5	<i>Shakhla Efendiyeva</i> ADAPTATION DEGREES OF HIGHER AQUATIC VEGETATION TO GLOBAL WARMING CONDITIONS 8
---	---

CHEMICAL SCIENCES

<i>Tausarova B.R., Alieva M.B., Rodionov A.M., Mugiy M.E., Turar A.A.</i> ACTUAL PROBLEMS OF IMPARTING FIRE-RETARDANT PROPERTIES TO INSULATING MATERIALS MADE OF NATURAL FIBERS..... 11
--

ECONOMIC SCIENCES

<i>Aliyeva Ruhangiz Tofik, Aliyev Farid Zaur</i> ASSESSMENT OF THE IMPACT OF FACILITIES CONSTRUCTED ON ENVIRONMENTAL POLLUTION... 14	<i>Vasilik Natalia</i> FORMATION OF A CREATIVE MANAGEMENT SYSTEM IN THE ORGANIZATION.....26
<i>Najafli Mustafa</i> STUDENTS' PERCEPTIONS ON CHALLENGES AND OPPORTUNITIES..... 17	

HISTORICAL SCIENCES

<i>Matiiv Y.V.</i> SOCIAL PROBLEMS AND STRATEGIES FOR THEIR SOLUTION IN THE VISION OF NON-PARLIAMENTARY POLITICAL PARTIES IN THE 2019 ELECTIONS 29

JURISPRUDENCE

<i>George Mirianashvili, Thea Tsamchkuashvili</i> ETHICS IN GEORGIAN PUBLIC SERVICE: EVOLUTION AND CONTEMPORARY CHALLENGES 33	AWARENESS ABOUT CONSUMER RIGHTS AMONG SCHOOL PUPILS IN TBILISI40
<i>Vakhtang Caraia, Tengiz Taktakishvili, Slava Petelava, Nino Sachaleli, Nino Kobalia</i>	<i>Zurab Aznaurashvili, Tamar Devdariani</i> ETHICAL STANDARDS AND JUDICIAL INDEPENDENCE: ENSURING INTEGRITY IN THE LEGAL PROFESSION....47

MATHEMATICAL SCIENCES

<i>Vasil Cvetkov</i> AVERAGES, ENTROPY AND OBSERVATIONS 52

PEDAGOGICAL SCIENCES

<i>Faizullaeva Nilufar</i> FEATURES OF INTERNATIONAL ACADEMIC MOBILITY IN MODERN CONDITIONS..... 58

PHILOLOGICAL SCIENCES

<i>Bogdan Andrei</i> MISSION OF WISDOM: APOPTHEGMATA IN LITERARY DEPICTIONS OF CROSS-CULTURAL ENGAGEMENT 61	<i>Guliyeva Lyudmila</i> FACTOR ANALYSIS OF RECENT YOUTH SOCIO- POLITICAL VOCABULARY65
--	--

POLITICAL SCIENCES

<i>Khatia Markozashvili</i> FACTORS HINDERING THE DEVELOPMENT OF CIVIL SOCIETY IN GEORGIA..... 68

PSYCHOLOGICAL SCIENCES

Kasım kızı Nurzat, Efilti Erkan

THE RESEARCH OF NEWLYWED COUPLES' PRE-MARITAL EXPECTATIONS AND THE FULFILLMENT OF THESE EXPECTATIONS DURING THE MARRIAGE PROCESS IN KYRGYZSTAN 73

Zakutbekova Sezim, Efilti Erkan

INVESTIGATION OF MARITAL COMPATIBILITY OF COUPLES IN KYRGYZSTAN ACCORDING TO THEIR DEMOGRAPHIC CHARACTERISTICS.....78

SOCIAL SCIENCES

Roma Fabijonavičiūtė – Genienė, Skaidrė

Račkauskienė, Dainora Jurgaitytė

MANIFESTATIONS OF PROFESSIONAL BURNOUT SYNDROME AMONG SOCIAL WORKERS WORKING WITH INDIVIDUALS WITH INTELLECTUAL DISABILITIES IN DAY ACTIVITY CENTERS..... 83

TECHNICAL SCIENCES

Berestovoi I.O.

ANALYSIS OF MASS AND DIMENSIONAL CHARACTERISTICS OF ULTRAVIOLET BALLAST WATER TREATMENT SYSTEM ELEMENTS..... 90

Murad Abdullayev

WEB DEVELOPMENT. FRONT-END PROGRAMMING.....94

BIOLOGICAL SCIENCES

GLOBAL WARMING, COP-29 AND AZERBAIJAN

Elshad Gurbanov¹
Sanubar Aslanova²

¹Baku State University

²Azerbaijan State Pedagogical University

[DOI: 10.5281/zenodo.14288511](https://doi.org/10.5281/zenodo.14288511)

Abstract

Global warming is one of the most important environmental problems of the modern era. The effects of climate change are observed in the form of global warming of the atmosphere, rising sea levels and an increase in natural disasters. In this context, various events are being held at the international level, and COP-29 (Conference of the Parties on Climate Change) is one of the main platforms of this process. Azerbaijan is also one of the countries affected by the effects of global warming and, while participating in international initiatives, is trying to formulate its own national strategy. The abstract analyzes these issues in detail and discusses Azerbaijan's position, contributions and challenges at COP-29. The role of the country and future strategies in ecological, economic and political contexts are also the main focus of this article.

Keywords: COP-29, global warming, climate change, Azerbaijan, sustainable development, environmental policy

One of the main challenges of the 21st century is ensuring ecological balance. This includes limiting the intensive exploitation of natural resources, oil, gas and coal production, giving priority to renewable energy sources, green and blue economy, efficient use of water resources, reducing carbon dioxide emissions, recycling and other issues.

Plants are the basis of the life of all living things on the planet, the organic world and living life began with plants. The plant world has the ability to directly use sunlight thanks to the unique process of photosynthesis, which creates the appearance of the Earth we observe. It is plants that provide the Earth with oxygen and thereby act as the driving force of evolution. They are a rich reserve of organic matter and a very valuable resource. The vegetation cover of each region is constantly changing as a result of the continuous complex influence of environmental factors of the territory. These changes occur depending on the physical and geographical conditions of the territory, global warming, and disruption of the ecological balance of the atmosphere.

The impact of global warming directly on flora, indirectly on human health, and on the living ecosystem as a whole is constantly in the focus of humanity.

As technology develops, global climate change is one of the main problems that concern florists and ecologists around the world. The scale of natural disasters resulting from anomalous climate change continues to increase from year to year. Due to the impact of global warming, long-term droughts and desertification occur in regions, the plant world completely disappears or decreases, and the ecological balance and energy balance on Earth are disrupted.

According to scientists, as a result of the complete melting of continental glaciers and the expansion of water from heat, the level of the oceans will increase by 70-80 centimeters compared to the present, coastal settlements, where millions of people currently live, will be flooded, which will change the annual

trajectories of cyclones and anticyclones and intensify climate change, thus leading to the extinction of many plant species.

The potential role of plants in saving the Earth from catastrophic climate change is known to mankind. However, as a result of some recent research conducted by world ecologists and florists, it has become clear that the plants that make up the Earth's vegetation cover are capable of absorbing more carbon dioxide released into the atmosphere as a result of human activity than previously thought. Researchers have determined that a properly constructed climate model used to determine the effects of global warming, taking into account some features of the photosynthesis process, predicts an increase in the absorption of carbon dioxide by plants by the end of the 21st century. For example, it is possible to determine how efficiently carbon dioxide can move in the leaf, how plants adapt to temperature changes, and how nutrients are distributed.

For many years, human activity has caused irreversible damage to the environment. A few years ago, humanity lived by the principle of "whatever happens after us". Fortunately, this trend has changed. Thus, the exploitation of ecosystem resources is limited to a level that does not harm the restoration of natural systems. The development of a green economy is direct evidence of this. A green economy is an economic development model that assumes a responsible attitude of people to natural resources. It is aimed at finding a reasonable compromise between increasing prosperity and protecting natural resources.

Developed countries are raising funds for financial assistance to developing countries to help them adapt and reduce the impact of climate change. Thus, everyone thinks that it is possible to save plant species through measures to reduce the impact of climate change on the world's flora.

In order to stop rapid global warming, tame extreme weather conditions, slow down the rate of melting glaciers and save the biosphere, selected

intelligent people must find a way out. Since vegetation is constantly changing as part of a living ecosystem, people must recognize plants, and experts must develop measures to protect and restore the flora of the areas they live in.

2024 is significant as Azerbaijan, a fossil fuel producer and exporter, will host the 29th session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP29). At this time, the leadership of the Republic of Azerbaijan has set itself the goal of demonstrating its strategy for taking serious measures on climate change. COP29 will be a global forum where important steps will be taken together to discuss and solve environmental problems. Baku will be the center of the world for two weeks, and the city will welcome approximately 70-80 thousand foreign guests. Hosting COP29 in Azerbaijan is, first of all, a recognition by the UN of Azerbaijan's fulfillment of its climate commitments. In addition, hosting COP29 in Azerbaijan signals recognition of political and economic stability in the country at the UN level. The decision to host COP29 in Baku also expresses global support for Azerbaijan's green energy policy. Accordingly, by the Decree of the President of the Republic of Azerbaijan Ilham Aliyev, 2024 was declared the "Year of Solidarity for a Green World" in Azerbaijan. Being an oil and gas country, Azerbaijan has currently identified the creation of green energy types and the transportation of green energy to world markets as a new priority direction of its energy policy. The export of electricity produced on the basis of renewable and green energy has led to the beginning of a new era in Azerbaijan's energy strategy. The implementation of the project in Azerbaijan will create broad opportunities for achieving achievements in the fields of ecology, economy, innovation and technology.

The political and economic advantages that COP29 can bring to Azerbaijan are significant in terms of strengthening the country's position in the regional and international arena. Within the framework of this event, Azerbaijan, by actively participating in the fight against global climate change, gains the opportunity to draw attention to the important problems facing the modern world.

On the political level, holding COP29 attracts the attention of Azerbaijani leaders and diplomatic missions, increasing the country's positive image in the international community. This process creates conditions for a wide discussion of Azerbaijan's environmental policy, energy efficiency and efficient management of resources.

From an economic point of view, organizing the conference helps to attract investment to the local economy and provide an opportunity for the development of the tourism sector. At the same time, COP29 serves the transfer of green technologies, the implementation of innovative projects and the expansion of the sphere of interest of foreign investors. As a result, Azerbaijan's role in global climate policy further strengthens its economy and international relations.

Global warming and climate change are among the most serious environmental problems facing humanity.

International conferences such as COP-29 are important in terms of organizing countries' joint fight against these problems and identifying specific measures. Azerbaijan, as an active participant in this process, is trying to contribute to global efforts. The country is taking important steps in the field of transition to renewable energy sources, reduction of carbon emissions and application of sustainable development principles to reduce the negative impacts of climate change. At the same time, it continues its efforts to fulfill its international obligations by solving economic and social challenges at the national level. Such activities can further strengthen Azerbaijan's role in global climate policy.

References

1. Dimeyeva, L. A., Sitpayeva, G. T., Sultanova, B. M., Ussen, K., & Islamgulova, A. F. (2015). High-altitude flora and vegetation of Kazakhstan and climate change impacts. *Climate change impacts on high-altitude ecosystems*, 1-48.
2. Isaev, A. P., Protopopov, A. V., Protopopova, V. V., Egorova, A. A., Timofeyev, P. A., Nikolaev, A. N., ... & Sleptsova, N. P. (2010). *Vegetation of Yakutia: elements of ecology and plant sociology. The Far North: plant biodiversity and ecology of Yakutia*, 143-260.
3. Bilichenko, I. N. (2020). Influence of forest fires on mountain-taiga geosystems. In *Environmental transformation and sustainable development in the Asian region* (pp. 80-80).
4. Эльшад, К., & Асланова, С. (2024). ИСТОРИЯ И ЗНАЧЕНИЕ ИЗУЧЕНИЯ ФИТОМЕЛИОРАЦИИ НЕФТЕЗАГРЯЗНЕННЫХ ЗЕМЕЛЬ В АЗЕРБАЙДЖАНЕ. *German International Journal of Modern Science/Deutsche Internationale Zeitschrift für Zeitgenössische Wissenschaft*, (80).
5. Basti, A., & Aslanova, F. (2024). THE RELATIVE DORMANCY OF NEWLY INTRODUCED PEACH CULTIVARS CHARACTERISTIC. *Annali d'Italia* №, 60, 10.
6. Qurbanov, E. M., & Cabbarov, M. T. (2017). *Geobotany*. Baku: Baku State University publishing house.
7. Qurbanov, E. M. (2009). *Medicinal plants*. Baku: Elm.
8. Azizi, A., Mahboob, M., Monib, A. W., Hassand, M. H., Sediqi, S., & Niazi, P. (2023). The Role of Plants in Human Health. *British Journal of Biology Studies*, 3(1), 08-12.
9. Qurbanov, E. M. (1996). *Plant world of Nakhichevanchay river basin*. Baku: Baku State University, 248.
10. Qurbanov, E., & Huseynova, H. (2022). New spreading areas of some species in the Botanicalgeographical regions of the middle part of the Caspian coast. *Acta Botanica Caucasica*. Published by Baku State University, Department of Botany and Plant Physiology. Volum, 1, 4-8.
11. Youssef, N., Markert, B., Qurbanov, E., Sevnic, H., & Wünschmann, S. (2014). Bioindication of trace metal pollution in the atmosphere of Baku city using *ligustrum japonicum*, *olea europea*, and

pyracantha coccinea leaves. Journal of Environmental Engineering and Landscape Management, 22(1), 14-20.

12. Abdallah, Y. N., & Mejnun, G. E. (2013). Change of The Morpho-Anatomical Structure of Leaves of Ligustrum japonicum And Olea europea Caused By Heavy Metal Pollution. Caspian Journal of Applied Sciences Research, 2(2).

13. Atamov, V. V., Cabbarov, M., & Gurbanov, E. (2006). The pytosociological characteristics of ecosystems of mountain of Talysh Region of Azerbaijan. Asian Journal of Plant Sciences, 5(5), 899-904.

14. Gurbanov, E., & Aslanova, S. (2024). AVERAGE ANNUAL PRODUCTIVITY OF THE THYMUS-ETALUM-FESTUCOSUM FORMATION, DISTRIBUTED IN SUMMER PASTURE FIELD NO. 8 "TURKESOVA"(AZERBAIJAN). Norwegian Journal of Development of the International Science, 126.

15. Kurbanov, E., Aslanova, S., & Ibragimov, S. (2023). Types of Hole-Meadow and Wetlands Vegetation in Oil-contaminated Soils Siyazan District (Azerbaijan). Bulletin of Science and Practice.

16. Gurbanov, E., Aslanova, S., & Ibrahimov, S. (2023). The Alhagieto-Salsoletum-Artemisiosum formation group at the SiyazanNeft NQCI mine. AS-Proceedings, 1(3), 17.

17. Эльшад, К., & Санубар, А. (2024). ЭКОЛОГИЧЕСКАЯ КЛАССИФИКАЦИЯ ПОЧВЕННО-РАСТИТЕЛЬНЫХ ТЕРРИТОРИЙ, ЗАГРЯЗНЕННЫХ МИНЕРАЛИЗОВАННЫМИ ВОДАМИ НА АПСХЕРОНСКОМ ПОЛУОСТРОВЕ. German International Journal of Modern Science/Deutsche Internationale Zeitschrift für Zeitgenössische Wissenschaft, (75).

18. Gurbanov, E., & Aslanova, S. (2023). Phytocenoses found in grassy mountain-meadow soils in the subalpine zone of Talish.

19. Gurbanov, E. M., Sh, A. S., & Asadova, B. Q. (2023). PHYTOECOLOGICAL RESEARCH ON OIL-CONTAMINATED SOILS OF "SHIRVANNEFT" OIL AND GAS DEVELOPMENT AREA AND ITS RECULTIVATION (AZERBAIJAN). Труды Мордовского государственного природного заповедника им. П. Смиловича, (33), 172-183.

20. Qurbanov, E., Aslanova, S., & Ibrahimov, Ş. (2024). ŞİRVAN RAYONUNUN NEFTLƏ ÇİRKƏNMİŞ TORPAQLARINDA RAST GƏLİNƏN YARIMSƏHRA BİTKİLİYİNİN FİTOKOLOJİ XARAKTERİSTİKASI. Nature & Science/Təbiət və Elm, 6(1).

21. Гурбанов, Э., Асланов, С., & Сафарова, А. (2024). КЛИМАТИЧЕСКИЕ УСЛОВИЯ ГОРНОЙ ЧАСТИ ТАЛЫША. German International Journal of Modern Science/Deutsche Internationale Zeitschrift für Zeitgenössische Wissenschaft, (90).

22. Aslanova, S. (2024). Subalpine Meadow Vegetation of Talish Highlands of Azerbaijan.

23. GURBANOV, E., & RZAYEVA, A. EVALUATION OF DECORATIVE PROPERTIES OF SOME CONIFEROUS PLANTS INTRODUCED TO ABSHERON PENINSULA.

24. Yusifova, A., Asadova, B., & Aslanova, S. (2024). PLANTS, HUMAN HEALTH AND CIVILIZATION. Norwegian Journal of Development of the International Science, 136.

25. Асланова, Ф. (2024). АГРОБИОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА РАЗЛИЧНЫХ СОРТОВ КУКУРУЗЫ, ВЫРАЩИВАЕМЫХ В БОГАРНЫХ УСЛОВИЯХ ЗАКАТАЛЫ, И РОЛЬ В СЕЛЕКЦИИ. <https://www.bulletennauki.ru>, 102.

ADAPTATION DEGREES OF HIGHER AQUATIC VEGETATION TO GLOBAL WARMING CONDITIONS

Shakhla Efendiyeva

Baku State University, Faculty of Biology

[DOI: 10.5281/zenodo.14288538](https://doi.org/10.5281/zenodo.14288538)

Abstract

Higher aquatic plants are essential to aquatic ecosystems, playing a pivotal role in the production of organic matter and oxygen, as well as the stabilization of aquatic and wetland environments. These plants exhibit remarkable adaptive mechanisms, including structural, physiological, and reproductive changes, enabling them to thrive under extreme environmental conditions. The Absheron Peninsula, with its arid climate, fluctuating precipitation, and significant anthropogenic pressures, serves as a critical study area for understanding these adaptations. Key mechanisms include dimorphism, allowing plants to transition between aquatic and terrestrial forms, and specialized gas exchange systems that compensate for reduced sunlight in water. However, anthropogenic activities, particularly eutrophication caused by excessive nutrient input, present significant challenges. This leads to water blooming, oxygen depletion, and biodiversity loss, further destabilizing ecosystems. This study highlights the resilience of higher aquatic vegetation and underscores the urgent need for conservation measures to mitigate eutrophication and maintain ecological balance in aquatic ecosystems.

Keywords: Dimorphism, bioproductivity, eutrophication, aquatic ecosystems, adaptation

Introduction

Aquatic ecosystems play a crucial role in maintaining biodiversity and ensuring the stability of natural processes. Higher aquatic plants, as primary producers, are key to these ecosystems, influencing water quality, nutrient cycling, and the habitat conditions for numerous organisms. Their extensive surface area increases phase interfaces, making them essential in ecological and hydrobiological research.

The Absheron Peninsula, an ecologically sensitive region of Azerbaijan, faces severe climatic and anthropogenic challenges, including fluctuating precipitation, extreme temperatures, and significant anthropogenic waste discharge. This region provides a valuable model for understanding how higher aquatic plants adapt to such adverse conditions and maintain their ecological functions.

Materials and Methods

This study was conducted during the summer of 2023 on three lakes of the Absheron Peninsula: Bulbula, Ganlygol, and Khojagasan. These lakes were selected due to their ecological significance and their exposure to various climatic and anthropogenic pressures.

Field Investigations

Water Quality Parameters: Measurements of temperature, salinity, and water depth were taken using standard field instruments.

Vegetation Observations: Morphological traits of aquatic plants were recorded, with special attention to submerged and floating species.

Species Identification

Key species, including *Batrachium rionii*, *Sagittaria sagittifolia*, *Ceratophyllum demersum*, *Nymphaea alba*, *Potamogeton pectinatus*, and others, were identified using standard botanical keys and taxonomic literature.

Chemical Analysis

Biogenic components, such as nitrites, nitrates, ammonium, and phosphates, were measured using

spectrophotometric methods to assess nutrient concentrations and eutrophication levels.

Eutrophication Assessment

Water bloom intensity, the presence of toxic substances, and oxygen depletion were monitored to evaluate the ecological health of the lakes.

Comparative Analysis

Historical data on aquatic vegetation and water quality were reviewed to identify long-term changes and trends in ecosystem dynamics.

Results and Discussion

Adaptation Mechanisms of Higher Aquatic Plants

Higher aquatic plants demonstrate a range of structural, physiological, and reproductive adaptations that enable them to survive and thrive in aquatic environments:

1. Reproductive Strategies

1.1. Sexual reproduction is often suppressed in response to unstable water temperatures and strong winds, leading to a dominance of vegetative propagation. This ensures population stability in extreme conditions.

2. Structural Adaptations

2.1. The reduction or complete absence of woody tissues in vascular bundles is compensated by the development of aerenchyma, which facilitates buoyancy and efficient gas exchange.

2.2. Morphological flexibility allows stems and leaves to withstand strong currents and fluctuating water levels.

3. Dimorphism

3.1. Dimorphic plants such as *Batrachium rionii*, *Sagittaria sagittifolia*, and *Nymphaea alba* can transition between aquatic and terrestrial forms, enabling survival during periods of water body desiccation.

3.2. Submerged leaves often transform into floating leaves, enhancing photosynthetic efficiency and gas exchange.

4. Gas Exchange and Photosynthesis

4.1. In submerged plants, gas exchange occurs through the entire surface of the leaf due to the absence

of stomata. Floating plants, however, have stomata on the upper side of their leaves, optimizing gas exchange.

4.2. Chlorophyll distribution in epidermal cells enhances light absorption, compensating for the reduced sunlight penetration in water.

5. Root Adaptations

5.1. Roots serve different functions based on species: in *Lemna*, they act as stabilizers, while in *Nymphaea*, they store nutrients and anchor the plant to the substrate.

Eutrophication and Its Impacts

Observations from the Absheron Peninsula

The lakes studied (Bulbula, Ganlygol, and Khojagasan) demonstrate significant eutrophication levels due to increasing anthropogenic pressures. Key observations include:

1. **Water Blooming:** Excessive nutrient input, particularly nitrates and phosphates, has led to rapid phytoplankton growth, causing water blooming.

2. **Degradation of Water Quality:** Toxic substances, unpleasant odors, and reduced oxygen levels were recorded during water blooming events.

3. **Hydroflora and Hydrofauna Decline:** The decay of aquatic vegetation and fauna due to oxygen depletion contributes to secondary contamination.

4. **Role of Sediments:** Organic matter that fails to decompose in the water column settles into sediments, where it undergoes bacterial decomposition, further exacerbating eutrophication.

Long-term Impacts

Eutrophication disrupts the natural balance of aquatic ecosystems, leading to:

Reduced biodiversity due to the loss of sensitive aquatic species.

Altered nutrient cycling, impacting ecosystem productivity and resilience.

Increased vulnerability to climate change due to weakened ecological functions.

Conclusion

Higher aquatic vegetation demonstrates remarkable adaptability to extreme environmental conditions, such as those found on the Absheron Peninsula. Their physiological and morphological traits enable them to maintain ecological stability despite significant climatic and anthropogenic pressures. However, eutrophication poses a severe threat, diminishing their ecological roles and exacerbating water quality issues.

To mitigate these impacts, targeted conservation measures, including reducing nutrient inputs and protecting aquatic habitats, are essential. Sustainable management practices must prioritize maintaining the ecological integrity of water bodies on the Absheron Peninsula.

References

- Andreev, A. N., & Bukharitsin, P. I. (2010). Centennial fluctuations of solar activity and expected climate changes in the North Caspian region. *Geology, Geography and Global Energy*, 1(36), 79–87.
- Bonov, A. D. (1969). Solar data. (2), 93–95.
- Bukharitsin, P. I., & Andreev, A. N. (2006). Rhythms of solar activity and expected extreme cli-

matic events in the North Caspian region for the period 2007–2017. In *Proceedings of the International Scientific Conference on Extreme Hydrological Events in the Aral-Caspian Region* (pp. 137–143). Moscow, Russia.

4. Gnevyshev, M. N. (1966). On the 11-year cycle of solar activity. *UFN*, 90(2).

5. Gurbanov, E., & Rzayeva, A. (2022). Evaluation of decorative properties of some coniferous plants introduced to Absheron Peninsula. *Acta Botanica Caucasica*, 1(2), 3–7.

6. Gurbanov, E., Huseynova, H., Mammadova, Z., & Razaeva, A. (2024). Endemic plants of the Caspian Coast flora (in Azerbaijani territory). *German International Journal of Modern Science*, (91).

7. Gurbanov, E., Ibragimov, S., & Huseynova, K. (2022). Plant ecological research for the bioremediation from pollution by oil and oil products in Absheron Peninsula (Azerbaijan). *Bulletin of Science and Practice*.

8. Gurbanov, E., Huseynova, H. Z., & Ibrahimov, Sh. I. (2020). Methods for determining soil contamination by oil and petroleum products and indicator plants in the north of Caspian Sea. *International Journal of Agriculture and Biological Sciences*, 4, 84–89.

9. Gurbanov, E. M. (2004). Flora and vegetation of Atropatena province (within Azerbaijan Republic). Autoreferat of dissertation for the degree of Doctor of Biological Sciences. Baku, Azerbaijan.

10. Gurbanov, E. M., & Huseynova, H. Z. (2021). Phytosenological structure of meadow plants spread in the Samur-Shabran plain. In *Behavioral Theories and Practices of Russian Science* (pp. 12–17). Saint Petersburg, Russia.

11. Gurbanov, E. M., & Huseynova, H. Z. (2021). Research and protection of the coastal psammophyte-desert vegetation of Absheron National Park. *Bulletin of Science and Practice*, 7(1), 49–54.

12. Gurbanov, E. M., & Huseynova, H. Z. (2022). New spreading areas of some species in the botanical-geographical regions of the middle part of the Caspian coast. *Acta Botanica Caucasica*, 1(1), 4–8.

13. Gurbanov, E. M., & Huseynova, H. Z. (2023). New distribution areas of some species on Absheron Botanical-Geographical Regions of the Caspian Coast. In *Actual Problems of Contemporary Natural and Economic Sciences* (pp. 13–15). Ganja, Azerbaijan.

14. Gurbanov, E. M., & Huseynova, H. Z. (2023). The rare and endangered plants included in the "Red Book of Azerbaijan" in the flora of the Caspian coast. In *I International Conference* (pp. 265–267). Andijan, Uzbekistan.

15. Hassanpanah, D., Gurbanov, E., Gadimov, A., & Shahriari, R. (2007). Reduction of nitrate accumulation in potato by use of potassium humate for human safety. *Iranian Biomedical Journal*, 11(1), 461.

16. Huseynova, H. Z. (2022). Vegetation of the southern part of the Caspian Coast and its nutritional value. *Biosystems Diversity*, 30(3).

17. Huseynova, H. Z. (2023). New distribution areas of some species of plants on the southern part of the Caspian coast. *Biosystems Diversity*, 31(1), 123–130. <https://doi.org/10.15421/012313>

18. Ismailov, N. M. (2006). *Globalistics and Ecology of Azerbaijan*. Elm.

CHEMICAL SCIENCES

ACTUAL PROBLEMS OF IMPARTING FIRE-RETARDANT PROPERTIES TO INSULATING MATERIALS MADE OF NATURAL FIBERS

Tausarova B.R.

d. of c.s. professor

*Almaty Technological University
Kazakhstan, Almaty, Tole bi street, 100*

Alieva M.B.

Ph.D. Asst. Prof.

*Almaty Technological University
Kazakhstan, Almaty, Tole bi street, 100*

Rodionov A.M.

Master's student

*Almaty Technological University
Kazakhstan, Almaty, Tole bi street, 100*

Mugiyn M.E.

Master's student

*Almaty Technological University
Kazakhstan, Almaty, Tole bi street, 100*

Turar A.A.

Master's student

*Almaty Technological University
Kazakhstan, Almaty, Tole bi street, 100*

[DOI: 10.5281/zenodo.14288558](https://doi.org/10.5281/zenodo.14288558)

Abstract

At the moment, there is an increasing problem in the world with the creation of fire-safe building materials. Most fires occur instantly, due to the use of highly flammable insulation material from refined petroleum products. Polymer materials without flame retardants burn well, as a result of which the flame covers the walls of buildings. Industrial flame retardants based on chlorine and fluorine are poisonous. Toxic gases are released during the combustion of this material.

This article discusses the issue of conferring flame retardant properties with environmentally friendly flame retardants. Such flame retardants can be based on nitrogen and phosphorus. At the same time, getting into the environment, they do not cause harm. Such substances are capable of decomposition under real conditions. They also do not emit poison when burning and are safe for humans.

Keywords: Flame retardant, anti-fire insulation material, natural fiber, fiber insulation, anti-fire properties.

The problem of the safety of thermal insulation materials. Insulation materials are used everywhere. But the materials used have disadvantages - a great fire hazard and a tendency to catch fire. In 2021 year, 12,256 fires occurred in the Republic of Kazakhstan, as a result of which 413 people died, damage amounted to more than 9 billion tenge. Most thermal insulation is combustible materials, which provokes the risk of fire. [1].

Flame Retardants – what is it. Flame retardants are additional substances that reduce the flammability of materials. They provide self-attenuation. [2][4]. Principles of chemical action of flame retardants. [2][3]:

1. When the temperature rises, flame retardants decompose into non-flammable gas and other substances, while heat from the burning material is absorbed. This will lower the temperature and reduce the amount of oxygen.

2. Some flame retardants are charred, creating incombustible gases and coke, which forms a thermal insulation layer on the surface.

3. Other flame retardants work as inhibitors of the oxidation of organic substances.

Biological flame retardants. Flame retardants can be created from natural raw materials – biological flame retardants. In the studies of these authors. [5][6], starch, chitosan and cyclodextrin were used to create safe insulation materials.

1. Starch, a representative of biological flame retardants. It promotes self-damping during gorenje. [7].

2. Tannic acid is used in the processing of porous materials, it is characterized by cheapness and accessibility. Such compounds create a carbon coke layer. Which in turn stops the access of oxygen and the access of heat. At the same time, iron and nickel catalyze this process. A weak gas is released and the oxidation process stops. [7].

3. Cyclodextrin is not an expensive bio-flame retardant. It also forms a carbon protective layer, ammonia, and water vapor, which do not support combustion. [7].

4. Phytic acid from the same class of flame retardants. It contains 28% atomic phosphorus in the form of phosphate groups. Metals work as a catalyst. [7].

5. Chitosan is used in a mixture of flame retardants, with the addition of aluminum and hypophosphite. Hydroxyl groups and nitrogen form ammonia, thereby reducing the concentration of oxygen in the air mixture. [7].

6. Lignin with natural origin has flame retardant properties. Its interaction with flame retardants during combustion creates a layer of silicon and carbon. [8].

7. Polydopamine is a flame retardant with adhesive properties. It is environmentally friendly. A catalyst in the form of nickel and iron contributes to this process. [9-10].

Bulging flame retardants. The swelling flame retardant works as follows. A porous coke layer with a density of is formed on the surface $3 \times 10^{-3} - 3 \times 10^{-2}$ g/cm³, while the volume increases quite strongly. The thermal conductivity of such an insulating layer is commensurate with the thermal conductivity of the air. At the same time, the heat from the fire does not fit the material. Heat transfer is reduced by 100 times. Also, the oxygen of the air cannot reach the material. When such a porous layer is formed, endothermic reactions occur, which in turn take away heat, thereby significantly reducing the temperature of the medium. At a temperature of 210 °C, ammonium polyphosphate is phosphorylated to form essential phosphorus groups. [11]. The authors studied the effectiveness of a swelling flame retardant on textiles using a solution of carbamide, pentaerythritol and ammonium phosphate. Such flame-retardant coatings are quite thin, this does not affect the size of the processed material. [12].

Hemp fiber is an excellent material for insulation. The cannabis plant is common in a wide variety of countries. The authors of the study added hemp fiber to drywall slabs. Further, they came to the conclusion that by adding only 2% hemp fiber, it is possible to reduce the density and increase the thermal insulation properties to a significant extent. [13]. The authors of the study tested 11 samples with a thickness of 50 mm and an area of 100×100 mm, which were prepared under conditions of 50% humidity and 23 °C. insulation for thermal conductivity and fire resistance, having a density of 40 kg/m³. Anti-fire characteristics were determined using the LST EN ISO 11925-2 method. The flammability of the material when it enters the flame was investigated. Flame retardants Apyrol BKW and Flovan CGN applied to the samples by immersion and spraying were used for the study. To prevent the ignition of hemp fiber, 45 g/l of flame retardant is required. The mass of the sample should not change after ignition, which confirms the absence of combustion. The added poly lactide fiber melts, filling the space, thereby reducing the rate of ignition. The vapor permeability of insulation samples was studied using the LST EN 12086 C method. To increase the water-repellent properties, the hydrophobic agent Beiphob FR with a concentration of 1.25 g/l was used. The vapor permeability coefficient of the untreated sample was 1.72, and after treatment - 1.8. [14]. With the help of FOX 304 equipment, a decrease in thermal conductivity by 3.8% was investigated when adding 11% poly lactide to hemp fiber. Also, the thermal conductivity decreased by 4.4% with the addition of 15% poly lactide. [15]. The authors'

study compared the possibilities of rotting and the use of hemp shavings and fiber insulation in construction. Hemp fibers can be produced in three stages: rolling, crushing into fibers and grinding to a fiber length of 20-30 mm. The binding component in the authors' study was corn starch. It is safe, but hygroscopic, and requires hydrophobization. The hydrophobic agent Beiphob FR was used for this purpose. The samples were formed thermally at 130 °C and rolled into rolls. Samples with 11 and 15% poly lactide were obtained with densities of 40 and 100 kg/m³. Samples from hemp shavings were produced at 160°C. The properties of hemp insulation depend on the microscopic structure of the bonds. It was examined using a scanning electron microscope. Poly lactide fills the voids in the fibers during heat treatment by gluing them together. An increase in density by 2 times increases thermal conductivity by 4%. Mechanical characteristics show the highest strength with 15% poly lactide. The shavings insulation showed the highest strength characteristics, which is important for use in construction. Analyses have shown that treatment with a hydrophobic reagent significantly reduces water absorption. At a concentration of 0.75 g/l, water absorption decreases by 2 times, and at 1.25 g/l - by 20 times. For hemp shavings, the improvements were less noticeable: when using 16 g/l, water absorption decreased by 5.7 times, but unchanged at 8 g/l. [16][17].

Flame retardant thermal insulation materials are created from renewable sources. Thermal insulation materials can also be produced from renewable materials such as rice husks and wheat straw. This significantly reduces their cost, since raw materials are a waste of agricultural products. They will be completely environmentally friendly. [18]. The use of geopolymer glue in their production improves their properties, the ignition temperature increases. Geopolymer glue is a non-organic, non-flammable binder, provides a protective film on the surface of the fibers, which increases the fire resistance of the material. [19][21].

The use of silicon compounds to create refractory materials. The authors investigated the insulation made of porous vermiculite and liquid glass. The manufacturing process involves adding a modifier and a foaming agent to the liquid glass, after which the mixture is whipped in a mixer to stabilize the foam. Then vermiculite is added, and the solution is poured into plastic molds for solidification. The finished samples are kept for 3-28 days for subsequent tests. Granules of expanded vermiculite (brown or yellowish mica) are used as a filler, which increases in volume when moisture is absorbed. [22]. Inorganic flame retardant made of silicon dioxide does not harm the environment like halogens. But such a flame retardant is not suitable for polymers. Nano particles of silicon dioxide have a large surface area. And the binders are liquid glass, it binds the flame retardant particles to the processed material. [23].

References

1. Statistics of fires in the Republic of Kazakhstan for 2021 year: <https://www.zakon.kz/6013388-za-2021-god-v-pozharakh-pogibli-413-kazakhstanstsev-mchs.html>

2. Flame retardants: <https://fireman.club/in-seklodepia/antipiren/>
3. GOST 12.1.033-81 System of occupational safety standards. Fire safety. Terms and definitions
4. GOST 16381-77 Materials and products for thermal insulation construction. Classification and general technical requirements
5. M. Li, H. Zhao, J. Cheng, T. Wang, T. Fu, A. Zhang, Y. Wang; An Effective Green Porous Structural Adhesive for Thermal Insulating, Flame-Retardant, and Smoke-Suppressant Expandable Polystyrene Foam; 2020 vol. 10
6. S. Michałowski, E. Hebda, K. Pielichowski; Thermal stability and flammability of polyurethane foams chemically reinforced with POSS; (2017) 130:155–163 DOI 10.1007/s10973-017-6391-4
7. M. Wang, G. Yin, Y. Yang, W. Fu, J. Luis, D. Palencia, J. Zhao, N. Wang, Y. Jiang, D. Wang; Bio-based flame retardants to polymers: A review; 2022.07.003 DOI:10.1016/j.aiepr.2022.07.003
8. L. Gao, G. Zheng, Y. Zhou, L. Hu, G. Feng; Improved mechanical property, thermal performance, flame retardancy and fire behavior of lignin-based rigid polyurethane foam nanocomposite; 2015 vol. 15 DOI 10.1007/s10973-015-4434-2
9. C. Zheng, D. Li, M. Ek; Improving fire retardancy of cellulosic thermal insulating materials by coating with bio-based fire retardants; 2019; 34(1): 96–106
10. P. Acun, J. Zhang, G. Yin, X. Liu, D. Wang; Bio-based rigid polyurethane foam from castor oil with excellent flame retardancy and high insulation capacity via cooperation with carbon-based materials; 2020 vol. 18
11. R. N. Sabirzyanova, I. V. Krasina The use of a swelling flame retardant to make materials fire resistant. Bulletin of Kazan Technological University – 2014. Volume: 17, Number: 19, Pages: 140-142 UDC 677.014.27
12. S.V. Afanasyev, V.M. Balakin; Flame retardants based on phosphorus-containing compounds and aminoaldehyde resins 2014 16, No.1(6), UDC 614.841.411: 667.637
13. M. Charai, H. Sghouri, A. Mezrhab, M. Karkri., Thermal insulation potential of non-industrial hemp (Moroccan cannabis sativa L.) fibers for green plaster-based building materials., Journal of Cleaner Production 2021 Volume 292, 126064
14. R. Stapulioniene, R. Tupciauskas, S. Vaitkus, S. Vejelis; Development and investigation of thermal insulation from hemp-poly lactide fibres, Engineering Structures and Technologies, 2016: 8:1, 23-30, DOI: 10.3846/2029882X.2016.1158127
15. A. Kremensas, R. Stapulionienė, S. Vaitkus, A. Kairytė., Investigations on Physical-mechanical Properties of Effective Thermal Insulation Materials from Fibrous Hemp., Procedia Engineering 2017 Volume 172, Pages 586-594
16. B. Gaujena, V. Agapovs, A. Borodinecs, K. Strelets; Analysis of Thermal Parameters of Hemp Fiber Insulation; 2018 vol. 251
17. S. Pochwała, D. Makiola, S. Anweiler, M. Böhm; The Heat Conductivity Properties of Hemp-Lime Composite Material Used in Single-Family Buildings; 2020 vol. 14
18. S. Zou, H. Li, L. Liu, S. Wang, X. Zhang, G. Zhang; Experimental study on fire resistance improvement of wheat straw composite insulation materials for buildings; 2019.18.037; DOI:10.11975/j.issn.1002-6819.2019.18.037
19. S. Michałowski, K. Pielichowski; 1,2-Propanediolizobutyl POSS as a co-flame retardant for rigid polyurethane foams; (2018) 134:1351–1358
20. M.F. Villena, C.E. Ferrandez-Garcia, T.G. Ortuño, A.F. Garcia, M. T. Ferrandez-Garcia; Analysis of the Thermal Insulation and Fire-Resistance Capacity of Particleboards Made from Vine (*Vitis vinifera* L.) Prunings; 2020 vol. 11
21. Y. Huang, S. Jiang, R. Liang, P. Sun, Y. Hai, L. Zhang; Thermal-triggered insulating fireproof layers: a novel fire-extinguishing MXene composites coating; 2019 vol. 45 S1385-8947(19)33036-0
22. I. N. Tikhomirova, A. V. Makarov, and Zin Min Htet; Thermal insulation materials based on expanded vermiculite and foamed liquid glass; 2020 Vol. 61, No. 4; DOI 10.1007/s11148-020-00501-4
23. X. Qiu, X. Wan, Z. Wang, Z. Li, J. Li, X. Li, Z. Zhang., A simple and universal strategy for construction and application of silica-based flame-retardant nanostructure., Composites Part B: Engineering 2022 Volume 238, 109887

ECONOMIC SCIENCES

ASSESSMENT OF THE IMPACT OF FACILITIES CONSTRUCTED ON ENVIRONMENTAL POLLUTION

Aliyeva Ruhangiz Tofik

*Azerbaijan University of Architecture and Construction
Doctor of Philosophy in Economics, Associate Professor*

ORCID ID 0000-0002-5214-006X

Aliyev Farid Zaur

Siegen university Germany

Azerbaijan State Economic University

ORCID ID 0009-0003-1190-6991

[DOI: 10.5281/zenodo.14288586](https://doi.org/10.5281/zenodo.14288586)

ОЦЕНКА ВОЗДЕЙСТВИЯ СТРОЯЩИХСЯ ОБЪЕКТОВ НА ЗАГРЯЗНЕНИЕ ОКРУЖАЮЩЕЙ СРЕДЫ

Алиева Рухангиз Тофик

Азербайджанский университет архитектуры и строительства

Доктор философии по экономике, доцент

ORCID ID 0000-0002-5214-006X

Алиев Фарид Заур

Университет Зигена Германия

Азербайджанский государственный экономический университет

ORCID ID 0009-0003-1190-6991

Abstract

In modern conditions, construction sites around the world have a significant impact on the environment both locally and globally. Every stage of the construction process has a noticeable impact on the environment. This includes the extraction of materials, their transportation from different parts of the world to the construction site, the construction process itself, and waste disposal at the end of construction. In a rapidly evolving global economy, it is critical to understand how projects under construction impact the environment and how this impact can be measured and reduced in the future. This article describes the impact of construction projects on the environment and what measures are needed to reduce this impact.

Аннотация

В современных условиях объекты строительного сектора во всем мире оказывают значительное воздействие на окружающую среду как на местном, так и на глобальном уровне. Каждый этап строительного процесса оказывает заметное воздействие на окружающую среду. Это и добыча материалов, и их транспортировка из разных уголков мира на строительную площадку, и сам процесс строительства, и утилизация отходов по окончании строительства. В условиях быстро развивающейся мировой экономики крайне важно понимать, как строящиеся объекты влияют на окружающую среду и как это влияние можно измерить и уменьшить в будущем. В данной статье описывается воздействие строительных объектов на окружающую среду и то, какие необходимы мероприятия для снижением этого воздействия.

Keywords: construction, object, environment, ecology, factors, building materials.

Ключевые слова: строительство, объект, окружающая среда, экология, факторы, строительные материалы.

In modern conditions, construction is one of the most important sectors of the economy. In addition to the construction of residential buildings, which provide housing for a huge number of the population, it includes the construction of the infrastructure of settlements, the laying of various types of communications, the increase in industrial, agricultural and military facilities, as well as water and hydraulic structures. Construction and related industrial enterprises have a direct impact on the surrounding ecosystem, and this impact is dramatically increasing. Any construction project requires a large amount of mineral raw materials, such as wood, crushed stone, stone, clay and sand. In this regard,

large-scale deforestation and open-pit mining are occurring all over the world, which has an extremely negative impact on the environment. As a result of mining, air and water bodies are polluted, many plants and animals die, and biological and geological ecosystems are disrupted. Active environmental pollution occurs during the processing of resources at industrial enterprises involved in the production of building materials. [5 p.160].

During the production of building materials, a large amount of waste is generated, a large amount of pollutants dust, soot, and gases are released. The construction materials enterprises themselves occupy a

large area, and as a result of construction work, its natural environment is destroyed. The development of construction sites, including the destruction of vegetation and soil cover, causes destructive changes in existing ecosystems. This is because in extreme environmental conditions, recovery can take decades to centuries, and in some cases may never fully recover. In addition to water and air pollution, soil destruction and vegetation destruction, construction work can lead to changes or destruction of seasonal migration routes of animals and fish. The nature of the relationship between the environment and future objects is determined at the building design stage. [4].

When constructing real estate at a certain stage, it is important to take into account the environmental feasibility of construction and possible environmental risks. Designing a construction project without taking into account environmental requirements will subsequently lead to an increase in financial costs for restoring the environment damaged as a result of construction. In developed Western countries, building using local natural building materials and green building using processes and facilities with minimal environmental impact are becoming increasingly popular. In Azerbaijan, “green” construction is just beginning to develop, so many measures for the interaction of construction projects and processes with the surrounding natural ecosystem are advisory in nature. However, for these recommendations to be of real benefit, they must be included in professional regulations and developed with the input of a variety of building and environmental experts. [7 p.52].

Many scientists have made a huge contribution to the study of problems of assessing the impact of objects under construction on the environment [7,8,10]. The results of these scientific studies make it possible to examine in detail the sources of environmental pollution, identify factors and assess the economic damage from urban pollution and methods for its compensation.

At each level of construction of the facility, one of the basic environmental requirements must be observed - the preservation of natural relief and vegetation cover. Therefore, the main criteria for assessing the environmental situation in the development area are: taking into account environmental components; taking into account the health status of the population; state of change in the natural environment, including the natural ecosystem. As a result of the study, it was established that when planning and development projects, environmental factors can be considered in two aspects: 1) creating comfortable conditions for the life of people in the city;

2) regulation of the condition, protection and environmental safety of the environment. When developing construction design documentation, it is only necessary to justify the planned economic or other activities of the future construction site. Therefore, at the investment justification stage, the goal of constructing a facility is to show the possibility of its implementation taking into account certain environmental problems associated with both the regional characteristics of the territory.

It should be noted that when developing the “Environmental Protection” section of the design documentation for a construction project, the following data is taken into account:

1. Brief information about the designed object
2. Protection and rational use of land resources
3. Protection of the air basin in the area where the facility is located from pollution
4. Protection of surface and groundwater from depletion and pollution
5. Environmental protection during storage (disposal) of industrial waste
6. Protection of flora and fauna
7. Forecast of changes in the state of the environment under the influence of the designed facility.

Based on the assessment of these data, an environmental justification for the construction project is given.

The impact of a facility under construction on the environment occurs both during the construction period itself, since it requires a sufficient amount of raw materials, building materials, energy, water and other resources, and during the operation of the constructed facility.

The main factors polluting the environment during the construction phase include:

1. Increase in the amount of construction waste, air pollution during the organization of a construction site
2. Pollution of surface runoff, soil erosion as a result of transportation of construction waste and unloading and loading operations;
3. Increased emissions of harmful substances (gases, dust) into the environment during welding, insulation, roofing and finishing work.
4. Generation of waste and the possibility of dust in the air, vibration and noise loads during stone and concrete work.
5. Shading of areas where development is taking place, which leads to a shortage of solar color necessary for life.
6. Excessive use of energy resources;
7. Locations become less resistant to earthquakes.

Table 1

Generation of construction waste during construction activities (thousand tons)

	2015	2019	2020	2021	2022	2023
Generation of construction waste	3,3	2,9	3,1	2,1	43,8	5,2
Application and disposal of construction waste	0,6	1,3	1,3	0,8	1,2	1,2

As can be seen from Table 1, the sharp increase in construction waste in recent years creates an additional

burden on the environment. At the same time, the possibility of their secondary use is insignificant every year [1,2.p. 79-80].

In addition, after construction is completed, new problems arise during the operation of buildings, such as poor lighting, soil pollution, a decrease in the amount of vegetation, and thermal pollution.

To solve the problems of improving the environmental and social consequences of the construction and operation of construction projects, a multifactorial

model of the need to conduct economic analysis is presented, thereby reducing the negative consequences of the construction project on the environment. [4].

As can be seen from Figure 1, economic analysis and problem solving will create favorable conditions for the construction and operation of the facility.

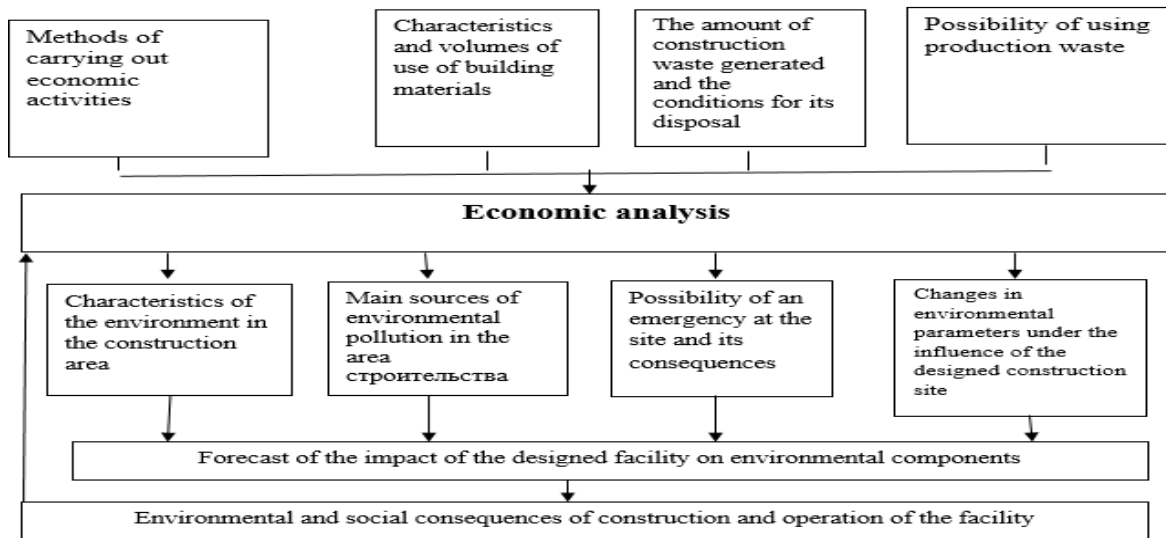


Fig. 1. Economic analysis of the impact of a construction project on the environment.

Conclusions: to prevent adverse effects on the environment during the construction of facilities, it is necessary to carry out such measures as: organizing a waste collection site; garbage removal in closed bodies; organization of proper storage and transportation of flammable materials; organization of wastewater treatment; processing of materials in dust collection devices; fencing and replanting of preserved trees and others.

References

1. Azərbaycan Respublikası Dövlət Statistika Komitəsi <https://www.stat.gov.az/>
2. Azərbaycanca ətraf mühit Bakı, 2023
3. Azərbaycanca tikinti.Statistik mecmu., Bakı,2023
4. Yaşayış və qeyri-yaşayış obyektlərinin tikintisi necə aparılmalıdır? Yaşayış və qeyri-yaşayış obyektlərinin tikintisi necə aparılmalıdır? | "Nahçıxan" İnformasiya Agentliyi (nuhcixan.az)
5. Алиева Р.Т. Направления эффективного использования инвестиционного потенциала в капитальном строительстве Азербайджана. Международная конференция «Современные проблемы строительства» АзАСУ 2020 с.160-166.
6. Aliyeva R.T.Actual problem of the transition to ecological housing construction in modern conditions The XXXIII International Scientific Symposium «Dialogue of sciences and cultures in the modern world Bishkek, Kyrgyzstan 2022, s258-262

7. Aliyeva R.T. Aspects of development of housing construction in Azerbaijan. Memar Elmi, Analitik-İnformasiya jurnalı Azərbaycan Memarlıq İttifaqının rəsmi mətbuat orqanı N37,Bakı 2023.p52-55

8. Aliyeva R.T. Aliyev F.Z. Assessment of economic damage during natural disasters İnternatiol scientific symposium “Haydar Aliyev and the ideology of Azerbaijanism Haydar Aliyev-100 Turkey.Ankara 2023 p.69-71

9. Aliyeva R, İlchenko V - Research Evaluation of the Effectiveness of Capital Investments in the Construction and Reconstruction of Highways. International Conference BUILDING INNOVATIONS, 2022 p.631-642

10.Большеротов А.Л. Оценка опосредованного воздействия строительства на окружающую среду. Ж. Экологическое строительство. Научно-технический и производственный журнал 2011, №6. с.47-51

11.Влияние строительства на природу. — Текст: непосредственный // Молодой ученый. — 2018. — № 51 (237). — URL: <https://moluch.ru/archive/237/60082/> (дата обращения: 25.10.2023).

12.Хомич В.А. Экология городской среды: Учеб. Пособие для вузов. – Омск: Изд-во сибади, 2002. – 267 с.

STUDENTS' PERCEPTIONS ON CHALLENGES AND OPPORTUNITIES FOR STARTUP INNOVATION AND ENTREPRENEURSHIP IN AZERBAIJAN

Najafli Mustafa

High School Student, Baku Modern Educational Complex

[DOI: 10.5281/zenodo.14288620](https://doi.org/10.5281/zenodo.14288620)

Abstract

With an emphasis on the students' perceptions of the primary obstacles and possibilities for startup creation and growth in the context of economic diversification, the study aims to investigate students' perceptions of the challenges and opportunities for entrepreneurship and startup innovation in Azerbaijan. The study examines the elements that young people believe lead to entrepreneurial success, and examines how the Azerbaijani economy is changing and how the start-up culture is expanding through a literature review and qualitative data collection method.

Data was gathered by surveying graduate and undergraduate students in Azerbaijani universities. A Likert scale was employed in the survey to measure the respondents' thoughts. Documents such as government publications and research on global, including Azerbaijani entrepreneurship were also reviewed. The basis for using triangulation strategy in the research is that a more thorough and in-depth understanding of the phenomenon being studied is made possible by combining two methodologies (qualitative and quantitative), which also increases the accuracy and dependability of the data collected. Additionally, it strengthens the validity of the data and helps get around the drawbacks of each method.

Almost all survey participants expressed a desire to launch their own company, indicating a strong interest in entrepreneurship among students.

However, major obstacles including market saturation, lack of experience, and lack of capital make it hard to achieve their goals. The majority of respondents also voiced discontent with the state of startup assistance, particularly with regard to financial resources and educational opportunities. Students are motivated by chances in fields like healthcare, education, and technology as well as financial independence.

The results highlight the critical importance of innovation, risk management and government support in developing the entrepreneurial ecosystem, while identifying key components considered necessary for success, thereby providing a basis for further research.

In light of these conclusions, the author suggests strengthening legislative backing, expanding financial resources, and establishing educational programs in order to establish a supportive startup environment in Azerbaijan.

Keywords: Azerbaijan, Startup Innovation, Students' Perceptions, Economic Diversification, Challenges and Opportunities, Entrepreneurial Ecosystem, Youth Entrepreneurship, Financial Resources, Mentoring and Training, Regulatory Barriers, Market Saturation, Risk Management, Government Support.

Introduction

With a study of students' perceptions of the challenges and opportunities for startup innovation and entrepreneurship, this paper explores their views on the barriers, motivators, and prerequisites for the success of creative endeavors and entrepreneurship in contemporary social and economic contexts.

Startups are crucial for economic growth because they improve competitiveness, provide employment, and develop technology worldwide.[15] Their importance is also growing in Azerbaijan, as the country's economy has traditionally relied on the oil and gas industry.[13]

In the 1990s, the idea of startups became well-known in the US as business model development was sped up by the Internet and venture capital.[5] Although Azerbaijan's business environment has been evolving towards a market economy since independence in the early 1990s, it is the support for innovation that has led to a significant increase in startup activity in Azerbaijan since the mid-2010s.[8]

Key components of entrepreneurship include innovation, risk-taking, the "creative destruction" process, and making decisions in the face of uncertainty.

Young entrepreneurs find it challenging to secure funding due to limited collateral and financial history, this issue is made worse in Azerbaijan by a dearth of venture capital and other funding options.[12]

As is the case globally, bureaucratic inefficiencies and complicated rules hinder the establishment and expansion of start-ups in Azerbaijan.[13]

Young entrepreneurs in Azerbaijan are unable to acquire the skills they need due to a lack of formal training programs and mentorship.[7] In Azerbaijan, societal views frequently discourage taking risks and failing, which makes prospective business owners doubt themselves.[9]

The particular difficulties faced by Azerbaijan are frequently ignored in research on international entrepreneurship, especially when considering young entrepreneurs.[1] In order to foster innovation and build a supportive ecosystem, it is critical to investigate how students perceive these opportunities and obstacles.

The future of the economy is shaped by young people, which makes this research issue vital. Examining their perspectives aids in identifying obstacles, rewards, and critical elements for the growth of startups, all of which are critical for enhancing the entrepreneurial climate and fostering innovation, particularly in light of economic diversification.

Researching the difficulties and possibilities faced by young business owners in Azerbaijan provide valuable information on the entrepreneurial ecosystem, which aids in the creation of efficient support systems.[1] Finding obstacles makes it easier to develop focused initiatives that increase mentorship and resource accessibility, thereby bolstering the startup culture.[14] In keeping with Azerbaijan's objective of lowering its reliance on oil and gas, a robust start-up ecosystem offers substantial economic advantages, such as job creation and economic diversification.[16]

By providing flexible solutions for comparable situations, the study fills a knowledge gap and advances the study of entrepreneurship in transitional nations like Azerbaijan.[11] The findings obtained through the triangulation strategy, incorporating both qualitative and quantitative methodologies can also be used by educational institutions to enhance their young entrepreneur assistance initiatives.[4]

Research Methodology

1. Quantitative Research Method – Survey (Pie Charts reflecting the survey questions and the answers received are added to the article in Appendix A.)

The main means of data collection is a survey of undergraduate and graduate students from Azerbaijani universities, utilizing Google Forms tool, that is considered one of the most accessible and practical ways both for conducting and for participating in the survey remotely. The questionnaire consisted of 17 questions. The specified group was chosen because they are a potential next generation of businesspeople who could have an effect on the economy of the nation.

The purpose of the survey is to investigate how students perceive obstacles, incentives, resource accessibility, and support system awareness. The Likert scale chosen for this article is used in closed surveys to quantify participants' opinions and facilitate statistical analysis. A range of viewpoints from various academic disciplines and degrees of entrepreneurial experience are guaranteed by the random sample technique.

This method allows us to identify important trends and gain a deeper understanding of the opportunities and challenges facing young business owners and future entrepreneurs in Azerbaijan.[6]

Improving the study's validity requires careful evaluation of ethical issues. The following actions were taken during the survey:

Participants received comprehensive information regarding the study's objectives, their involvement, and their freedom to discontinue participation at any moment without incurring any fees. This dedication to openness promotes moral behavior and honors participants' autonomy.[10]

In order to maintain confidentiality and encourage open communication, measures were taken to anonymize participant information in all reports.

These moral issues align with the values of accountability, integrity, and respect that are necessary when working with vulnerable populations, including young business owners.

2. Qualitative Research Method – Document Review

The document review examines current reports, policies and literature on entrepreneurship worldwide, including Azerbaijan in addition to the survey. In order to give context for the entrepreneurial scene, this analysis focuses on government policies, educational initiatives, and prior research. It finds gaps in knowledge and chances to enhance systems of assistance for young business owners. It should be noted that the validity and reliability of a study are enhanced when survey and document review data are combined.

Results

1. Survey

The majority of survey participants (91.2%) are students [Pie Chart 4] with a bachelor's degree (54.5%) [Pie Chart 3], most of whom (60.6%) are males [Pie Chart 2] between the ages of 18 and 30 [Pie Chart 1].

According to the survey's findings, entrepreneurship is highly popular among young people in Azerbaijan: 96.9% of participants said they would like to run their own business [Pie Chart 5], and 88.2% have declared their intention to take such action in the near future [Pie Chart 6].

Significant Difficulties: Young potential business owners have challenges with funding (17.6%), lack of experience (26.5%), and market saturation (38.2%) [Pie Chart 7]. Communication (23.5%) and problem solving (29.4%) are the hardest abilities to master by young entrepreneurs [Pie Chart 8].

Assistance and Materials: The majority of respondents (70.6%) express dissatisfaction with the degree of support [Pie Chart 9] and the availability of financial resources (35.3% assess it as “poor”) [Pie Chart 12]. 38.2% of participants are not aware of the financial options that are accessible [Pie Chart 13], and just 14.7% of respondents rate this aspect as “good” [Pie Chart 12].

Opportunities and Inspiration: Financial gain (39.4%) and curiosity for a specific field (27.3%) are the main motivators for respondents [Pie Chart 15]. Also, 18.2% of respondents chose independence in this matter [Pie Chart 15]. The three most promising areas among respondents are considered to be innovation in education (32.4%), technology and digital services (29.4%), and healthcare (20.6%) [Pie Chart 17].

Mentorship programs (26.5%), networking opportunities (23.5%), and family support (20.6%) are all essential for the growth of entrepreneurship [Pie Chart 10]. In addition, the significance of networking is also considered important for business success with a percentage of 79.4 [Pie Chart 11].

Although participants (76.4%) find the regulatory environment as challenging [Pie Chart 14], most of them (70.6%) see the growth prospects for independent businesses in an optimistic light [Pie Chart 16].

2. Document Review

The following important conclusions are drawn from the text using the document analysis method:

Regulatory and bureaucratic obstacles: The complicated criteria for business registration and licensing, as well as bureaucratic procedures, provide major obstacles for young entrepreneurs in Azerbaijan. These obstacles hinder the launch and growth of startups, which has a detrimental effect on entrepreneurial activity.[2; 12; 14]

Insufficient financial resources: One of the primary obstacles is the scarcity of funding. Insufficient collateral and financial history pose challenges for young businesses, which are made worse by Azerbaijan's dearth of venture capital and other forms of funding.[3; 12]

The need for mentoring and training programs: Research indicates that young entrepreneurs in Azerbaijan lack access to adequate training and mentoring programs, which leaves them without the necessary abilities to manage a business successfully.[7; 11]

Social and cultural norms: Young people who are prepared to launch their own businesses are hesitant due to societal views that are frequently unsupportive of taking risks and having a low threshold for failure.[9]

The need to improve the entrepreneurial ecosystem: Improving the entrepreneurship ecosystem is necessary to overcome these obstacles. This includes making it easier to obtain funding, streamlining administrative processes, and implementing training and mentorship initiatives.[7; 12; 14].

This analysis emphasizes the current obstacles to Azerbaijan's startup and innovation development as well as the necessity of all-encompassing policies to encourage youth entrepreneurship.

Discussion and Conclusion

The survey's findings show that Azerbaijani students are very interested in entrepreneurship. Almost all respondents expressed their desire and intention to run their own business. This fact attest to the youth's potential as a major force behind the nation's economic diversification. However, it is challenging to achieve their entrepreneurial goals due to the obstacles

that have been highlighted, including market saturation, inexperience, and financial challenges.

According to the survey, there is a lack of support for startups in Azerbaijan, as well as a lack of information and training initiatives regarding available financial resources. However, entrepreneurial motivation remains high despite the difficulties, giving hope for future entrepreneurial growth in Azerbaijan.

The study's findings emphasize the necessity of focused programs to assist aspiring young business owners. Their performance can be greatly boosted by easier access to funding, the establishment of mentoring and vocational training programs, and the development of a supportive regulatory framework. Startup development can be a key component of long-term growth and job creation as Azerbaijan's economy shifts from an oil-based to a diversified model.

The small sample size of the study is one of its limitations as the survey was given primarily to students, it might not accurately represent the views of all young business owners in Azerbaijan. Furthermore, the breadth of knowledge regarding personal obstacles and incentives is constrained by the application of quantitative approaches.

Future studies might concentrate on a larger sample of participants, such as exclusively young business owners who have already begun operations. To learn more about individual experiences and coping mechanisms, qualitative research methods like focus groups and interviews would be helpful.

The survey found that young people in Azerbaijan have a lot of potential for startup innovation and entrepreneurship, but it also pointed out the obstacles that now prevent them from taking a step in this direction. By changing the legislative structure, implementing educational initiatives, and enhancing resource accessibility, these barriers must be eliminated in order to establish a more favorable business environment.

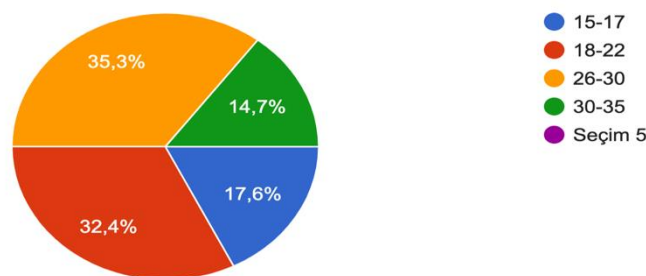
Appendix A

Survey Results Received via Google Forms Tool

Pie Chart 1

What is your age?

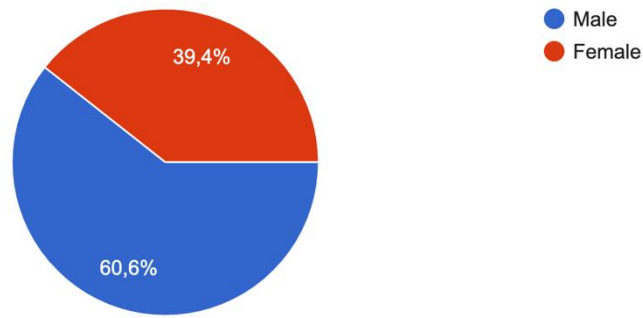
34 cavab



Pie Chart 2

What is your gender?

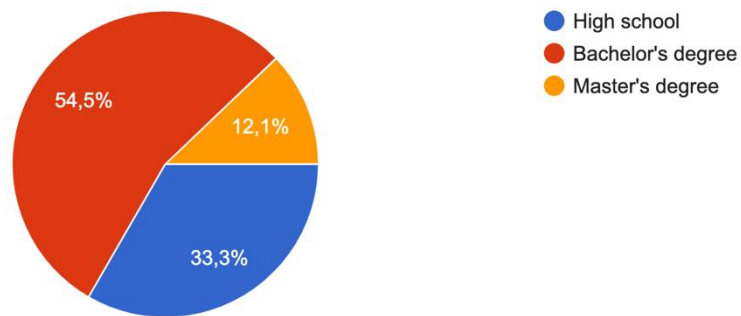
33 cavab



Pie Chart 3

What is your current level of education?

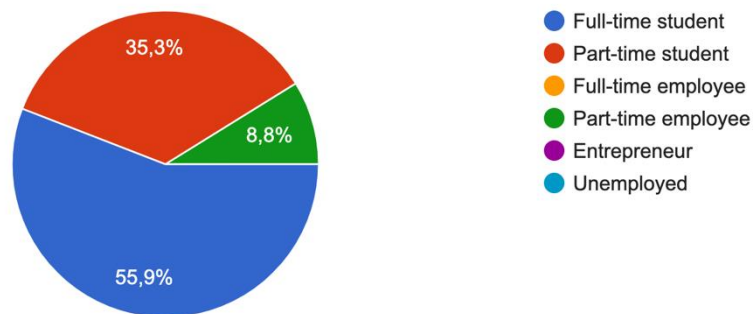
33 cavab



Pie Chart 4

What is your employment status?

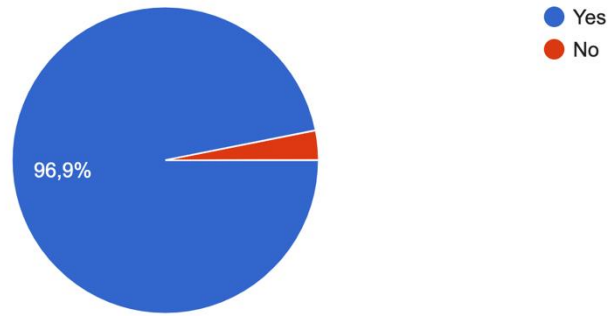
34 cavab



Pie Chart 5

Do you have the desire to run your own business?

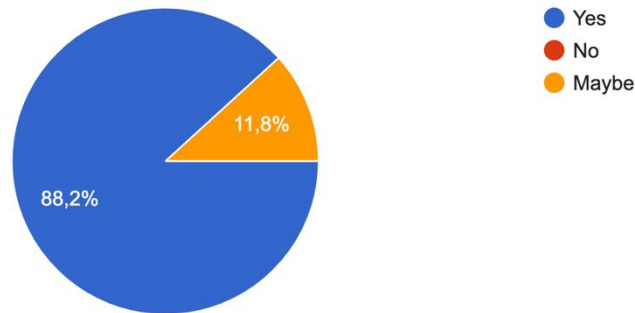
32 cavab



Pie Chart 6

Are you planning to start your own business in the near future?

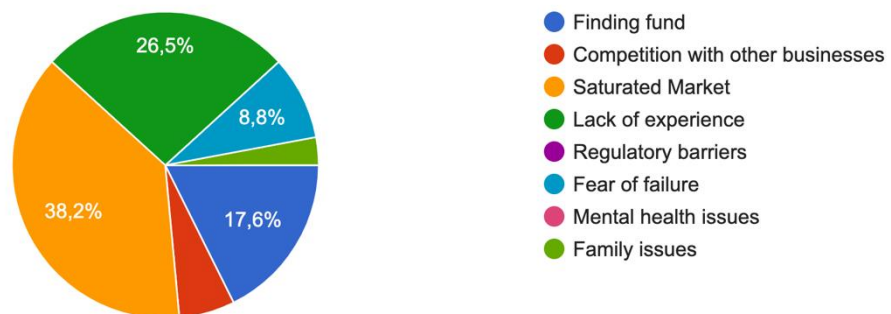
34 cavab



Pie Chart 7

What challenges do you face as a young entrepreneur?

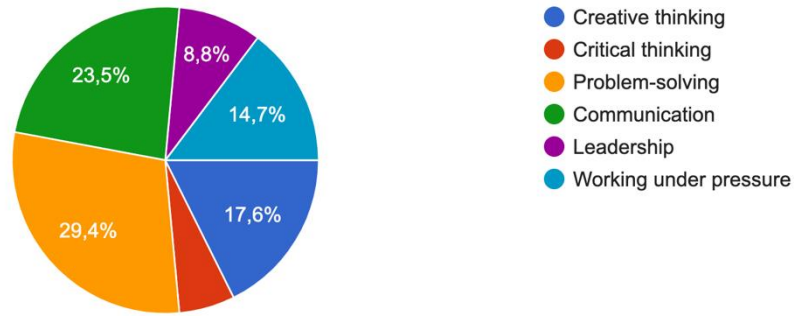
34 cavab



Pie Chart 8

What skills do you think young entrepreneurs might find challenging to develop?

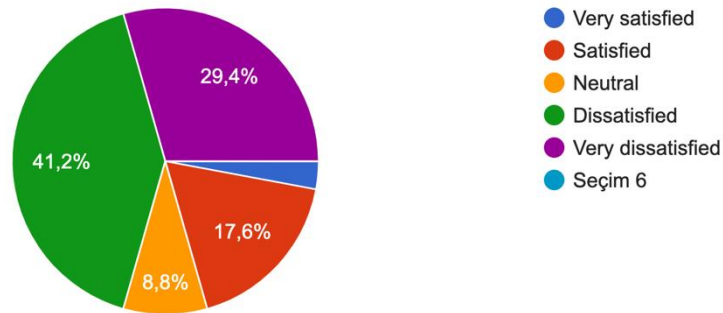
34 cavab



Pie Chart 9

Are you satisfied with the level of support provided to young entrepreneurs in your community?

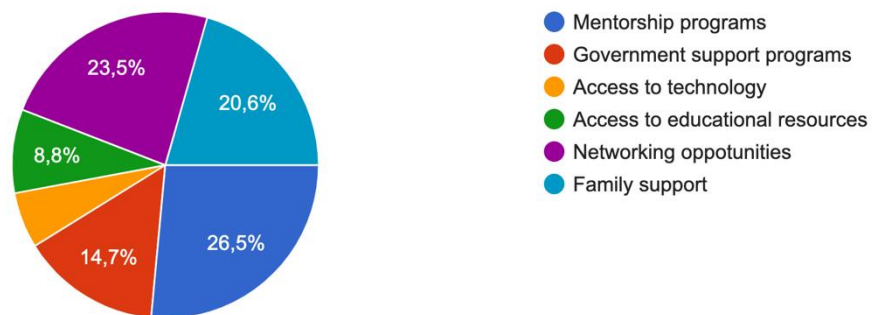
34 cavab



Pie Chart 10

What kind of assistance are you looking for during your entrepreneurial journey?

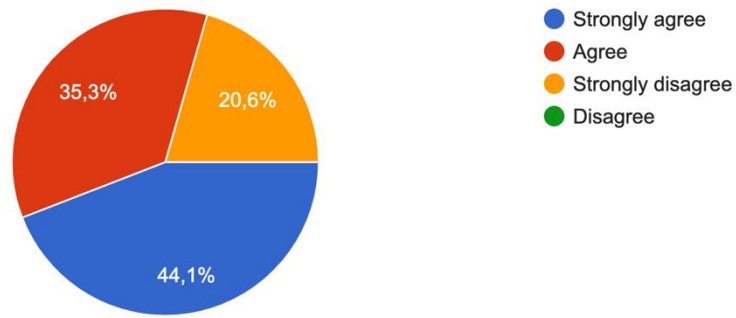
34 cavab



Pie Chart 11

Do you believe networking is necessary for the success of young entrepreneurs?

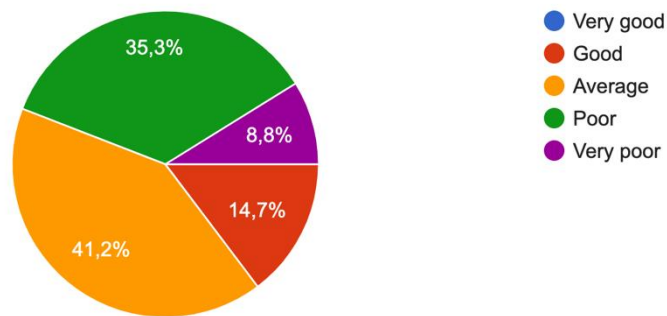
34 cavab



Pie Chart 12

How would you evaluate your access to financial resources for establishing a business?

34 cavab



Pie Chart 13

Have you ever applied for funding (such as grants, loans,) to start a business?

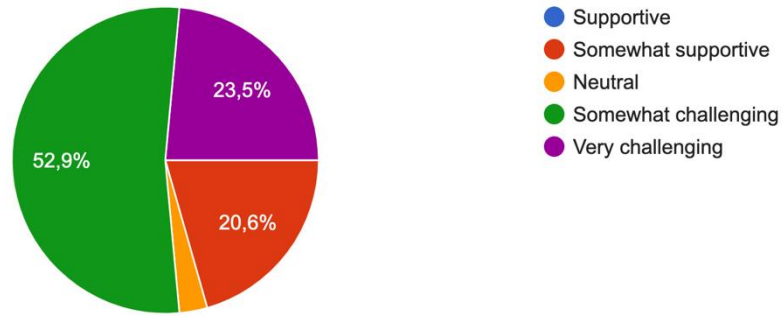
34 cavab



Pie Chart 14

How would you define the regulatory circumstances to start a business in Azerbaijan?

34 cavab



Pie Chart 15

What motivates you to be an entrepreneur?

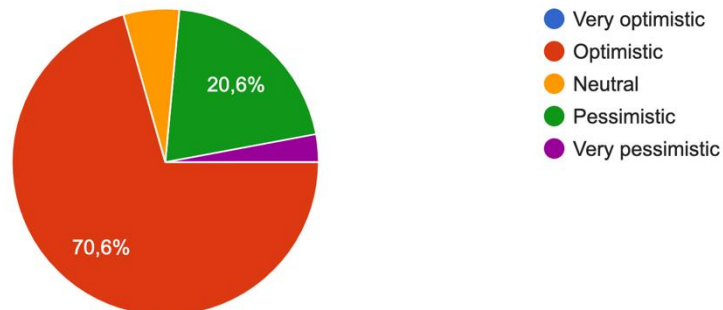
33 cavab



Pie Chart 16

How optimistic are you about the growth prospects for independent businesses in Azerbaijan?

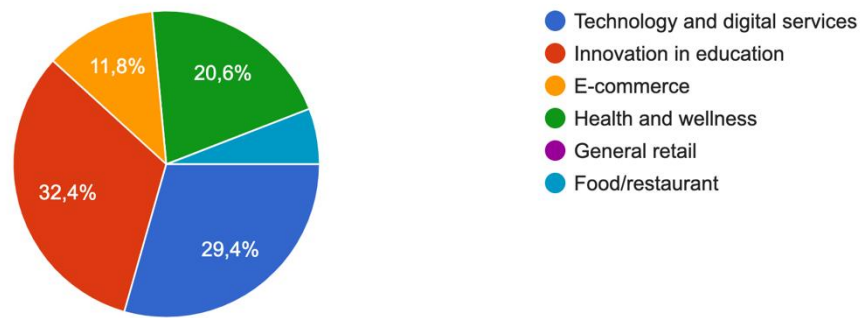
34 cavab



Pie Chart 17

What future development trends do you see for young entrepreneurs in Azerbaijan?

34 cavab



References

1. Acs, Z. J., & Szerb, L. (2007). The global entrepreneurship and development index. *International Entrepreneurship and Management Journal*, 3(4), 417–435. <https://doi.org/10.1007/s11301-007-0030-7>
2. Azerbaijan Business Association. (2022). Skills gap in the Azerbaijani workforce: Implications for startups. <https://www.aba.org/skills-gap-report>
3. Beck, T., & Demirguch-Kunt, A. (2006). Access to finance: An unfinished agenda. *World Bank Economic Review*, 20(3), 433–469. <https://doi.org/10.1093/wber/1hl006>
4. Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152. <https://doi.org/10.2307/2393553>
5. Dyer, J. H., & Gregersen, H. B. (2016). *Entrepreneurial management: A new model for startup success*. Harvard Business Review Press.
6. Fink, A. (2013). *How to conduct surveys: A step-by-step guide* (5th ed.). Sage Publications.
7. Guliyeva, S. (2020). The role of education and training in fostering entrepreneurship among youth in Azerbaijan. *Journal of Azerbaijan Studies*, 6(2), 55–70.
8. Hasanov, A. (2022). Startups in Azerbaijan: Challenges and opportunities in a changing economy. *Azerbaijan Economic Review*, 9(1), 23–37.
9. Huseynov, F. (2022). Cultural factors influencing entrepreneurship in Azerbaijan: An analysis of youth perceptions. *International Journal of Business and Social Science*, 13(5), 112–120.
10. Hepworth, J. (2016). Ethical issues in research with children. *Childhood*, 23(1), 121–137. <https://doi.org/10.1177/0907568214565389>
11. Kauffman Foundation. (2019). *The Kauffman Index of Startup Activity: 2019*. Kauffman Foundation. <https://www.kauffman.org/report/kauffman-index-2019>
12. Mammadov, A. (2021). The impact of bureaucracy on entrepreneurship in Azerbaijan: Challenges and solutions. *Azerbaijan Economic Review*, 8(1), 34–47.
13. Mammadov, A., & Rzayev, A. (2021). Diversification of the economy in Azerbaijan: The role of startups. *International Journal of Business and Management*, 16(3), 78–90.
14. OECD. (2018). *Entrepreneurship at a glance 2018*. OECD Publishing. https://doi.org/10.1787/entrepreneur_aag-2018-en
15. Schwartz, A. (2020). The impact of startups on economic growth. *Global Entrepreneurship Monitor*, 20(1), 18–30.
16. World Bank. (2021). *Azerbaijan: Economic growth and recovery amid COVID-19*.

FORMATION OF A CREATIVE MANAGEMENT SYSTEM IN THE ORGANIZATION**Vasilik Natalia***PhD in Economics,**Associate Professor of the Department of Management,**Lutsk National Technical University*[DOI: 10.5281/zenodo.14288816](https://doi.org/10.5281/zenodo.14288816)**ФОРМУВАННЯ СИСТЕМИ КРЕАТИВНОГО МЕНЕДЖМЕНТУ В ОРГАНІЗАЦІЇ****Василик Наталія***кандидат економічних наук,**доцент кафедри менеджменту,**Луцький національний технічний університет***Abstract**

The article is devoted to the relevance, essence and stages of forming a creative management system in an organization. The article describes approaches to the formation of a creative management system. The main subsystems of the creative management system are allocated. The following stages of formation of the creative management system are defined: diagnostics and analysis of the organizational environment, development of the conceptual subsystem, formation of the subject subsystem, definition of the object subsystem, creation of the supporting subsystem, integration of subsystems and establishment of interaction, testing and adaptation stage, monitoring and development of the system.

Анотація

Стаття присвячена розкриттю актуальності, суті, підходів та етапів формування системи креативного менеджменту креативного менеджменту в організації. В статті описано підходи до формування системи креативного менеджменту. Виділено основні підсистеми системи креативного менеджменту. Визначено такі етапи формування системи креативного менеджменту: діагностика та аналіз організаційного середовища, розробка концептуальної підсистеми, формування суб'єктної підсистеми, визначення об'єктної підсистеми, створення забезпечуючої підсистеми, інтеграція підсистем і налагодження взаємодії, етап тестування та адаптації, моніторинг та розвиток системи.

Keywords: creative management, creative management system, approaches to the formation of a creative management system, subsystems, creative environment.

Ключові слова: креативний менеджмент, система креативного менеджменту, підходи до формування системи креативного менеджменту, підсистеми.

Одним із визначальних чинників конкурентоспроможності є здатність організації створювати нові ідеї та трансформувати їх у конкретні продукти, послуги чи рішення, які відповідають сучасним вимогам. Впровадження креативного менеджменту сприяє формуванню сприятливого середовища для розкриття творчого потенціалу працівників, розвитку інноваційної культури та забезпеченню стійкого розвитку організації. Формування системи креативного менеджменту забезпечує не лише адаптацію організацій до змін зовнішнього середовища, а й підвищує їхню внутрішню стійкість, дозволяючи оптимізувати процеси, мінімізувати ризики та ефективно досягати стратегічних цілей. Це особливо важливо в умовах економічної нестабільності, коли саме інновації можуть стати ключем до успішного розвитку та збереження конкурентних переваг.

Особливої важливості креативний менеджмент набуває в економіках, орієнтованих на знання, де основними рушійними силами виступають інтелектуальні ресурси та креативність. Приклади успішних компаній, таких як Google, Apple, Tesla, демонструють, як системний підхід до управління творчістю сприяє швидкій адаптації до змін та лідерству на ринку.

Для українських організацій актуальність цього питання зростає через необхідність інтеграції у глобальний економічний простір, відбудови та підтримки України, розвитку креативних індустрій і підвищення ефективності використання людського потенціалу. Разом з тим, участь України у програмі «Креативна Європа» відкриває нові можливості для розвитку культурних і творчих секторів, стимулюючи впровадження сучасних методів управління та інноваційного мислення [1].

Отже, формування та впровадження системи креативного менеджменту сприяють зміцненню конкурентоспроможності, розвитку інновацій та забезпеченню довгострокової стабільності організацій у сучасних умовах. Тому дослідження даної теми є надзвичайно актуальним для сучасних організацій, не лише креативної економіки, а і всіх загалом не залежно від сфери діяльності.

На нашу думку, «креативний менеджмент – це особлива управлінська діяльність, що спрямована на активізацію творчої діяльності працівників щодо генерування креативних ідей, їх оцінку та відбір з метою формування ефективних креативних рішень, реалізація яких забезпечить підприємству інноваційний розвиток та одержання високих економічних, соціальних і екологічних результатів» [2].

Система креативного менеджменту – це сукупність інструментів, елементів, підсистем, які забезпечують реалізацію всіх креативних процесів в організації, формують креативне середовище в організації та стимулюють розкриття креативного потенціалу працівників на всіх рівнях управління.

При розробці системи креативного менеджменту, з метою кращого розуміння її мети, цілей і швидшої інтеграції в бізнес-процеси і культуру організації, керівникам організації варто використовувати один чи декілька підходів до побудови системи креативного менеджменту. Загалом, підходами до формування системи креативного менеджменту є:

1. Стратегічний підхід – передбачає інтеграція креативності у довгострокову стратегію організації через формулювання місії, бачення та цілей, які захоплюють інновації у всіх аспектах діяльності компанії.

2. Процесний підхід – передбачає оптимізацію внутрішніх процесів і створення умов для творчості, а також впровадження гнучких структур, креативних команд і методик.

3. Технологічний підхід – передбачає використання цифрових інструментів і платформ для генерації ідей, управління проектами, управління знаннями та інноваціями.

4. Аналітичний підхід – використання великих даних, штучного інтелекту та аналітичних інструментів для виявлення трендів, оцінки ефективності ідей і прогнозування інноваційних рішень.

5. Інклюзивний підхід – передбачає залучення працівників усіх рівнів до процесів креативного менеджменту і це допомагає розкрити потенціал кожного співробітника і врахувати ідеї з різних рівнів організації.

6. Культурний підхід – передбачає формування корпоративної креативної культури, яка сприяє відкритості до нових ідей, експериментів і ризиків, а також стимулює співробітників до творчості, співпраці та розвитку креативних навиків.

7. Маркетинговий підхід – передбачає зосередження на потребах споживачів чи клієнтів та розробка нових чи удосконалення існуючих товарів, технологій, послуг шляхом активного використання технік та методів генерування креативних ідей та їх реалізацію.

8. Екосистемний підхід – орієнтація на створення партнерських відносин із зовнішніми стейкхолдерами, включаючи клієнтів, постачальників та інших партнерів, для спільного розвитку інновацій. Це дозволяє обмінюватися ідеями, ресурсами та технологіями.

Таким чином, система креативного менеджменту повинна враховувати різноманітні аспекти діяльності організації, забезпечуючи її гнучкість і розвиток творчого потенціалу.

Слід також враховувати, що який би підхід не був обраний, ключовим фактор є створення та підтримка в організації креативного середовища. Таке середовище складається з трьох підсистем: культури, стилю лідерства та організаційних цінностей;

структур і систем управління (формальних і неформальних); навичок і ресурсів компанії, включно з її можливостями та обмеженнями [3].

Формування системи креативного менеджменту в організації – це багатоетапний процес, який включає інтеграцію підсистем для ефективної взаємодії учасників творчого процесу. На нашу думку, складовими системи креативного менеджменту, є такі підсистеми: концептуальна (мета, цілі, завдання, функції системи), суб'єктна (керуюча, керована, впливова підсистеми), об'єктна (ідеї та інновації, процеси та інструменти для генерування ідей, культура організації), забезпечуюча (інформаційне, ресурсне, комунікаційне, організаційно-методичне, технічне, мотиваційне забезпечення, оцінка і контроль результатів, креативне лідерство). Враховуючи зазначені складові системи креативного менеджменту, ми пропонуємо використовувати такі етапи формування системи креативного менеджменту:

1. Діагностика та аналіз організаційного середовища – передбачає оцінку існуючого стану організації з точки зору її креативного потенціалу, аналіз зовнішніх факторів, які впливають на інноваційну діяльність (ринкові тенденції, технологічний прогрес, конкуренція) та визначення сильних і слабких сторін у контексті творчого розвитку організації.

2. Розробка концептуальної підсистеми – здійснюється з метою визначення чіткого стратегічного напрямку організації щодо розвитку креативності, також передбачає визначення конкретних завдань, таких як стимулювання інновацій, підвищення конкурентоспроможності, оптимізація процесів, а також функцій, методів та принципів.

3. Формування суб'єктної підсистеми:

– керуюча підсистема – визначення відповідальних осіб і відділів, які будуть розробляти, координувати й контролювати процес креативного менеджменту;

– керована підсистема – створення команд і груп, які безпосередньо займаються генеруванням ідей та їх реалізацією;

– впливова підсистема – вибір та залучення зовнішніх експертів, партнерів, консультантів, клієнтів для інтеграції зовнішніх знань та ідей [4].

4. Визначення об'єктної підсистеми – передбачає визначення основних об'єктів креативного менеджменту: ідей, інновацій, процесів, інструментів, а також вибір методів генерування креативних ідей та формування організаційної культури, орієнтованої на креативність, через навчання, тренінги, комунікаційні заходи.

5. Формування забезпечуючої підсистеми – передбачає виділення фінансових, матеріальних, кадрових ресурсів для підтримки творчої діяльності; розробка процедур, методик і регламентів для підтримки процесів інновацій; створення баз знань, інформаційних систем, доступу до сучасних досліджень і трендів; використання цифрових платформ для управління інноваціями та комунікації; побудова ефективної системи обміну інформацією між учасниками творчого процесу; розробка системи

заохочень для співробітників, які демонструють креативність та ініціативність; підтримка ініціативності керівників, здатних надихати команди на творчі досягнення; розробка показників ефективності системи креативного менеджменту, проведення регулярного моніторингу.

6. Інтеграція підсистем і налагодження взаємодії, тобто забезпечення узгодженої роботи всіх підсистем через єдині цілі та взаємну підтримку, створення механізмів комунікації між учасниками процесу для обміну ідеями та координації дій.

7. Етап тестування та адаптації – передбачає пілотне впровадження системи креативного менеджменту, оцінка ефективності процесів та внесення корективів на основі отриманого досвіду, а також постійне вдосконалення системи, враховуючи зміни в зовнішньому середовищі та нові технологічні можливості.

8. Моніторинг і розвиток системи – передбачає регулярний аналіз результатів роботи системи креативного менеджменту, внесення змін до підсистем з урахуванням нових викликів і можливостей та створення умов для масштабування креативних ініціатив.

Висновок. Процес формування системи креативного менеджменту є багатограним і вимагає комплексного підходу. Результатом ефективного функціонування даної системи є генерація продуктивних креативних ідей, прийняття креативних рішень, які сприяють та забезпечують розробку креативних технологій, товарів, продуктів чи послуг. Крім того, система сприяє підвищенню продуктив-

ності праці та формуванню корпоративної культури, орієнтованої на інновації, креативність та постійне вдосконалення.

References

1. Ukraina pryiednalasia do prohramy EU «Kreatyvna Yevropa» (2021-2027) [Ukraine joined the EU program "Creative Europe" (2021-2027)]. Yevro-intehratsiyni portal. Available at: <https://eu-ua.kmu.gov.ua/node/4246> (in Ukrainian)

2. Bozhydamik T., Vasilik N. (2015). Establishment and development of creative management at the enterprise. *Economist. Applied Economics*. No. 3 March, Pp. 37-39. URL: http://nbuv.gov.ua/UJRN/econ_2015_3_12 (in Ukrainian).

3. Motorniuk U., Oherchuk Y. (2022). Personnel's creative potential management in the enterprise management system. *Economy and Society. Management*. No 45. URL: <https://economyandsociety.in.ua/index.php/journal/article/view/1956> (in Ukrainian).

4. Kuzmin O.Ye., Goryachka O.O. (2013). Organization of activity of innovation creativity collectives on machine-building enterprises. *Visnyk Natsional'noho universytetu "L'vivs'ka politehnika": Menedzhment ta pidpriemnytstvo v Ukraini: etapy stanovlennia i problemy rozvytku*, No 778. Pp. 342-347. URL: http://nbuv.gov.ua/UJRN/VNULPM_2013_778_50 (in Ukrainian).

HISTORICAL SCIENCES

SOCIAL PROBLEMS AND STRATEGIES FOR THEIR SOLUTION IN THE VISION OF NON-PARLIAMENTARY POLITICAL PARTIES IN THE 2019 ELECTIONS

Matiiv Y.V.

*Hetman Petro Sahaidachnyi National Army Academy,
lecturer at the Department of Foreign Languages
and military translation*

ORCID: <https://orcid.org/0000-0003-2409-1552>

[DOI: 10.5281/zenodo.14288834](https://doi.org/10.5281/zenodo.14288834)

СОЦІАЛЬНІ ПРОБЛЕМИ ТА СТРАТЕГІЇ ЇХ ВИРІШЕННЯ У БАЧЕННІ ПОЗАПАРЛАМЕНТСЬКИХ ПОЛІТИЧНИХ ПАРТІЙ НА ВИБОРАХ 2019 РОКУ

Матіїв Ю.В.

*Національна академія сухопутних
військ імені гетьмана Петра Сагайдачного,
викладач кафедри іноземних мов
та військового перекладу*

ORCID: <https://orcid.org/0000-0003-2409-1552>

Abstracts

The article analyzes the peculiarities of the 2019 parliamentary elections in Ukraine as an important stage in the political history of the state. Based on the analysis of the election programs of political forces that did not get into the parliament, the social aspects of their promises to voters are studied. Particular attention is paid to the key issues that concerned Ukrainians: high tariffs, corruption and social injustice. The author highlights the strategic approaches and proposals of political parties to overcome these challenges, in particular in the economic, social and legal spheres, as well as the prospects for implementing the declared changes in the political sphere.

Анотація

У статті проаналізовано особливості парламентських виборів 2019 року в Україні як важливого етапу в політичній історії держави. На основі аналізу передвиборчих програм політичних сил, які не потрапили за підсумками виборів до парламенту, досліджуються соціальні аспекти їх обіцянок виборцям. Особлива увага приділена ключовим проблемам, які турбували українців: високі тарифи, корупція та соціальна несправедливість. Висвітлюються стратегічні підходи та пропозиції політичних партій щодо подолання значених викликів, зокрема в економічній, соціальній та правовій сферах, а також перспективи впровадження задекларованих змін у політичній сфері.

Keywords: political party, elections, Verkhovna Rada of Ukraine, social sphere, election program.

Ключові слова: політична партія, вибори, Верховна Рада України, соціальна сфера, передвиборча програма.

Вступ

Парламентські вибори 2019 року в Україні – новий етап у політичній історії країни. Перемога новоствореної партії «Слуга народу» стала не тільки безпрецедентним успіхом «політичного новачка», але й відображенням глибокої недовіри українців до традиційних партій та бажання кардинальних змін. Причини такого вибору, як стверджують аналітики, криються в емоційному запиті суспільства на оновлення політичної еліти та втомі від «старих облич». Результат виборів – реакція на системну корупцію, нездатність держави забезпечити реальний соціальний захист та правову справедливість. Соціологічні опитування 2017 – 2019 рр. показували, що найактуальнішими проблемами для більшості опитаних була війна на Сході України (51,3%) та соціально-економічні проблеми: зростання цін (37%), низький рівень зарплат чи пенсій (36%), безробіття (27,1%), високі комунальні тарифи (26,9%). Також українців турбували

соціальне розшарування (14,5%), корупція у судах, поліції, прокуратурі (12,1%) та високий рівень злочинності (11,4%) [1].

Чимало з цих гострих соціальних питань порушували політичні партії, які не увійшли до парламенту за підсумками дострокових виборів 2019 р. Аналіз їх передвиборчих програм (соціальна складова) – основна мета статті.

Виклад основного матеріалу

Соціальні проблемами перебували в центрі уваги передвиборчої програми партії «Громадянська позиція» [2]. Команда А. Гриценка декларувала «країну без олігархів!». У передвиборчій програмі констатовано: «Україна не зможе рухатися вперед, поки ми не скинемо владу олігархів. Вони створили власні монополії в економіці та політиці. Приватизували правоохоронні та силові структури. Монополізували правосуддя. Вони порушують наші конституційні права і свободи. Ми дамо олігархам вибір: або вони вестимуть чесний

бізнес і сплачуватимуть податки, або шукатимуть для проживання іншу країну» [2].

У соціальній сфері партія пропонувала: на будівництві нових доріг, мостів, вокзалів та аеропортів створити сотні тисяч нових робочих місць; затвердити державну програму кредитування житла та стимулювання створення робочих місць для вимушених переселенців; знизити оподаткування заробітної плати; запровадити персональну фінансову відповідальність чиновника за блокування роботи підприємства; забезпечити всім підприємцям рівні умови доступу і прозорі конкурентні процедури приватизації державних підприємств і майна; запровадити відкриті конкурси для працівників ДФС і митниці; остаточно ліквідувати податкову міліцію; позбавити правоохоронні та силові структури невласливих їм функцій і важелів силового втручання в економічні процеси [2].

«Справедливість у житті – заможні громадяни!» Саме із таким соціальним гаслом йшла на парламентські вибори 2019 р. політична партія «Радикальна партія Олега Ляшка» [3]. Очільники політичної сили вважали, що «корінь всіх наших бід – бідність. Вона породжує тотальну несправедливість, корупцію і бардак. Подолати бідність і дати людям впевненість у завтрашньому дні – наше головне завдання» [3].

Новітні радикали вважали, що через низькі доходи, а також внаслідок закриття закладів профтехосвіти, «сьогодні столярів, зварювальників, будівельників і трактористів днем з вогнем не знайдеш. Землю зорати і кладку покласти нікому. З такою політикою скоро з Китаю будемо виписувати комбайнерів. Ми маємо силу і волю це змінити! Бо без робочих професій ми не піднімемо економіку. Сьогодні кожна дитина, особливо з сільських, малозабезпечених сімей, має отримувати такі прикладні знання, які будуть її годувати. А держава повинна збільшувати замовлення на робітничі професії. Ті, хто навчаються, повинні отримувати гідні стипендії, на які можна вижити» [3].

Партія пропонувала підняти соціальні стандарти докорінно змінивши підходи державної економічної політики: не закордонні кредити на проїдання, а інвестиції у розвиток економіки; не імпорт іноземної продукції, а підтримка національного виробника; не вимоги МвФ, а інтереси українського народу; не огульна приватизація, а ефективне управління держмайном; не продаж сільгоспземель іноземцям, а захист селян; не підвищення тарифів, а енергомодернізація та власний видобуток газу; не «витискання соків» з підприємств, а інвестиційні стимули, дешеві кредити та обмеження перевірок; не економія на науці і освіті, а ставка на інтелект та інновації; не масова еміграція, а створення робочих місць в Україні як пріоритет №1. «Результатом впровадження нашої економічної політики буде: понад 100 млрд доларів приватних інвестицій у розвиток економіки, більше 1 млн робочих місць і зупинення масової еміграції українців, економічне зростання 8-10% на рік замість нинішніх 2-3», – резюмували члени

політичної партії «Радикальна партія Олега Ляшка» [3].

Націоналістичну течію на парламентських виборах 2019 р. представляли декілька політичних партій, серед яких одне з провідних місць відведено політичній партії «Свобода» [4]. Соціальний блок цієї політичної сили включав декілька положень, серед яких: ухвалення пакету законів про повернення капіталів з офшорів; усунення схеми виведення грошей з України; ліквідація олігархічних монополій; заборона приватизації стратегічних та прибуткових підприємств; заборона торгівлею стратегічним ресурсом України – землею с/г призначення; знищення корупційної схеми формування тарифів; встановлення справедливих тарифів для людей, замість корупційних надприбутків для олігархів; розвиток могутнього середнього класу не менше 60% від працездатного населення; запровадження прогресивної шкали оподаткування за принципом: малий бізнес – малі податки, великий бізнес – великі податки; створення українським заробітчанами умови для повернення на Батьківщину; скасування несправедливої пенсійної реформи; встановлення виплати українським сім'ям зв'язку з народженням дитини у розмірі 120 000 гривень; забезпечення дешевих державних кредитів на житло для молодих сімей; забезпечення фермерів дешевими кредитами та дотаціями [4].

Передвиборна програма політичної партії «Українська стратегія Гройсмана» передбачала «розвиток середнього класу» та «дієву систему соціального забезпечення»: перехід до трирівневої системи пенсійного забезпечення; соціальна адаптація та інтеграція усіх категорій осіб з особливими потребами; запровадження сучасних механізмів підтримки людей, які не мають змоги працювати [5].

Ключові елементи стратегії соціально-економічного розвитку України політичної партії «Сила і честь» передбачали: вжиття усіх необхідних заходів із подолання бідності українців, у тому числі через подолання масової корупції, ліквідацію економічно необґрунтованих складових у тарифах; демонополізацію, деолігархізацію, деофшоризацію, дерегуляцію, детінізацію економічних відносин, що матиме результатом зміцнення внутрішнього ринку, стимулювання вільної конкуренції, гарантування непорушності економічних прав і свобод; ефективну систему законодавчого захисту приватної власності та підприємницької діяльності, що передбачатиме дієві правові механізми запобігання рейдерству і тиску на бізнес; ефективну земельну реформу із впровадженням такої моделі ринку землі, яка би забезпечила рівний та конкурентний доступ до землі для всіх учасників ринку. Після належного експертного та громадського обговорення прийняти відповідне законодавство з основним акцентом на власнику землі – громадянину України, який буде працювати на своїй землі; модернізацію і створення нової транспортної інфраструктури, включаючи сухопутний, повітряний, морський і річковий шляхи

сполучення; фінансову та цінову стабільність, зниження рівня бюджетного дефіциту, боргового навантаження України до економічно обґрунтованого рівня, відновлення довіри бізнесу та населення до банківської системи в цілому, відновлення кредитування та ін. [6].

«Побудувати країну в якій хочеться жити» – основна мета політичної партії «Самопоміч» [7]. Партія пропонувала виборцям запровадити «соціальний добробут»: базовий дохід європейського стандарту не нижче 300 євро; обов'язкове індивідуальне пенсійне накопичення без збільшення ЄСв; стимул для соціально відповідального бізнесу; програма забезпечення житлом багатодітних сімей і прозора процедура його розподілу, допомога при народженні дитини у 100 000 грн – держава на ділі визнає цінність сім'ї для виховання майбутніх поколінь [7].

Передвиборна програма антиукраїнської, проросійської політичної партії «Опозиційний блок» у дусі російської пропаганди безпідставно фокусувала увагу на «падінні соціальних стандартів, підвищенні комунальних тарифів, зубожінні населення, зростанні злочинності» [8]. Соціальні стандарти перераховані у розділі «Соціальний захист та розвиток людського потенціалу – від народження до першого робочого місця»: відкриття перинатальних центрів у всіх обласних центрах та великих містах; виплата при народженні першої дитини – 100 тис. грн, другої – 200 тис. грн, третьої та наступних – 400 тис. грн; безкоштовна дошкільна освіта для всіх; школа повного дня для дітей 6–13 років; розвиваючі, спортивні, професійно-орієнтовані секції для підлітків 13–17 років; пріоритетний розвиток професійної та середньої спеціальної освіти – гарантія працевлаштування молодого фахівця з гідною оплатою праці; податкові пільги при прийомі на перше робоче місце: роботодавець не сплачує ЄСв, молодий фахівець до 27 років не сплачує податок з доходів фізичних осіб; безкоштовна вища освіта за спеціальностями реального сектора: будівництво, промисловість, IT-галузь, агропромисловий комплекс, сфера послуг; гідні зарплати вчителів та викладачам – не менше 1,5 середньої зарплати в регіоні; безкоштовне медичне обслуговування для пенсіонерів, малозабезпечених, військовослужбовців, працівників сфери освіти, поліцейських та лікарів за рахунок держави; безкоштовне медичне обслуговування для найманих працівників за рахунок оплати поліса роботодавцем; пенсія – не нижче 40% від середньої заробітної плати в країні; щорічна індексація пенсій з урахуванням зростання споживчих цін [8].

З огляду на предмет дослідження, значне зацікавлення викликає передвиборча програма партії «Соціальна справедливість» [9]. Політична сила виступала за сильну державу, яка має професійну армію й вживає заходів щодо повернення окупованих територій прагматичним шляхом. Національна безпека, безпека підприємницької діяльності та особиста безпека громадян – були її ключовими пріоритетами [9].

«Соціальна справедливість» мала намір вести нещадну й ефективну боротьбу з корупцією не тільки й не стільки на побутовому рівні, а перш за все, у вищих ешелонах влади. Члени цієї політичної сили намагалися домагатися, щоб в Україні дійсно запрацювали соціальні ліфти – у владі мали працювати не «випадкові зайти та пройдисвітти», а гідні професіонали з адекватним життєвим досвідом та моральними чеснотами [9]. «Соціальна справедливість» вважала безперечними та однозначними пріоритетами державної соціальної політики гідну освіту й медицину [9]. «Ми виступаємо за переосмислення результатів вже здійснених перетворень, коригування окремих напрямів реформ, – читаємо у передвиборній програмі. – Та за безумовну заборону експериментів, які руйнують кращі традиції у цих галузях. Ми за інновації, за осучаснення застарілих механізмів державного управління, але наполягаємо, що будь-які новації в цих соціально-чутливих сферах повинні впроваджуватись виключно після ретельного експертного й громадського обговорення» [9].

Проросійська, антиукраїнська за ідеологічною суттю «Партія Шарія» основну мету діяльності вбачала у задоволенні та захисті законних соціальних, економічних, творчих, спортивних, національно-культурних та інших прав українців, їх життя, здоров'я, честі, гідності, недоторканності та безпеки як найвищої соціальної цінності, задекларованої Конституцією України [10].

У соціальній сфері партія пропонувала поновити соціальні виплати жителям непідконтрольних територій України, оскільки «державна не має права дискримінувати власних громадян, а тим більше тих, хто не з власної волі опинився у скрутному становищі». Прихильники «руського міра» також декларували необхідність «встановлення стійкого миру та припинення війни на сході країни» [10]. Окрім того, у передвиборній програмі партії йдеться про розвиток масового спорту, побудову спортивних майданчиків, басейнів та ін., пропаганду здорового способу життя серед молоді [10].

Члени Аграрної партії України у стінах Верховної Ради України мали намір максимально працювати над тим, щоб: гарантувати надання медичних послуг кожній людині незалежно від її фінансової спроможності, соціального статусу та місця проживання; зберегти інфраструктури медичних закладів; підтримувати академічну науку, розвиток науково-медичного потенціалу та посилення заходів по боротьбі із невиліковними на сьогодні хворобами; широко запровадити страхову медицину, разом з нею – неоподаткування страхових платежів, аби роботодавці могли в обов'язковому порядку страхувати всіх найманих працівників; впровадити обов'язковий щорічний профілактичний медичний огляд, який забезпечить виявлення хвороб на початковому етапі і збереже життя тисяч громадян; дбати про безпеку харчових продуктів; запровадити чесні, прозорі та справедливі умови ведення бізнесу; спростити регуляторні вимоги, створити економічні механізми та стимули для розвитку підприємницької діяльності: відкрити і вести свій бізнес в Україні має стати просто; на

всіх рівнях захищати та підтримувати національного товаровиробника; стимулювати виробництво кінцевих продуктів з метою збільшення долі доданої вартості в українській економіці; забезпечити умови для накопичення власного капіталу, аби малий та середній бізнес став стрижнем української економіки; запровадити прозору, зрозумілу, стабільну систему оподаткування, де сплачувати податки буде вигідно, а тіньові схеми стануть неприйнятними; детінізувати заробітні плати та підвищити вартість оплати праці, що дозволить наблизитися до «європейських» доходів та зарплат, зніме соціальну напругу в суспільстві, забезпечить гідний подальший розвиток держави, підтримати становлення та розвиток сімейних фермерських господарств та інші малі й середні суб'єкти господарювання, що є основою інтеграційних процесів міста і села тощо [11].

План порятунку України за 70 днів запропонувала на виборах 2019 року політична партія «Рух нових сил Михайла Саакашвілі» [12]. Політична сила обіцяла виборцям: відкриття 1000 великих та середніх індустріальних підприємств; реанімацію авіакосмічної промисловості; підвищення видобутку нафти вп'ятеро, а газу – вдвічі; модернізація атомної енергетики; припинити корупційні схеми купівлі-продажу земельних ділянок; забезпечити переважне право викупу землі фермерським господарствам; ліквідувати бюрократичні земельні процедури; знизити відсоткову ставку по кредитах втричі; залучити в країну найпотужніші банки та фінансові корпорації світу; приводити до європейських стандартів 2 000 км доріг щорічно [12].

Партія запропонувала соціальну програму «Гідне майбутнє», яка передбачала: тарифи без частки олігархів та корупціонерів; субсидії для малозабезпечених, а не для компенсації олігархам; замість поборів у медичних закладах – страхові поліси, що гарантують якісне лікування; залучення інвестицій для побудови 500 сучасних лікарень; перенесення акценту з лікування на збереження здоров'я; фінансування за принципом «гроші прямують за учнем/студентом»; стипендії найкращим студентам на навчання в найкращих університетах світу; гнучку систему підготовки спеціалістів, затребуваних ринком; державні пенсії не нижчі за прожитковий мінімум; державну підтримку системи пенсійних накопичень; соціальну підтримку тих, хто не може подбати про себе самостійно; забезпечення рівних можливостей для вразливих груп населення – сиріт, дітей з бідних родин, людей з обмеженими можливостями [12].

Висновки

Кожна з позапарламентських політичних партій мала власну стратегію щодо подолання гострих соціально-економічних проблем. Більшість партій наголошували на необхідності підвищення соціальних стандартів, створення ефективної пенсійної системи та покращення медичних послуг. Проте, можна погодитися з українськими політологами, які вважали, що політичні програми учасників парламентських перегонів є неконкретними, абстрактними, не містять механізмів їх реалізації, а більшість їх положень сформульовані загальною і нечітко, без зазначення строків їх виконання [13].

Література

- 10 головних проблем, які турбують українців. Опитування соціологів. URL: https://espreso.tv/news/2017/11/22/10_golovnykh_problem_yaki_turbuyut_ukrayinciv_reytyng_sociologiv
- Передвиборна програма політичної партії «Громадянська позиція». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборча програма політичної партії «Радикальна партія Олега Ляшка». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Програма Всеукраїнського об'єднання «Свобода» на позачергових виборах народних депутатів України 21 липня 2019 року «Україна – понад усе!». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборна програма політичної партії «Українська стратегія Гройсмана». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборна програма політичної партії «Сила і честь». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Програма політичної партії Об'єднання «Самопоміч». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборна програма політичної партії «Опозиційний блок». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборча програма політичної партії «Соціальна справедливість». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборна програма політичної партії «Партія Шарія». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборна програма Аграрної партії України. URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Передвиборна програма політичної партії «Рух нових сил Михайла Саакашвілі». URL: <https://ukurier.gov.ua/media/files/2019-7/peredviborni-programi-politichnih-partij-129-11-09-2019.pdf>
- Римаренко С. Концепції національного розвитку у програмах учасників парламентських виборів в Україні. URL: https://ipiend.gov.ua/wp-content/uploads/2020/05/vyborchiyi_process_2019.pdf

JURISPRUDENCE

ETHICS IN GEORGIAN PUBLIC SERVICE: EVOLUTION AND CONTEMPORARY CHALLENGES

George Mirianashvili

Dr., Professor of Grigol Robakidze University

Thea Tsamchkuashvili

Dr., Professor of Grigol Robakidze University

[DOI: 10.5281/zenodo.14288846](https://doi.org/10.5281/zenodo.14288846)

Abstract

This study delves into the level of consumer rights awareness among Tbilisi school students. By analyzing factors influencing this awareness, the research identifies a significant knowledge gap, particularly in areas like product composition, complaint filing, and online shopping security. To address this, the study recommends integrating consumer education into the school curriculum, emphasizing interactive learning methods and real-world applications. Additionally, collaborations with consumer protection organizations and universities can enhance the effectiveness of these initiatives. By empowering young people with consumer rights knowledge, we can foster a more informed and responsible consumer society in Georgia.

Keywords: Consumer rights, consumer education, youth awareness, consumer protection, economic literacy, social responsibility.

Introduction

Ethics, a cornerstone of philosophical inquiry, examines the principles of human morality. Originating from the ancient Greek term "ethos," which means habit or custom, ethics was first formally introduced by Aristotle. However, its roots extend further back to the philosophical musings of Socrates and Plato. These early philosophers sought to intertwine moral understanding with philosophical systems, establishing morality as a framework of norms and principles governing human behavior.

The German philosopher Immanuel Kant elevated ethics above all sciences, asserting that while other sciences provide the conditions for human life, ethics defines its purpose and meaning. Modern definitions of ethics highlight its role as a systematic endeavor to derive guiding principles from individual and societal moral experiences, emphasizing the necessity of distinguishing right from wrong.

In the context of public service, particularly in Georgia, ethics plays a critical role in shaping the behavior and actions of civil servants. The journey of ethical development in Georgia's public service has been marked by significant legislative milestones. Starting with the 1997 Law "On Civil Service," which laid down general conduct guidelines for civil servants, to more recent reforms such as the 2015 Law "On Public Service" and the 2017 Government Decree on ethics, these frameworks aim to instill integrity, transparency, and accountability within the public sector.

This article delves into the evolution and current trends of ethics in Georgia, exploring the legislative measures, the practical implications for civil servants, and the overarching importance of ethical principles in fostering a trustworthy and effective public service. Through a detailed examination, we aim to shed light on the continuous process of ethical standard formation and the critical role it plays in combating misconduct

and corruption, ultimately ensuring the implementation of good faith and public trust in state institutions.

1. The Essence of Ethics and Its Development Trends in Georgia

Ethics is seen as a component of philosophy that studies human morality. The term "ethics" is of ancient Greek origin, derived from the word "ethos," which means habit or custom. The term "ethics" was first introduced by the ancient Greek philosopher Aristotle (382-322 BC). However, issues of ethics were addressed much earlier by Socrates (470-399 BC) and Plato (427-347 BC). The interest of ancient Greek philosophers in ethical issues is not surprising, as ethics was considered a philosophical discipline. The study of morality without philosophical understanding was deemed unthinkable;¹ thus, their philosophical systems were created to build ethical doctrines.² Morality was viewed as a set of norms and principles regulating people's lives.

The great German philosopher Kant (1724-1804) believed that ethics is superior to all other sciences because while other sciences create the conditions for human life, ethics explores what human life means and what it ought to be. Ethics studies the goal, while other sciences study the means of achieving this goal.³

There is no single, specific definition of ethics. According to one definition, ethics is seen as a systematic attempt to thoroughly use individual and public moral experiences to define the guiding rules of human behavior. Ethics is related to the definition of right and wrong; it is the search for moral standards. The issue of separating ethics and morality is important. Focusing on ethics emphasizes the active involvement of the individual in the search for a morally correct position. Ethics demands action, thinking, analysis, and the identification of justified behavior. However, solving various ethical dilemmas arising from the activities of a

¹ Badzagua, M., *Fundamentals of Professional Ethics*, Tbilisi, 2018, p. 10.

² Bandzeladze, G., *Ethics*, Tbilisi, 1966, p. 73.

³ *Ibid.*, p. 12.

public institution may rarely present clearly right or wrong actions.⁴

Ethics defines certain obligations aimed at creating a better environment. It is one of the important values for people of different professions, be it politics, science, education, or others.⁵

The purpose of ethical conduct is to prevent and suppress misconduct within the state and society, eliminate corruption, and ensure the implementation of the principle of good faith.⁶ The formation of ethical standards is an ongoing process that requires regular consideration and refinement to adapt to changing circumstances and emerging ethical challenges.

The general rules of conduct for civil servants were defined in the 1997 edition of the Law of Georgia "On Civil Service." This law aimed to establish general principles regulating the behavior of civil servants in the performance of their official duties. According to the 1997 edition, a separate chapter was dedicated to the general rules of conduct for civil servants. This chapter included guidelines for issuing and using public information, managing conflicts of interest, and preventing corruption.

Despite these measures, the necessity for a unified administrative mechanism to protect ethical norms was identified as a key need in Resolution №627 of the Government of Georgia, which approved the concept of civil service reform and related measures. As a result of this reform, the Parliament of Georgia adopted a new Law "On Public Service" in October 2015. Additionally, amendments were made to the Law "On Conflict of Interest and Corruption in Public Institutions."⁷ Finally, on April 20, 2017, the Government of Georgia issued Decree N200 on the "Determination of General Rules of Ethics."

The norms defined in these legislative acts (along with any other specific norms) regulate the standard of behavior for civil servants.

2. Legal Regulation of the Standard of Conduct for Civil Servants

Activity in public service in Georgia encompasses all activities carried out by civil servants, except⁸ for those activities defined as exceptions by the Law of Georgia "On Public Service." This includes activities in municipal institutions and legal entities under public law, excluding cultural, educational, scientific, research, sports, and religious organizations, as well as membership-based legal entities defined by the law. Public service is considered within various offices, including the administration of the President of Georgia, the Office of the Prime Minister and the Government of Georgia, the Office of the National Bank of Georgia, the Office of the State Audit Office, the Office of the High Council of Justice of Georgia, the Office of the

Public Defender of Georgia, the Office of the Business Ombudsman of Georgia, and the administration of the state representative.

Public service is carried out by civil servants, who can be categorized into three types: professional civil servants, persons employed under an administrative contract, and persons employed under a labor contract.⁹ Among these, professional civil servants hold the leading position within the civil service system due to their functional roles and workloads, which are considered the primary managerial functions.¹⁰

The general rules of ethics and conduct in public service are regulated by several legislative acts, including the Law of Georgia "On Public Service," the Law of Georgia "On Combating Corruption," and the Government of Georgia's decree "On Determining the General Rules of Ethics and Conduct in Public Institutions" (April 20, 2017, N200). Additionally, if specific rules of ethics exist for certain public servants, these special rules may apply alongside the general rules established by the mentioned legislative regulations.

Article 77 of the Law of Georgia "On Public Service" outlines additional rights and obligations for officials, specifically stating that compliance with the general rules of ethics and conduct is mandated by the Law of Georgia "On Combating Corruption." This law defines who qualifies as a civil servant for its purposes, detailing that it includes professional civil servants, individuals employed under administrative contracts in the civil service, and officials listed in the first paragraph of Article 2. It clarifies that persons employed under labor contracts are not considered public servants, except where exceptions are established by Georgian legislative acts. This reservation indicates that a person employed under a labor contract in the civil service, who is otherwise considered a public servant, must adhere to certain ethical standards.

Additionally, the Government of Georgia's decree "On Determining the General Rules of Ethics and Conduct in Public Institutions" (April 20, 2017, No. 200) addresses the issue of incompatibility of interests and the distribution of gift regulatory norms for civil servants employed under labor contracts. This decree includes an exceptional provision stipulating that the norms regulating the incompatibility of interests and the acceptance of gifts apply to these individuals. However, this should not be interpreted as exempting them from the obligation to prioritize public interest. All legal status subjects employed in public service must protect and prioritize public interests. In cases where public and private interests conflict, the fact that the regulation on the incompatibility of interests does not apply

⁴ Denhart, R., Denhart, J., Public Management, Ilia State University, 2012, p. 200.

⁵ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Tskhvalashvili, T. eds.), Ethics and General Rules of Conduct in the Civil Service, Tbilisi, 2015, p. 7.

⁶ Author Collective, Management and Leadership in Public Service, Civil Service Bureau, 2020, p. 71.

⁷ Law of Georgia on the "Fight Against Corruption".

⁸ Persons defined in the first paragraph of Article 4 of the Law of Georgia "On Public Service".

⁹ Subparagraph "c" of Article 3 of the Law of Georgia "On Public Service".

¹⁰ Dvalishvili, I., Turava, K., Kardava, E., Makalatia, M., Dvalishvili, N., Tsulaia, A., Pirtskhalaishvili, Z., Kardava, E. (Eds.), Comments on the Law of Georgia on Civil Service, Tbilisi, 2018, p. 20.

to someone employed under a labor contract cannot justify making decisions based on private interests.¹¹

The mentioned decree also sets exceptional conditions for employees of the Ministry of Internal Affairs of Georgia, establishing that the rules of ethics and conduct apply to them unless otherwise specified by special legislation.¹² Furthermore, special norms may regulate various issues differently in other cases. For example, Article 13 (11) of the Law of Georgia "On Combating Corruption" states that the article on incompatibility of interests applies to members of the Parliament of Georgia unless otherwise prescribed by the rules of procedure of the Parliament of Georgia.¹³ The rules of procedure stipulate that the ethical standards of behavior for members of Parliament are determined by their code of ethics, which is approved by the Parliament.

Accordingly, this confirms that the general rules of ethics and conduct apply to civil servants alongside any special rules of ethics and/or conduct established for them, if such rules exist.

3. The Importance of Protecting the Ethical Principles of a Civil Servant

Adherence to ethical principles in any profession is crucial for establishing an effective standard of conduct that promotes more effective, accountable, and transparent governance. This benefits both the relationship with the state and public relations/accountability. Acting in compliance with ethical principles in public service is vital for the effective functioning of institutions, which, in turn, ensures the proper protection of public interests.

Each principle of activity in the civil service, as defined within the legislative framework of Georgia, plays a significant role in ensuring the implementation of effective managerial activities. Upon entering the civil service, a civil servant undertakes to act in accordance with the principles of civil service, ethics, and rules of conduct. The Law of Georgia "On Public Service" dedicates a separate chapter to the principles of public service and defines the following principles: legality, loyalty, equality before the law, economy and efficiency, merit-based public service, impartiality, equal access to public service, accountability, political neutrality, and social and legal protection of civil servants. At the same time, the Law of Georgia "On Combating Corruption" and the Government of Georgia's decree "On Determining the General Rules of Ethics and Conduct" (2017, No. 200) combine the guiding principles and values of the civil service. These legislative regulations clarify the principles of activity in the

public service, which should guide individuals employed in the public service.

Acting on the principle of loyalty imposes an obligation on a public servant to carry out official activities in good faith. This should be expressed in decisions made or accepted within the framework of the functions and duties assigned to them, ensuring that any actions comply with the law and serve the interests of the people and the state.¹⁴ Public servants should prioritize the needs of society over personal benefit or their own interests. They should be responsible for their actions and decisions, facilitating the process of gaining and maintaining public trust in public institutions.

Commitment to the state ensures transparent, non-discriminatory, and neutral decisions. Accordingly, when a public servant makes decisions based on objective circumstances, acts impartially, understands the factors causing any kind of conflict of interest, and makes discrimination-free decisions, they uphold their obligations to the people and the state and act in accordance with the principle of loyalty.¹⁵

An important principle of activity in the public service is the principle of legality, which, along with other principles, is fundamental. Any action of a civil servant should be based on the principles of the rule of law and legal reservation.¹⁶

Acting in accordance with the principle of neutrality obliges a public servant to be free and neutral when making decisions, separating state interests from those of any personal political party or religious association to which they may belong. The goal of political neutrality is to ensure that civil service remains separate from political interests, creating a politically neutral civil service. While a civil servant has the right to support any political ideology, this support should not influence their official decisions.¹⁷

Similarly, acting in accordance with the principle of religious neutrality requires public servants to remain free and neutral when making decisions, ensuring state interests are separate from those of any personal religious community or association to which they may belong. Although the Constitution of Georgia does not explicitly mention norms of religious neutrality, it establishes the freedom of faith, religion, and conscience for every person. Additionally, the constitutional principle of equality before the law includes religious communities, obliging the state to ensure equal benefits as guaranteed by law, which implies the religious neutrality of the state.¹⁸

The freedom of expression of public servants is a significant issue concerning ethics and standards of conduct. A civil servant, as a citizen, does not lose their freedom of expression when they enter public service;

¹¹ Law of Georgia on the "Fight Against Corruption", Art. 21.

¹² Government of Georgia, On Determining the General Rules of Ethics and Conduct in a Public Institution, Decree of April 20, 2017, No. 200, Article 2, Paragraph 3.

¹³ Rules of Procedure of the Parliament of Georgia, Article 227, Paragraph 1.

¹⁴ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 24.

¹⁵ Ibid., pp. 27-28.

¹⁶ Law of Georgia on "Public Service", Art. 7.

¹⁷ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 33.

¹⁸ Government of Georgia, On Determining the General Rules of Ethics and Conduct in a Public Institution, Decree of April 20, 2017, No. 200, Art. 7.

however, there are certain restrictions under the legislation. For instance, a public servant, other than one in a leadership position, may publicly express their views on the policies of the public institution where they work, provided these opinions do not concern issues directly within their official authority or knowledge gained through their official role. In such cases, the public servant must indicate that their views do not represent the position of the public institution.¹⁹

"Incompatibility of interests in a public institution" refers to the conflict between a public servant's personal or property interests and the interests of the public institution.²⁰ A "conflict of interest" is defined as a situation where a civil servant's private interests may unduly influence the performance of their public duties.²¹

There are three types of incompatibility of interests: real, visible, and potential.

Real Incompatibility of Interests: This occurs when a civil servant's private interests directly conflict with their official duties. For example, a civil servant receiving income from an organization they oversee creates a real conflict of interest.

Visible Conflict of Interest: This occurs when a civil servant formally declares a conflict of interest. For instance, if a civil servant officially declares ownership of shares in a business and, based on a trust agreement, transfers the management of these shares to another person for the duration of their service, this represents a visible conflict of interest.

Potential Conflict of Interest: This occurs when a conflict of interest might arise if circumstances change.²² For example, a civil servant who owns shares in a company that could potentially become a service provider for the public institution where they work in a decision-making capacity faces a potential conflict of interest. Sources of potential conflicts may include additional activities that, while compatible, might still influence the civil servant's main duties improperly.

Article 9 (2) of the resolution of the Government of Georgia "On Determining the General Rules of Ethics and Conduct in a Public Institution" states that a public servant should avoid circumstances that may be perceived as direct or indirect influence of private interest on their official activities. This provision is preventive, aiming to avoid the occurrence of potential incompatibility of interests. It obliges public servants to steer clear of any circumstances that might be perceived as influencing their official activities.

Direct Influence: This might occur when a public servant is part of a tender commission responsible for selecting a winning company. Due to their position, they can directly influence the commission's decision.

Indirect Influence: This might occur when a public servant's private interests, even if not directly involved, can still influence the final decision. For instance, a public servant's relationship with a company participating in a tender can create an indirect influence on the outcome, especially if the public servant has a vested interest in the company.²³

The following activities are considered compatible with the position occupied by a public servant: scientific activities, pedagogical activities, creative activities, and sports activities. Each compatible activity has a specific definition. For example, scientific activity includes the creation and publication of scientific works or articles, participation in various scientific conferences and seminars, as well as the implementation of scientific research activities. Pedagogical activity includes conducting lectures, seminars, and trainings, as well as sharing and transferring professional knowledge and experience in other forms. Creative activity is considered the creation, restoration, and/or interpretation of cultural values, both in material and intangible forms.

The definition of sports activities is particularly interesting. Although its exact definition is not clear, its inclusion in the list of compatible activities may cause differences of opinion.²⁴ The definition of sports activities is not found in the Law of Georgia "On Sports," but the state policy document on sports (2014-2020) specifies that sports include all forms of physical activity, whether irregular or organized, aimed at improving physical and mental abilities, developing public relations, and achieving results in competitions of all levels.²⁵ This general definition raises questions about what is meant by all forms of physical activity and whether the activities of sports referees, coaches, athletes, or professional athletes are covered. For example, whether sports activities include those for whom sport is the main source of income.

It would be beneficial if legislative regulation could clearly define what sports activities mean and what types of sports activities can be considered compatible, to avoid mixed practices in the public service. It is also noteworthy that certain activities, such as those in the cultural sphere, are not listed among compatible activities. The potential conflicts of interest arising from activities in the cultural sphere need to be revised and newly defined by legislation.²⁶

It is important to outline specific criteria for evaluating compatible activities, which would give employers the opportunity to discuss, evaluate, and resolve issues of conflict of interest in each specific case. However, there should not be any gaps in such regulations, and the issue of whether or not to carry out a particular

¹⁹ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 78.

²⁰ Law of Georgia on the "Fight Against Corruption", Article 3, Paragraph 3.

²¹ OECD, Managing Conflict of Interest in the Public Service, OECD Guidelines and Country Experiences, 2003, p. 53.

²² Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct

in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 51.

²³ Ibid., p. 53.

²⁴ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 60.

²⁵ State Sports Policy Document 2014-2020, 2014, p. 3.

²⁶ Ibid., p. 4.

activity should not depend solely on the integrity of public servants.

4. Principle of Integrity and Ethical Environment Management in Public Service

It is essential to highlight the principle of good faith separately, as it encompasses and implies actions in accordance with relevant moral and ethical values, norms, and rules of behavior. A conscientious public servant acts within their authority and uses their position or power solely to protect public interest based on the law. Integrity in public administration is intertwined with concepts such as ethics and rules of conduct, morality, corruption, conflict of interest, and incompatibility of positions in public service.

Whether a particular civil servant is conscientious is measured by their decisions and actions in preventing unethical behavior, immoral attitudes, corruption offenses, and conflicts of interest. Therefore, adherence to the standard of integrity is crucial in public service.²⁷ Conscientiousness refers to adherence to ethical principles and moral values, even when faced with difficult decisions or the temptation to act otherwise. Acting in accordance with the principle of good faith involves considering the potential impact of one's actions on the institution, the state, or society as a whole. When making decisions, civil servants take into account the rights of others, strive to minimize harm, and promote public interests.

A public institution based on good faith is one that conducts its activities on the foundation of ethical values, where work is performed with high-quality personal and organizational skills. Such an institution not only deserves the trust and respect of the public but also sets a positive example for other institutions. Achieving and maintaining this result requires all public servants to understand the importance of acting in compliance with the principle of good faith and effectively implementing it in practice.

5. Principle of Integrity and Ethical Environment Management in Public Service

It is important to highlight the principle of good faith, as it encompasses actions aligned with relevant moral and ethical values, norms, and rules of behavior. A conscientious public servant acts within their authority and uses their position or power solely to protect public interests based on the law. Integrity in public administration relates to concepts such as ethics and rules of conduct, morality, corruption, conflict of interest, and incompatibility of positions in public service.

Whether a particular civil servant is conscientious is measured by their decisions and actions in preventing

unethical behavior, immoral attitudes, corruption offenses, and conflicts of interest. Therefore, compliance with the standard of integrity is crucial in public service. Conscientiousness refers to adherence to ethical principles and moral values, even when faced with difficult decisions or the temptation to act otherwise.²⁸ Acting in accordance with the principle of good faith implies considering the potential impact of one's actions on the institution, the state, or society as a whole. When making decisions, civil servants consider the rights of others, strive to minimize harm, and promote public interests.²⁹

A public institution based on good faith is one that conducts its activities on the foundation of ethical values, where work is performed with high-quality personal and organizational skills.³⁰ Such an institution not only deserves the trust and respect of the public but also sets a positive example for other institutions. Achieving and maintaining this result requires all public servants to understand the importance of acting in compliance with the principle of good faith and effectively implementing it in practice.

The issue of integrity is especially important in relation to dismissed civil servants. According to legislation, a dismissed public servant has no right to start working in a public institution within one year from the date of dismissal or to carry out activities in an enterprise they systematically supervised during the last three years. They also have no right to receive income from such a public institution or enterprise.³¹ It is important to highlight the principle of good faith separately, as it encompasses actions aligned with relevant moral and ethical values, norms, and rules of behavior. A conscientious public servant acts within their authority and uses their position solely to protect the public interest based on the law. Integrity in public administration is intertwined with concepts such as ethics and rules of conduct, morality, corruption, conflict of interest, and incompatibility of positions in public service.

Whether a particular civil servant is conscientious is measured by their decisions and actions in preventing unethical behavior, immoral attitudes, corruption offenses, and conflicts of interest. Therefore, compliance with the standard of integrity is crucial in public service. Conscientiousness refers to adherence to ethical principles and moral values, even when faced with difficult decisions or the temptation to act otherwise. Acting in accordance with the principle of good faith implies considering the potential impact of one's actions on the institution, the state, or society as a whole. When making decisions, civil servants consider the rights of others, strive to minimize harm, and promote public interests.

²⁷ Law of Georgia "On Culture", Article 5, Subparagraph "g".

²⁸ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 40.

²⁹ Agapishvili, Y., Beselia, G., Kardava, E. (Eds.), Integrity in the Public Service: Corruption Offences, Conflicts of Interest, and Incompatibility of Office, 2022, p. 9.

³⁰ Gunashvili, D., Makalatia, E., Razmadze, J., Samchkuashvili, T., Siradze, E., Khazalia, Y. (Eds.), Ethics and General Rules of Conduct in Public Service: Practical Manual, Third Edition, Tbilisi, 2017, p. 18.

³¹ Law of Georgia on the "Fight Against Corruption", Article 13, Paragraph 10.

A public institution based on good faith is one that conducts its activities on the foundation of ethical values, where work is performed with high-quality personal and organizational skills. Such an institution not only deserves the trust and respect of the public but also sets a positive example for other institutions. Achieving and maintaining this result requires all public servants to understand the importance of acting in compliance with the principle of good faith and effectively implementing it in practice.

The issue of integrity is especially important in relation to dismissed civil servants. According to legislation, a dismissed public servant has no right to start working in a public institution within one year from the date of dismissal or to carry out activities in an enterprise they systematically supervised during the last three years. They also have no right to receive income from such a public institution or enterprise. This restriction serves to protect the public interest. However, in practical enforcement, the integrity of the public servant is crucial. When a dismissed civil servant engages in activities in the private sector, the legislation regulating civil service no longer applies to them. The aim is to restrict the civil servant from carrying out private activities, while the private institution focuses on its own interests without legislative constraints. This risk is often observed when employees move between public institutions and enterprises with state share participation. For instance, the Deputy Minister of Environmental Protection and Agriculture of Georgia, who supervises Ltd "Melioration", cannot work at this Ltd within one year after dismissal.³²

One severe manifestation of dishonesty is when it leads to corrupt acts. Widespread corruption not only reduces trust in public service but also significantly impacts economic factors. Therefore, any country aspiring to have a functional and effective public service must implement good faith and anti-corruption programs.³³

An important issue in influencing the exercise of official powers of a civil servant is the institution of gifts and the risks arising from them. According to the first paragraph of Article 5 of the Law of Georgia "On Combating Corruption", a gift is defined as property or services given to a public servant or their family member free of charge or on preferential terms, including complete or partial exemption from property obligations, which is an exception to the general rule. This definition includes both direct and indirect influence. Direct influence occurs when the public servant is the recipient of the gift and can use their authority in exchange for the gift to make a decision that is an exception to the general rule. Indirect influence occurs when the recipient of the gift is not the public servant directly but a member of their family, such as a spouse, minor

child, stepchild, or a person permanently residing with them.³⁴

Why is it important to regulate the issue of gifts, and what should a civil servant consider when offered a gift? The purpose of regulating gifts is to create a bona fide and corruption-free environment in public service, ensuring impartial and free decisions by civil servants. Gift policy promotes the introduction of important principles of public administration such as legality, integrity, objectivity, impartiality, equality, independence, transparency, and accountability.³⁵

One of the important roles in the ethical environment management process is played by the head of the institution and their management style. The head of the institution plays a decisive role in forming organizational culture and adherence to ethical principles. A supervisor who prioritizes action in accordance with ethical standards and respects ethical views can establish and develop a culture of ethical behavior throughout the institution. While legislation lays the foundation for ethical governance, the management style of the head of the institution contributes significantly to the realization of ethical principles.

Leaders are limited in certain actions to promote an ethical environment. For example, a civil servant in a leadership position should avoid an autocratic style of governance and instead provide an open and free environment for initiatives and criticism. Additionally, they should assign tasks within the competence of subordinate public servants and ensure the effective distribution of working time and functions among them. Within their authority, they should identify areas where there may be a risk of conflict of interest and develop mechanisms to ensure the reduction and/or effective management of these risks. Leaders should also be objective and impartial, facilitating the adoption of unbiased decisions and avoiding the encouragement of wrongful actions.

Creating a collegial environment and providing access to vocational education for public servants under their supervision is crucial. Leaders should also facilitate the involvement of their subordinates in various professional development programs. By promoting such an environment, the head of the institution not only ensures adherence to ethical standards but also fosters a culture of continuous improvement and integrity within the organization.³⁶

In addition to officials holding leadership positions in the civil service, each civil servant is obliged to determine the measures and tasks to be carried out according to priority and, in case of any difficulty, apply to their direct supervisor. A civil servant must reasonably distribute working time and resources when performing tasks, assess possible risks when planning

³² Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 49.

³³ Agapishvili, Y., Beselia, G., Kardava, E. (Eds.), Integrity in the Public Service: Corruption Offences, Conflicts of Interest, and Incompatibility of Office, 2022, p. 27.

³⁴ Agapishvili, Y., Beselia, G., Tsukhishvili, N. (Kardava, E. ed.), On Approval of the General Rules of Ethics and Conduct

in a Public Institution, Comments on the Decree of the Government of Georgia, Tbilisi, 2018, p. 65.

³⁵ Tsukhishvili, N., Gift Policy in Public Service: Comparative Analysis of International Practice and Georgian Legislation, 2020, p. 6.

³⁶ Government of Georgia, On Determining the General Rules of Ethics and Conduct in a Public Institution, Decree of April 20, 2017, No. 200, Article 25.

work, and develop appropriate measures to eliminate them. It is crucial to consider the objectives of the public service when performing work.³⁷

Beyond how a leader should behave, there is a statutory obligation to protect the rights of those under their authority. A civil servant is expected to perform instructions, orders, and other oral or written tasks in good faith. If these tasks are vague, difficult to perform, or if there is a problem of competence, the civil servant is obliged to immediately inform the issuing superior of these circumstances. Additionally, civil servants must not comply with instructions, tasks, and orders that contradict the legislation of Georgia.³⁸

Civil servants are required to act in accordance with the law and are responsible for their actions. The execution of illegal orders from superiors does not absolve them of responsibility for potential offenses. It is important to distinguish the results of executing an illegal task, which in some cases may impact broader state or public interests, and in other cases may not have such a wide scope. However, the primary issue is the illegality of the task, which cannot be measured solely by its impact. The illegality itself necessitates non-compliance regardless of the scale of its effect.

The statutory obligation ensures that civil servants are accountable for their actions, promoting an ethical and lawful work environment. This framework supports the integrity of public service by requiring all civil servants, regardless of rank, to adhere to legal and ethical standards and to take proactive steps to address any issues that arise in the course of their duties.

Conclusion

The exploration of ethics within Georgia's public service underscores its fundamental importance in shaping a transparent, accountable, and effective governance structure. Ethics, deeply rooted in philosophical tradition, continues to evolve, reflecting the dynamic nature of societal values and the complexities of modern governance.

Georgia's journey in establishing ethical standards for civil servants highlights the significance of legislative frameworks in guiding behavior and decision-making processes. From the early provisions in the 1997 Law "On Civil Service" to the comprehensive reforms encapsulated in the 2015 Law "On Public Service" and the 2017 Government Decree, these regulations strive to create an environment where ethical conduct is the norm. The focus on preventing conflicts of interest, managing ethical dilemmas, and upholding principles such as legality, loyalty, and neutrality demonstrates a commitment to fostering integrity within public institutions.

However, the effective implementation of these ethical standards depends not only on legislation but also on the dedication of individuals within the public service. Civil servants are entrusted with the responsibility to act in good faith, prioritizing public interest over personal gain. Their adherence to ethical principles and proactive engagement in ethical practices are crucial for maintaining public trust and enhancing the legitimacy of state institutions.

The continuous refinement of ethical standards and the introduction of measures to address emerging challenges are essential for sustaining an ethical culture in public service. Leaders play a pivotal role in promoting ethical behavior, and their actions set the tone for the entire organization. By fostering an environment of integrity, transparency, and accountability, public institutions can effectively serve the interests of society and contribute to the overall well-being of the nation.

In conclusion, the development of ethics in Georgia's public service is an ongoing process that requires vigilance, commitment, and adaptability. As Georgia navigates the complexities of modern governance, the emphasis on ethical conduct remains a cornerstone for achieving a just and equitable society. The lessons learned and the frameworks established provide a robust foundation for future advancements, ensuring that ethics continues to guide the path toward effective and honorable public service.

³⁷ Government of Georgia, On Determining the General Rules of Ethics and Conduct in a Public Institution, Decree of April 20, 2017, No. 200, Article 23.

³⁸ Government of Georgia, On Determining the General Rules of Ethics and Conduct in a Public Institution, Decree of April 20, 2017, No. 200, Article 24.

AWARENESS ABOUT CONSUMER RIGHTS AMONG SCHOOL PUPILS IN TBILISI**Vakhtang Caraia***Professor, Grigol Robakidze University***Tengiz Taktakishvili***Professor, Grigol Robakidze University***Slava Petelava***Associate Professor, Grigol Robakidze University***Nino Sachaleli***Assistant, Grigol Robakidze University***Nino Kobalia***Student, Grigol Robakidze University*[DOI: 10.5281/zenodo.14289085](https://doi.org/10.5281/zenodo.14289085)**Abstract**

This study delves into the level of consumer rights awareness among Tbilisi school students. By analyzing factors influencing this awareness, the research identifies a significant knowledge gap, particularly in areas like product composition, complaint filing, and online shopping security. To address this, the study recommends integrating consumer education into the school curriculum, emphasizing interactive learning methods and real-world applications. Additionally, collaborations with consumer protection organizations and universities can enhance the effectiveness of these initiatives. By empowering young people with consumer rights knowledge, we can foster a more informed and responsible consumer society in Georgia.

Keywords: Consumer rights, consumer education, youth awareness, consumer protection, economic literacy, social responsibility.

Introduction

Consumer rights are an important foundation of modern society, ensuring that people are treated fairly and ethically in the marketplace and protecting them from fraud, dangerous products and unethical practices. These rights are vital to protecting private interests, promoting fair competition, raising product standards and increasing consumer confidence. Despite their undeniable relevance, knowledge of consumer rights varies significantly across different groups, particularly among younger generations. This disparity raises a critical question: are young members of society well prepared to navigate the complexities of the market and protect themselves from potential exploitation? In an ever-changing global marketplace, disseminating information about basic consumer rights is more important than ever. Schoolchildren are a particularly important group in this regard, as they represent the next generation of self-sufficient consumers. These young people will soon face barriers in making purchasing decisions, obtaining reliable information and combating unfair practices in an increasingly complex marketplace. By raising awareness of consumer rights during their formative years, society can prepare them to make informed decisions, resist unethical behavior and contribute to a culture of accountability, fairness and transparency.

Consumer protection is a critical issue worldwide, especially during the transition to a market economy. Market mechanisms do not provide effective protection against unfair competition and monopolistic behavior. Consumers in Georgia, as in other countries of the former Soviet Union, have historically been deprived of their rights due to the lack of legislation or an appropriate institutional framework. In 1996, Georgia adopted the Law on the Protection of Consumer Rights, which created the legislative framework for the protection of

consumer rights. However, in 2005, the law was declared illegal, which led to the abolition of the subordinate legislation necessary for the implementation of the law and the obligation of the executive branch to coordinate antitrust acts adopted to protect consumer rights. This led to the exclusion of Article 153 from the Code of Administrative Offenses of Georgia, which provided for administrative sanctions for violations of trade legislation (Petelava, 2015).

In 1995-2005, international experts made a significant contribution to improving Georgia's antimonopoly policy, especially in the area of consumer protection. These specialists, including American experts from the Center for Economic Policy and Reforms in Georgia, Professor Terry Berguen from the University of Leuven and Belgian experts, trained personnel on market mechanisms and consumer protection. The country lacked a unified consumer protection policy and effective mechanisms, which requires the exchange of experience with industrialized countries, especially the European Union. This problem has become even more urgent with the repeal of the Georgian Law "On the Protection of Consumer Rights". The UN General Assembly resolutions 39/248 and 151 on consumer protection are also important in addressing consumer rights issues. These resolutions establish a set of principles and standards for regulating restrictive business practices and call on governments to develop, strengthen or maintain measures to prohibit harmful conduct that may affect consumers (Petelava, 2015).

Consumer protection practices vary across developed European countries. In France the Directorate-General of the French Ministry of the Economy is responsible for competition, consumer protection and advertising regulation. In the United Kingdom, local authorities implement consumer protection legislation,

while the Office of Fair-Trading sets consumer policy but does not exercise powers. In some countries, such as Australia, restrictive business practices and competition laws are inextricably linked, with the same authority overseeing and enforcing their application. In some countries, the government oversees both competition and consumer protection through a single agency, although enforcement agencies exist separately. In contrast, the United States lacks a single, comprehensive body of law that regulates the quality of goods and services and the rights of consumers and sellers. Contract law, federal statutes, rules and regulations, interpretations by federal government agencies and actions by various state and municipal law enforcement agencies contain consumer protection principles. In the United States, federal agencies such as the Federal Trade Commission, the Consumer Product Safety Commission, the Food and Drug Administration, the Food Safety and Inspection Service, the Trademark and Patent Office, the National Highway Traffic Safety Administration, the Federal Communications Commission and the Securities and Exchange Commission protect consumer rights. Other government agencies that regulate the banking industry include the Office of the Financial Conduct Authority, the Office of the Comptroller of the Treasury, the Federal Reserve and the Federal Deposit Insurance Corporation (Petelava, 2015).

This study examines the level of consumer rights awareness in Tbilisi, a dynamic and diverse city in Georgia. The study aims to determine how successfully consumer rights education has been integrated into the school curriculum and its effectiveness in shaping young people's attitudes by analyzing their knowledge and attitudes.

In addition, the article examines the sources through which students learn about consumer rights. These may include formal educational programmes, parental supervision, media influences and personal experiences. It also considers the challenges educators and policy makers face in incorporating consumer rights into educational programmes and the wider social implications of providing such knowledge to young people. The study thus illustrates the essential connection between education, social values and consumer culture. In addressing these issues, this study highlights the important role of education in preparing young people to navigate an increasingly consumer-driven world with confidence and responsibility. It advocates for the inclusion of comprehensive consumer education in school curricula to equip students with the skills needed to succeed in today's interconnected and competitive marketplace. Finally, the data demonstrates that ensuring a deep understanding of consumer rights among the younger generation is both a personal benefit and a societal imperative, leading to a fairer, more transparent and informed global economy.

Literature review

In recent years, scholars and policymakers have focused much attention on understanding consumer rights knowledge, which is considered a vital component of economic and civic literacy. This section re-

views the existing literature on consumer rights awareness, focusing on its importance, the role of education and the variables that determine its prevalence among young people.

Consumer rights are essential to ensure ethical business practices and protect people from exploitation. Kotler and Armstrong (2018) highlight that consumer rights not only protect people, but also promote fair trading practices, improve product quality and foster economic trust. Consumer International (2020) argues that increased awareness leads to informed decision-making by empowering consumers to challenge unethical behavior and hold firms accountable. However, many studies have identified gaps in consumer understanding, particularly among young people who are increasingly engaging in commerce through both traditional and digital platforms.

Educational institutions play an important role in promoting consumer rights. Formal education provides an opportunity to impart the knowledge and skills needed to deal with complex consumer situations. According to Grunert and Wills (2007), including consumer education in the school curriculum helps students understand concepts such as product safety, ethical consumption and dispute resolution. Similarly, the OECD (2019) argues that early consumer education is correlated with higher levels of economic literacy and responsible consumer behavior in adulthood.

In Tbilisi, Georgia, consumer education programmes are still at an early stage. The Ministry of Education of Georgia (2021) has emphasized the inclusion of consumer awareness programmes in the school curriculum to meet international standards. However, few studies have examined the effectiveness of these initiatives or students' awareness of them.

Family, media coverage and access to digital information influence young people's awareness of consumer rights. A study by Moschis and Churchill (1978) found that parental advice has a major impact on children's understanding of their rights and responsibilities as consumers. Many of the recent research papers highlight the growing importance of social media and online platforms as key sources of information for young people. These sites can be both helpful and harmful, providing real-time updates on consumer issues, while sometimes spreading misinformation.

Despite its importance, increasing the knowledge of consumer rights among students presents various challenges. Despite many global studies on awareness of consumer rights, there are few studies specifically focused on school students in Tbilisi. Most of the existing studies either focus on adolescents or take a broad approach to consumer education in Georgia. There is no data on the exact tactics Tbilisi schools use to teach these concepts, their success and how cultural and economic factors affect students' knowledge.

The available literature highlights the critical need for awareness of consumer rights, as well as the role of education in promoting responsible consumer behavior among youth. However, there are significant gaps, especially in knowing how students in Tbilisi interact with these concepts. The purpose of this study is to fill these gaps by analyzing the current level of awareness

among Tbilisi school students about consumer rights, studying the factors affecting their knowledge and identifying the potential for improving educational programs in this field.

The study of consumer awareness has received much attention worldwide due to the increasing complexity of the consumer environment and the critical importance of making informed decisions. Consumer education serves as a foundation for equipping consumers with the knowledge and skills needed to ethically navigate the marketplace. This section examines global strategies, approaches and frameworks for promoting knowledge about consumer rights, with a focus on youth education.

The concept of consumer rights has evolved in response to the challenges posed by globalization and mass production. Consumer rights ensure fair treatment in transactions, protect consumers from fraud and encourage ethical consumption. However, global surveys show that young consumers are often the least aware of their rights, despite their growing purchasing power and complex digital markets. International institutions such as the United Nations emphasize the need for consumer education. The UN Guidelines on Consumer Protection (updated in 2015) emphasize the need for youth-oriented educational initiatives to create a generation of responsible consumers. Countries such as Finland, Singapore and Australia have effectively integrated consumer education into their school curricula, exemplifying global best practice.

In many countries, consumer education is integrated into larger courses such as economics, civics and social sciences. For example, Australia's National Consumer and Financial Literacy Framework sets broad requirements for schools that link consumer education to practical skills such as budgeting, understanding contracts and internet safety. Similarly, in South Korea, consumer rights are a formal part of the secondary school curriculum, with an emphasis on practical applications such as dispute resolution and fraud prevention (OECD, 2019).

Modern educational methods emphasize interactive and experiential learning to increase student engagement and retention.

In contrast, some countries use a project-based strategy. For example, in Canada, students are tasked with developing awareness campaigns or studying real-life examples of consumer rights violations. These strategies promote critical thinking and a deeper understanding of the subject.

With the growth of e-commerce and digital marketplaces, online tools have become important in educating consumers about their rights. The EU's Consumer Classroom website provides teachers with resources to teach students about internet safety, advertising literacy and consumer law. These digital resources promote accessibility and allow educators to tailor content for different age groups.

Despite progress, the global effort faces significant challenges. The inclusion of consumer education in school curricula often competes with other academic priorities, resulting in a lack of time and resources for

the subject. In addition, cultural and economic disparities affect the success of educational programs.

Njuguna, Oloko, Oyugi (2014). examined the relationship between knowledge of consumer rights and consumerism in Nakuru County using methodologies such as Pearson correlation and linear regression analysis to analyze data collected from 400 households. This study provides a practical example of how simple regression analysis can be used to study influence of awareness on consumer behavior.

According to Gvenetadze (2019), the level of consumer education in Georgia is low compared to other EU member states due to legal gaps and lack of attention from the government and corporate sector. Georgia should urgently restore and implement the original version of the draft law "On Consumer Rights Protection" to improve the quality of education. Georgia can also follow the example of Hungary, which has effectively implemented consumer education programs. One of the important programs is Teaching and Learning for a Sustainable Future, which is aimed at students, teachers and consumer education professionals. Georgia's accession to the UN allows it to expand its cooperation with the UN and participate in this training program, effectively implementing the law on consumer rights protection. Research shows that professional orientation is key for youngster's future carrier planning (Kvirkvaia et al., 2018).

Danilanea and Marzano (2013) researched the relationship between social learning theories and the development of sustainable education, focusing on social, economic, environmental and cultural factors. They suggested that the content of consumer education in primary schools should be revised using theories of mentioned factors to improve the quality of life of students as consumers.

Bashir, Khan and Khan (2023) examined the relationship between consumer education and consumer protection laws, highlighting the need to educate consumers about their rights and responsibilities. It examines how consumer protection laws have evolved and how consumer education can contribute to consumer protection. The study also examines how technology and digital platforms are influencing consumer education, highlighting the importance of personalized approaches in the digital age.

Todua and Jashi (2018) discuss the Sustainable Development Goals (SDGs) and the importance of good nutrition for public health. Their study highlights the role of social marketing in solving social problems, as well as the importance of promoting activities in the agricultural and food industries. However, the introduction and promotion of healthy eating in Georgia remains a challenge due to the preference of low-quality food and low-income consumers for cheap products. Key solutions include research on consumer behavior towards good eating, focusing on interest, awareness and perception. The study also examines the impact of demographic characteristics on these variables.

Todua (2018) studied the role of healthy eating in food security and consumer sustainability, focusing on consumer knowledge and perception. According to

market research, age, education and money influence food awareness and subsequent purchase decisions.

Based on international best practices, Georgia can benefit from a hybrid strategy that combines formal education, experiential learning and digital resources. While Georgian youth learn consumer rights through informal channels such as family and media, a structured curriculum can provide consistency and depth of knowledge.

In addition, the use of regional case studies can make teaching more informative and effective. Students can, for example, investigate consumer disputes in Tbilisi markets or investigate the effects of online commerce in Georgia. Partnerships with consumer protection organizations and non-governmental organizations (NGOs) can expand the scope and quality of these programs.

Although research on knowledge of consumer rights is growing worldwide, research focused on school children, especially in transition countries such as Georgia, is limited. Most current research focuses on adult clients or broad economic knowledge. Future research should focus on evaluating the effectiveness of different teaching approaches in different settings, especially in cities like Tbilisi.

In addition, longitudinal studies could examine the long-term effects of consumer education on youth purchasing habits and economic activity. Understanding these trends can help develop more targeted and effective treatments.

In recent years, there has been a trend among young people towards entrepreneurial risk-taking, but this is insignificant compared to what can actually improve the country's image. Funds and business angels have been formed in the country, which are trying to invest in promising companies with global potential (Taktakishvili et al, 2024). This fact can contribute to the young generations' awareness about the consumer rights as well.

Global literature emphasizes the need for awareness of consumer rights and identifies various methods of educating young people. Best practices from Finland, South Korea and Australia emphasize the importance of formal education, interactive learning and digital technologies to develop a strong understanding

of consumer rights. For Georgia, incorporating these ideas into the local context in solving existing problems will significantly improve the effectiveness of consumer education among school pupils. This study aims to add to this growing debate by assessing the current state of consumer rights awareness in Tbilisi and recommending areas for development.

Methodology

We conducted the study among students of Tbilisi public schools and its goal was to identify what factors affect the level of awareness of Tbilisi school students about consumer rights. In order to obtain a homogeneous population and sample, only 11th graders were selected. Students had to answer ten questions on a five-point Likert scale. The questions corresponded to variables, one dependent (their own level of awareness of consumer rights) and 9 independent variables.

A total of 79 students from Tbilisi schools participated in the study.

Regression analysis was used to process the results of the study. The variables in the model were as follows:

- y - Level of awareness of students about consumer rights
- x1 - General information obtained from the Internet
- x2 - Information about the suitability of the product
- x3 - Information about the composition of the product
- x4 - Information about filing a complaint against the manufacturing company
- x5 - Information about returning or exchanging the product
- x6 - Information about regulations when purchasing the product remotely
- x7 - Information about the company's security policy
- x8 - Information about website security rules
- x9 - Information about warranty service

The study identified the factors that have the greatest impact on raising the level of awareness of schoolchildren about consumer rights.

Table 1.

Regression analysis

Regression Statistics								
Multiple R	0.718514							
R Square	0.516263							
Adjusted R	0.452239							
Standard Error	0.763522							
Observations	78							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	9	42.30709	4.700787	8.063582	5.06E-08			
Residual	68	39.64163	0.582965					
Total	77	81.94872						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.86627	0.489022	1.771432	0.08097	-0.10956	1.842099	-0.10956	1.842099
x1	0.04595	0.094621	0.485615	0.628801	-0.14286	0.234763	-0.14286	0.234763
x2	-0.08554	0.096879	-0.88301	0.380343	-0.27886	0.107774	-0.27886	0.107774
x3	0.240784	0.094312	2.55305	0.012927	0.052587	0.428982	0.052587	0.428982
x4	0.255743	0.093726	2.728638	0.008087	0.068717	0.44277	0.068717	0.44277
x5	0.087158	0.087201	0.999504	0.321094	-0.08685	0.261165	-0.08685	0.261165
x6	0.126508	0.103493	1.222389	0.225781	-0.08001	0.333025	-0.08001	0.333025
x7	-0.00116	0.073314	-0.01589	0.987369	-0.14746	0.14513	-0.14746	0.14513
x8	0.070115	0.086737	0.808365	0.4217	-0.10297	0.243195	-0.10297	0.243195
x9	0.153227	0.090882	1.685993	0.096381	-0.02813	0.33458	-0.02813	0.33458

Source: Authors' calculations

Regression analysis showed that the level of awareness of schoolchildren about consumer rights is influenced by two independent variables in the model: x3 - information about the composition of the product and x4 - information about filing a complaint against the manufacturing company. It seems that students are most often exposed to this type of information and based on these issues, they deepen their knowledge of consumer rights. The regression analysis did not reveal any connections between the other independent variables in the model and the dependent variable. Accordingly, it can be said as a recommendation that it is necessary to implement more active information campaigns in those directions, the corresponding variables of which, according to the model, do not affect the level of awareness of schoolchildren.

The explanatory power of the model is acceptable, because according to the model, the variables present there explain the dependent variable by 45 percent. However, a certain limitation of the model is that it does not take into account the remaining variables. Some limitations may also exist in that the responses to these questions were based on students' perceptions and there may be elements of subjective assessment here.

Before conducting the regression analysis, a multicollinearity test was performed to rule out potential relationships between the independent variables. The test showed that there were no significant relationships between the independent variables and all of them could be retained in the model.

Table 2.

Multicollinearity test

	x1	x2	x3	x4	x5	x6	x7	x8	x9
x1	1								
x2	0.263296	1							
x3	0.343702	0.494994	1						
x4	0.39978	0.283485	0.334289	1					
x5	0.250425	0.409237	0.287488	0.431726	1				
x6	0.48577	0.427242	0.437493	0.443493	0.513566	1			
x7	0.20856	0.264541	0.222901	0.243796	0.26904	0.342328	1		
x8	0.350948	0.452088	0.507637	0.413164	0.435907	0.516212	0.516421	1	
x9	0.088373	0.180458	0.073294	0.263316	0.408522	0.328553	0.16909	0.198319	1

Source: Authors' calculations.

The study reveals a significant gap in the understanding of consumer rights among Tbilisi students and suggests targeted educational interventions to address this gap. Based on feedback from participants, a number of methods emerged as potential ways to raise awareness of consumer rights among students, consistent with global best practices in civic education and consumer protection. This includes structured projects,

interactive learning sessions and a greater emphasis on hands-on learning.

The participants suggested starting projects that would involve schoolchildren in the process of raising awareness. Organizing informational meetings and training sessions was highlighted as a critical step in establishing credibility and competence with industry experts. Such events not only teach students about consumer rights, but also allow them to share this

knowledge with their friends, creating a ripple effect that extends beyond the classroom.

A general recommendation was to develop links between schools and universities. Such collaboration can provide an interdisciplinary approach that combines academic knowledge with practical application. Workshops, seminars or experiential learning programs simulating consumer scenarios can be part of collaborative projects. Schools can provide students with a better understanding of consumer rights and responsibilities by using the resources and expertise of higher education institutions.

Participants enthusiastically supported the inclusion of hands-on activities and civic education in the school curriculum. Hands-on learning, such as simulated shopping or hands-on research, can help students understand complex concepts more clearly. Meanwhile, adding consumer rights topics to civics lectures emphasizes their importance in democratic participation and ethical consumption, encouraging students to consider these rights as an integral part of their role as informed citizens.

The respondents' enthusiasm for participating in and implementing various projects indicates a strong case for community-based initiatives. Using this motivation, schools can create student-led support groups or clubs dedicated to raising awareness of consumer rights. Such platforms can act as incubators for leadership and innovation, where students are actively involved in creating and implementing awareness campaigns.

To maintain sustainability, policymakers and educators should explore the possibility of integrating consumer education into broader educational curricula. This can be achieved by:

- Preparing of age-appropriate learning materials.
- Establishing an alliance with consumer protection authorities.
- Implementing teacher training programs to provide educators with the necessary skills to effectively present this information.

By addressing these components, the study highlights the importance of a comprehensive and interactive approach to consumer education that ensures young people gain the knowledge and tools they need to navigate the complexities of today's consumer marketplace.

Conclusion

This study shows a significant gap in consumer rights understanding among Tbilisi students, highlighting the critical need for targeted interventions to equip youth with important consumer knowledge and skills. The results indicate that educational activities should be inclusive, interactive and in line with global best practices in consumer protection and civic education.

Community-initiated projects and trainings are crucial to address this gap, as participants emphasized the need for professional engagement and participatory methods. Such projects not only convey important messages, but also inspire students to actively participate in

awareness campaigns, creating a peer-centered educational approach that extends beyond the classroom. These programs can help students develop leadership and responsibility by embedding consumer education in a broader framework of ethical and democratic participation.

Cooperation between schools and universities was established as an additional important strategy. Schools can use the knowledge and resources of higher education institutions to organize joint workshops, experiential learning programs and case study-based workshops. This coordinated effort will provide students with a realistic and comprehensive understanding of consumer rights, improving their ability to effectively solve real-world problems.

Integrating consumer education into the curriculum is an important step forward. Participants particularly strongly recommended hands-on learning, such as simulations and mock purchases, which allow students to apply theoretical information to the real world. In addition, the inclusion of consumer rights in citizenship education emphasizes its importance as a foundation for democratic participation, enabling students to see themselves as knowledgeable, empowered citizens.

Participant commitment to leadership and participation in such activities demonstrates the school community's willingness to embrace a participatory structure. Schools can build on this momentum by creating student-led consumer advocacy groups or clubs. These platforms will be hubs for creativity and collaboration, allowing students to design and implement awareness campaigns, thereby increasing their impact.

To ensure these efforts continue, the report suggests a collaborative strategy involving educators, legislators and consumer advocacy organizations. This includes creating age-appropriate learning materials, implementing teacher training programs and establishing school-industry partnerships. By incorporating consumer education into the curriculum, institutions can better equip students to navigate the complexities of today's consumer landscape with confidence, resilience and ethical awareness. Finally, this study highlights the transformative potential of a comprehensive, interactive approach to consumer education. These efforts can help create a more informed and responsible society by providing students with the knowledge and tools they need to advocate for themselves and promote a just economy.

This research highlights the need to equip Tbilisi school students with the knowledge and skills needed to navigate an increasingly complex market. The results show that certain types of information, such as knowledge of product components and the ability to file complaints against manufacturers, have a significant impact on school students' awareness of consumer rights. These results highlight the need for targeted educational interventions to address knowledge gaps and provide a better understanding of consumer rights.

International approaches demonstrate the importance of integrating consumer education into school curricula through formal education, experiential learning and digital resources. Countries such as Finland, South Korea and Australia have developed effective

systems that can serve as a model for Tbilisi schools. Localized case studies, participatory methods and collaboration with non-governmental and consumer organizations can help strengthen these initiatives.

References

1. Bashir, S., Khan, A. S., & Khan, F. S. (2023). The role of consumer education in strengthening consumer protection laws. *Pakistan Journal of Social Research*, 5(2), 85–92.
2. Consumer International (2020). Consumer rights: Empowering the next generation. Retrieved from www.consumersinternational.org
3. Danilanea, L., & Marzano, G. (2013). Consumer education in primary school in the context of sustainable development. *Procedia - Social and Behavioral Sciences*, 00.
4. European Union (2020). Consumer Classroom: An Online Platform for Teachers. Retrieved from www.consumerclassroom.eu
5. Grunert, K. G., & Wills, J. M. (2007). A review of European research on consumer response to nutrition information on food labels. *Journal of Public Health Nutrition*, 10(6), 385–399.
6. Gvenetadze, D. (2019). Consumers' right to education in Georgia and EU states. *Journal of Law*, 2, Ivane Javakhishvili Tbilisi State University.
7. Kotler, P., & Armstrong, G. (2018). *Principles of Marketing* (17th ed.). Pearson.
8. Kvirikvaia, M., Kikutadze, V., Sikharulidze, D., Shaburishvili, S., & Charaia, V. (2018). Study of factors affecting young people's professional orientation in Georgia. *Globalization and Business*, 3(6), 233–242.
9. Moschis, G. P., & Churchill, G. A. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of Marketing Research*, 15(4), 599–609.
10. Njuguna, P. M., Oloko, M., Oyugi, L. (2014). Consumer Rights Awareness and its Effect on Consumerism in Kenya: A Survey of Household Consumers in Nakuru County. *European Journal of Business and Management* www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.6, No.15
11. OECD (2009). *Consumer Education: Trends, Policies and Good Practices*. Organisation for Economic Co-operation and Development. Retrieved from www.oecd.org
12. Petelava, S. (2015). Consumer rights protection. *New Economist*, N1.
13. Taktakishvili, Tengiz & Charaia, Vakhtang & Moutinho, Nuno & Alves, Jorge. (2024). Entrepreneurial Incentives Among University Students in Georgia and Portugal. *TalTech Journal of European Studies*. 14. 90-115. 10.2478/bjes-2024-0005.
14. Todua, N. (2018). Georgian consumers' awareness about the benefits associated with healthy nutrition. *International Journal of Business*.
15. Todua, N., & Jashi, C. (2018). Influence of social marketing on the behavior of Georgian consumers regarding healthy nutrition. *Bulletin of the Georgian National Academy of Sciences*, 12(2).
16. United Nations (2015). *UN Guidelines for Consumer Protection*. Retrieved from www.un.org

ETHICAL STANDARDS AND JUDICIAL INDEPENDENCE: ENSURING INTEGRITY IN THE LEGAL PROFESSION**Zurab Aznaurashvili***Assistant Professor of GRUNI***Tamar Devdariani***Visiting Lecturer of GRUNI*[DOI: 10.5281/zenodo.14289159](https://doi.org/10.5281/zenodo.14289159)**Introduction**

In the realm of law, the integrity and independence of the judiciary form the cornerstone of democratic governance and the rule of law. Ethical standards are not merely guidelines; they are fundamental principles that ensure judges and lawyers uphold the highest levels of professionalism, impartiality, and accountability. This article explores the vital role of ethical standards in the legal profession, focusing on their development, implementation, and impact on maintaining public trust in the judicial system.

From the historical evolution of legal ethics to contemporary international principles, the need for clear and enforceable ethical codes has never been more apparent. The Bangalore Principles of Judicial Conduct, among other significant documents, provide a comprehensive framework for judicial behavior, emphasizing the necessity of independence, impartiality, and integrity. By adhering to these principles, judges and lawyers can navigate the complexities of their roles while fostering an environment of fairness and justice.

This article delves into the mechanisms that support ethical conduct within the judiciary, including codes of ethics, judicial councils, and ethics commissions. It also examines the critical importance of ongoing education and training in ethics for legal professionals. By understanding and implementing these standards, the legal profession can enhance its credibility and ensure the effective administration of justice, thereby reinforcing the rule of law and democratic principles in society.

1. The Importance of Ethics in the Development of the Profession

At different stages of history, standards of ethics have varied significantly depending on the socio-economic environment and historical experiences. Ethics constitute a set of rules, norms of behavior, and standards adopted by society, which vary according to the specific characteristics inherent in each profession. The ethical standards set for doctors are distinctly different from those for judges or lawyers. While the obligation to act in good faith is common across all professions, ethical standards differ, reflecting the diversity of professions and the specific details and characteristics of each activity.

Undoubtedly, the development of professions is accompanied by the evolution of ethical standards.

Conversely, the existence and relevance of ethical standards contribute to the development of professions. The aim of ethics, which professionals face at the turn of each century, is the ability to establish rules that influence behavior.

Just as law develops in response to existing challenges, ethical standards have evolved and continue to evolve in accordance with historical context and current challenges. The legal profession is no exception. The development of legal professions has been accompanied by the evolution of ethical rules.

The history of legal ethics and its developmental stages are largely known and are associated with the evolution of law, spanning decades. Until the early twentieth century, there was no comprehensive code of ethics to regulate lawyers' behavior. Professional ethics were based either on innate views of ethical professional conduct or derived from other areas of law relevant to lawyers.

In 1887, the first code of ethics was created in the United States, specifically in Alabama. This code was based on an 1869 essay by George Sherwood and formed the foundation of several state codes of ethics. George Sherwood's antique book, an essay on professional ethics published in 1869, was based on lectures given at the University of Pennsylvania Law School in 1854.³⁹

The first ethics laws for American lawyers were passed by the American Bar Association (ABA) in 1908, perceived as a disciplinary code regulating lawyers' behavior. For the next fifty years, during a brief pause in the application of these rules, more emphasis was placed on the "gentlemanly" practice of law rather than on normative disciplinary standards. In 1964, under the direction of President Louis F. Powell, the ABA initiated a revision of existing laws, resulting in the creation of the Model Code of Professional Responsibility by 1969. This more detailed document contained nine "laws" accompanied by "ethical considerations." However, the code itself was met with criticism, mainly for the lack of clarity in its norms and the impracticality of certain issues.

In 1983, these rules were adopted as ethical standards in about thirty-five states, while others retained different versions of the Model Code. The ABA was not the only organization attempting to draft a comprehensive code; ethical standards in the legal profession

³⁹ Sherwood was a judge of the District Court of Pennsylvania and later became Chief Justice of the Supreme Court of Pennsylvania. In his essay, Sherwood focused on important issues such as the behavior of a lawyer in the courtroom, emphasizing that a lawyer should not engage in behavior

aimed at disrupting the tribunal. Source [Accessed 21.02.2024]. See also Jones, W. B., "The First Legal Code of Ethics Adopted in the United States," *American Bar Association Journal*, 1922, 8(2), 111-113. Source [Accessed 21.02.2024].

at global and regional levels have developed significantly over the past 25 years, driven by the evolution of the profession and new challenges.

Unlike lawyers, the fundamental principle of judicial ethics—namely judicial independence—was first mentioned in Article 10 of the Universal Declaration of Human Rights.⁴⁰ This article states, "In determining the rights and obligations or in determining the merits of any criminal charges submitted, everyone has the right to a fair and public trial of their case by an independent and impartial court." This principle was further developed in Article 14 of the International Covenant on Civil and Political Rights⁴¹, adopted in 1966.

This principle, along with other important standards that should guide judicial conduct, was significantly expanded by the act adopted by the Seventh United Nations Congress—the "Basic Principles on Judicial Independence."⁴² These principles, adopted by the United Nations Congress in 1985, stated, among other things, that "the independence of the judiciary must be ensured by the state and protected by the constitution or law of the country. It is the duty of all governmental and other institutions to respect the independence of the judiciary."⁴³

At the regional European level, several key instruments of judicial ethics have been established. The European Association of Judges adopted the Charter of Judges in Europe in Wiesbaden, Germany, on 20 March 1993. In 1994, the Council of Europe Committee of Ministers adopted a recommendation on the independence, effectiveness, and role of judges, followed by the European Charter on the Statute of Judges adopted by the Council of Europe in Strasbourg in 1998.

Among the numerous standards and codes of conduct established by the network of legal professions or international organizations, special importance should be given to the Bangalore Principles of Judicial Conduct and the Magna Carta of Judges.

In April 2000, under the auspices of the United Nations, a group of presidents and supreme court justices from around the world gathered in Vienna to address the lack of public confidence in the judiciary. This meeting laid the foundation for the development of the Bangalore Principles of Judicial Conduct, an inspiring document that has led many states to adopt national codes of ethics. The basic principles presented in these standards have influenced the development of codes of conduct in many countries. The Bangalore Principles, in turn, address fundamental issues of fair trial and judicial integrity.

Judicial independence and impartiality are fundamental guarantees of a fair trial, forming the foundation of democracy and the rule of law.⁴⁴ The standards set

by the Bangalore Principles of Judicial Conduct strengthen the legal system and, consequently, the rule of law. In a state governed by the rule of law, society has the right to demand the formation of general principles that align with the notion of a fair trial.

The profession of a lawyer, within any self-regulatory or legal framework, is based on respect for human rights, the protection of the rights of the parties, and the execution of justice. The existence of ethical standards is a crucial foundation for achieving these goals. The rules of professional conduct impose certain restrictions on lawyers, framing their behavior and indicating the expected conduct in conditions of fair competition.

The obligations imposed on judges, prosecutors, and lawyers are established to ensure their independence, impartiality, and effectiveness in serving the public. Public trust and respect for the legal profession are guarantees of the effectiveness of justice. The behavior of judges, prosecutors, and lawyers, both in the exercise of their functions and in their private lives, is essential for maintaining public confidence in the justice system. Therefore, representatives of the legal profession should be guided by proper standards of professional behavior. Ethical principles are not intended to establish directly enforceable standards of behavior but rather to offer guidance on overcoming difficulties faced in their professional and personal lives.

Learning a profession begins precisely from the student level. Teaching ethics is important not only for adhering to relevant standards in professional activities but also for the development of the profession itself. The education of lawyers and their preparation for the profession is not limited to obtaining theoretical knowledge. The primary goal of law school teaching is to teach students to think "like a lawyer." Rapid progress is achieved when students correctly understand legal processes, assess facts accurately, use proper legal language, and substantiate their positions with sound arguments. Law schools aim to develop skill-based abilities, emphasizing and consolidating the skills and ethical standards that are not only desirable but mandatory and necessary for a lawyer to possess.

The teaching modules of traditional law schools are often lacking in two main areas: client interaction experience and ethical substance. While the first may not necessarily be related to teaching methods, understanding ethical standards is a precondition for developing the legal profession and recognizing its importance. Professional ethics—teaching rules of professional conduct—is sometimes associated with "teaching professionalism," specifying appropriate rules of conduct, or simply encouraging politeness in

⁴⁰ Universal Declaration of Human Rights, United Nations General Assembly, December 10, 1948.

⁴¹ "All persons are equal before courts and tribunals. Each person has the right, when considering each criminal charge brought against them, or when determining their rights and obligations in any civil process, to have their case fairly and publicly heard by a competent, independent, and impartial court established by law."

⁴² The act was passed by the Seventh United Nations Congress on the Prevention of Crime and the Treatment of Offenders in 1985 (August 26-September 6) and came into force

through General Assembly resolutions of November 29, 1985, 40/32, and December 13, 1985, 40/146.

⁴³ "Basic Principles on Judicial Independence," United Nations, Article 1.

⁴⁴ Article 6 of the European Convention on the Protection of Human Rights and Fundamental Freedoms establishes that "everyone has the right to a fair and public hearing within a reasonable time by an independent and impartial court established by law."

some schools. Regardless of the approach, it is crucial to start understanding the importance of ethics from the doctrinal classroom. This will not only contribute to forming students into professional lawyers but also develop the legal profession in line with ethical standards.

The impact of ethical standards on the profession is significant. Ethics plays a crucial role in the development of law and legal practice. As previously mentioned, the legal profession is built on the principles of law, justice, and the rule of law. Ethical standards and behavior towards the legal system are vital for maintaining public trust. Unethical behavior can weaken confidence in justice, making ethical standards essential for defining acceptable behavior boundaries.

The reputation of the legal profession is closely tied to society's perception of the administration of justice. If lawyers fail to follow and promote the principles of the rule of law and justice, access to justice will be hindered. Therefore, lawyers, as defenders of the rule of law and individual rights, bear significant responsibility to society. Low public confidence in the legal profession often translates to low confidence in the justice system itself.

The rule of law is integral to the legal profession. Since all individuals have the right to adequate protection of human rights and fundamental freedoms, regardless of their economic, social, cultural, civil, or political affiliation, effective access to legal services provided by an independent legal profession is required to protect these rights.

Professional ethics is key to ensuring an independent, competent, efficient, and accountable legal profession. Ethics, through the conduct of lawyers, can implement the principles of fairness, integrity, and public trust in justice. Making ethical standards a reality hinges on the ability to enforce them. Lawyers, as guardians of the law, carry enormous responsibility through the development of ethical rules, educating society about ethics, and providing effective disciplinary actions regarding ethics.

Ethical standards form the basis for the legal profession to be accountable for their actions. Accountability helps maintain the credibility of the legal system. In summary, ethics serves as a fundamental framework for the legal profession, guiding the behavior of lawyers and promoting public confidence in the legal system.

2. International Principles of Professional Ethics

Lawyers around the world are specialized professionals who prioritize their clients' interests above their own and strive to uphold respect for the rule of law. They balance legal actions in the interests of their clients with respect for the court and a legitimate aspiration to maintain a reasonable standard of living.⁴⁵ In this process, the rules of ethics play a crucial role. They act as important guidelines in the daily application of the law, ensuring appropriate behavior.

⁴⁵ International Bar Association's International Principles on Conduct for the Legal Profession, International Bar Association, May 28, 2011, p. 5. Source [Accessed 15.02.24].

Improper ethical standards undermine the profession itself and, ultimately, justice. To ensure a high standard of practice and the independence of the profession, ethical standards must be developed by the profession's representatives. These principles of ethics should be derived from domestic legislation and must comply with international and regional standards. Considered international sources of ethical behavior include:

- Contract norms
- Universal documents developed by the UN
- European standards developed by the Council of Europe and the European Union
- Universal and European standards established by professional and institutional bodies
- Decisions of international courts

Judges, prosecutors, lawyers, police officers, notaries, and teachers each have their own rules of ethics, though certain ethical standards are common across these professions. These include respect for and protection of the rule of law, human rights, respect for the parties, the obligation to protect professional secrets/privacy, fairness, and mutual respect. This chapter will review the above-mentioned and other main international standards in relation to each of these professions.

3. International Standards of Ethics for Judges

The main function of judges is to develop the law through judicial decisions. Judges are responsible for being moral compasses and exemplars of competence, professionalism, and impartiality for the societies they serve. Given the importance of their work, it is crucial to regulate judicial conduct to prevent judges from abusing their professional powers and thereby undermining trust in the judiciary and the rule of law. Consequently, judicial ethics have often been the subject of intense debate in both domestic and international forums.

Several tools can be employed to promote and implement judicial ethics:

- **Code of Ethics:** Formulates ethical principles.
- **Judicial Councils:** Promote ethical principles.
- **Ethics Commissions:** Provide advisory functions to help judges resolve ethical dilemmas.

Over the past decades, numerous documents have been adopted regarding the independence of judges. Initially, international acts focused solely on judicial independence, but standards of ethical behavior began to form in parallel. As a result, principles related to the ethical behavior of judges are now reflected in various reports and recommendations. These ethical standards are discussed in significant international and national documents that establish standards of judicial conduct.⁴⁶

In addition to relevant agencies and instruments promoting proper judicial conduct, numerous ethical standards have been set by various actors. Among these, the United Nations has developed various rules

⁴⁶[https://www.coe.int/t/dghl/cooperation/lisbonnetwork/The mis/Ethics/Paper1_en.asp#:~:text=In%20order%20to%20have%20public's,of%20the%20societies%20they%20serve.>\[15.02.24\]](https://www.coe.int/t/dghl/cooperation/lisbonnetwork/The%20mis/Ethics/Paper1_en.asp#:~:text=In%20order%20to%20have%20public's,of%20the%20societies%20they%20serve.>[15.02.24])

and documents on judicial conduct. In 1985, the General Assembly of the United Nations adopted the Basic Principles on the Independence of the Judiciary. These principles are part of customary international law and are directed at the executive branch to promote and ensure the independence of the judiciary.

Ethical standards for judges are critical in maintaining public trust and the integrity of the legal system. Proper judicial conduct ensures that judges remain impartial, competent, and professional, reinforcing the rule of law and democratic principles in society.

The main principles reiterate those enshrined in the Universal Declaration of Human Rights, emphasizing equality before the law, the presumption of innocence, and the right to a hearing by a competent, independent, and impartial tribunal. The twenty basic principles primarily address:

- **Independence of the Judiciary** (1-7)
- **Impartiality** (2)
- **Freedom from Inappropriate and Unreasonable Interference** (4)
- **Legal Provision of Procedures** (5)
- **Fair Conduct of Legal Proceedings** (6)
- **Freedom of Expression and Association of Judges** (8-9)
- **Qualification, Selection, and Training** (10)
- **Position and Status of Judges** (11-14)
- **Discipline, Suspension, and Dismissal of Judges** (17-20)

The most important document of judicial ethics is the Bangalore Principles of Judicial Conduct, adopted by the United Nations. These principles encompass independence, impartiality, integrity, propriety, equality, competence, and diligence. The document's final part states, "National courts should take reasonable steps to introduce mechanisms for implementing these principles, in case these mechanisms do not already exist in the relevant legal systems."

The Bangalore Principles of Judicial Conduct have received widespread recognition among those interested in ensuring high standards of justice. This document is designed to be universally applicable to judges. The values it reflects are essential for public confidence in the justice system.

Five years after adopting these principles, a group of judges working on judicial ethics developed detailed commentaries. These commentaries explain each value comprehensively and constitute the most extensive document on judicial ethics.

The Bangalore Principles of Judicial Conduct and their commentaries establish that judicial independence is not a privilege but a responsibility. The principle of separation of powers implies independence from other government branches and freedom from internal court influence. It is crucial that judges make decisions free from any influence.

To summarize the key points of the Bangalore Principles:

- **Independence:** Judges must be free from any external and internal influences.
- **Impartiality:** Judges must act without bias or favoritism.
- **Integrity:** Judges must maintain high moral standards in both professional and personal conduct.
- **Propriety:** Judges must exhibit appropriate behavior that upholds the dignity of their office.
- **Equality:** Judges must ensure that all persons are treated equally before the law.
- **Competence and Diligence:** Judges must possess the necessary skills and commitment to perform their duties effectively.

These principles serve as a guide for judges to uphold the highest standards of judicial conduct, thereby fostering public trust and maintaining the integrity of the judicial system.⁴⁷

The main principles reiterate those enshrined in the Universal Declaration of Human Rights, emphasizing the equality of all before the law, the presumption of innocence, and the right to a hearing by a competent, independent, and impartial tribunal. The twenty basic principles primarily address issues such as:

- **Independence of the Judiciary** (1-7)
- **Impartiality** (2)
- **Freedom from Inappropriate and Unreasonable Interference** (4)
- **Legal Provision of Procedures** (5)
- **Fair Conduct of Legal Proceedings** (6)
- **Freedom of Expression and Association of Judges** (8-9)
- **Qualification, Selection, and Training** (10)
- **Position and Status of Judges** (11-14)
- **Discipline, Suspension, and Dismissal of Judges** (17-20)

The most important document of judicial ethics is the Bangalore Principles of Judicial Conduct, adopted by the United Nations.⁴⁸ These principles encompass independence, impartiality, integrity, propriety, equality, competence, and diligence. The document's final part states that "national courts should take reasonable steps to introduce mechanisms for implementing these principles, in case these mechanisms do not already exist in the relevant legal systems."⁴⁹

The Bangalore Principles of Judicial Conduct have received widespread recognition among those interested in ensuring high standards of justice. This document is designed to be universally applicable to judges, and the values it reflects are essential for public confidence in the justice system.

Five years after adopting these principles, a group of judges working on judicial ethics developed detailed commentaries. These commentaries explain each value comprehensively and constitute the most extensive document on judicial ethics.

⁴⁷ The Bangalore Principles of Judicial Conduct were adopted by a group of judges, including fifteen Supreme Court chairmen, in The Hague, November 25-26, 2002. Source, p. 7.

⁴⁸ <https://www.supremecourt.ge/files/upload-file/pdf/aq-tebi15.pdf> p. 7

⁴⁹ "The lack of guarantees for the independence of judges within the judicial body, depending on the hierarchy, can lead the court to a dubious decision" - Parlov-Tkalčić v. Croatia, [2010] ECHR 86; also: Agrokompleks v. Ukraine, [2012] ECHR 137.

The Bangalore Principles of Judicial Conduct and their commentaries establish that judicial independence is not a privilege but a responsibility. The principle of separation of powers implies independence from other branches of government and freedom from internal court influence. It is crucial that judges make decisions free from any influence.⁵⁰

The principle of absolute prohibition of *ex parte* communication must be strictly observed by judges to strengthen their independence and impartiality. The guarantor of trust in the judiciary is an impartial judicial system. "Objectivity of the judge is a necessary condition for the proper performance of their duties. It manifests itself not only in the content of the decisions delivered but also in all procedural actions that accompany the adoption of these decisions."⁵¹

Bangalore's second value links impartiality to the exercise of judicial powers without bias, while the United Nations Basic Principles on the Independence of the Judiciary assert that the judiciary should decide cases freely, impartially, and without lawful direct or indirect influence.⁵²

The International Covenant on Civil and Political Rights also focuses on the independence and impartiality of judges. Article 14 states that a judge's attitude towards the case and the parties involved should imply freedom from any influence.⁵³ Additionally, judges must always protect the prestige of the court and not allow their office to be used for personal interests.

In summary, maintaining judicial impartiality and independence is essential for upholding public trust in the judicial system. Judges must avoid *ex parte* communications and ensure their decisions and actions are free from bias and influence. This commitment to ethical conduct and impartiality reinforces the integrity of the judiciary and the rule of law.⁵⁴

Protecting the prestige and authority of the court requires judges to abstain from inappropriate behavior.⁵⁵ In its 21st opinion on the prevention of corruption among judges, the European Council of Judges recommends ethical conduct, ethical consultation, and training on ethics to strengthen the integrity of the court. It emphasizes the personal responsibility of judges for their behavior and the judicial system as a whole.⁵⁶

The French collection of ethical obligations of the court rightly notes that independent governance is also

a state of mind. It includes knowledge and behaviors that must be taught and evolve throughout a judge's career.⁵⁷

The establishment of ethical principles in codes of ethics has become the best practice to protect this principle. The code of ethics, as a living tool, helps judges successfully fulfill their duties in everyday life. It is a set of self-limiting rules, the observance of which is crucial for judges. In this process, it is especially important for the public to feel that judicial behavior is law-compliant and ethical.

In summary, maintaining ethical conduct and upholding the integrity of the judiciary require continuous education and adherence to a robust code of ethics. This ensures that judges not only follow the law but also maintain public confidence in the judicial system through their ethical behavior and decision-making.

Conclusion

Ethical standards are the bedrock of the legal profession, ensuring that judges and lawyers maintain the integrity, impartiality, and independence essential for a fair and just legal system. Through historical development and international consensus, frameworks like the Bangalore Principles of Judicial Conduct have established comprehensive guidelines that reinforce these core values.

The consistent application of these ethical standards fosters public trust and confidence in the judiciary, which is crucial for the effective administration of justice and the preservation of the rule of law. As the legal profession evolves, the importance of ethics education and ongoing training becomes ever more significant. Judges and lawyers must be well-versed in these principles to navigate the challenges of their roles while upholding the highest standards of professionalism.

By adhering to robust ethical codes and promoting a culture of accountability and integrity, the legal profession can continue to serve as a pillar of democracy. The commitment to ethical behavior not only protects the prestige and authority of the judiciary but also ensures that the rights and freedoms of individuals are safeguarded, thereby strengthening the fabric of society as a whole.

⁵⁰ Bangalore Principles of Judicial Conduct and its commentaries, TB, 2015, p. 67, §24.

⁵¹ Bangalore Principles of Judicial Conduct and its commentaries, TB, 2015, p. 91.

⁵² Resolution on the Basic Principles of Judicial Independence, Seventh United Nations Congress on the Prevention of Crime and the Treatment of Offenders, Milan, 1985, paragraph 2.

⁵³ Bangalore Principles of Judicial Conduct and its commentaries, TB, 2015, p. 67, §24.

⁵⁴ Ethical Principles for Judges, Canadian Judicial Council, 2021, p. 18, §F. Source [Accessed 12.02.24]. Also, Ethical

Principles for Judges, Canadian Judicial Council, 2021, p. 43, §c 10. Source [Accessed 12.02.24].

⁵⁵ Good faith compels a judge to refrain not only from acting contrary to the law, but also from any tactless or dishonest conduct," the Soviet European Network of Justice ENCJ, 2009-2010 Report, p. 4, §2.1; also, Bangalore Principles of the Conduct of Judges and its commentaries, TB, p. 129, §4.1.
⁵⁶ CCJE (2018)3Rev, p. 7.

⁵⁷ The Values of the Judiciary, Compendium of the Judiciary's Ethical Obligations. Source, p. 19.

MATHEMATICAL SCIENCES

AVERAGES, ENTROPY AND OBSERVATIONS

Vasil Cvetkov

Chief Assist. Prof. PhD Eng.

University of Architecture, Civil Engineering and Geodesy.

1164, 1 Hristo Smirnenski Blvd.

Sofia, Bulgaria

ORCID: 0000-0001-9628-6768

DOI: [10.5281/zenodo.14289165](https://doi.org/10.5281/zenodo.14289165)

Abstract

This study discusses the probability $Cv(n)$ that the average of n independent random variables is closer to the distribution expectation than some of the variables. The article reveals that the probability $Cv(n)$ can be presented by a simple function of the standardized Normal distribution $N(0,1)$ entropy and the number of variables n . Simulations based on randomly generated numbers, derived from three Normal Distributions – $N(0, 1)$, $N(0, 0.25)$, and $N(0, 9)$, and three Uniform Distributions – $U(-1, 1)$, $U(-2, 2)$, and $U(-10, 10)$ shows that the probability $Cv(n)$ is independent of the distribution standard deviation σ and $Cv(n) \rightarrow 0$ when $n \rightarrow \infty$. Simulations show, that the greatest probability to be an average closer to the distribution expectation μ than some observation in the sample, is when $n = 3$. However, even for the Uniform distribution, known to be the distribution with the greatest entropy, the probability $Cv(n=3) < 0.50$. Thus, automatically taking the mean of n observations as the most certain value of a measured quantity is risky and, in most cases, a wrong decision. More complicated approaches must be used to select the most trustful value among observations.

Keywords: Arithmetic Mean, Entropy, Normal Distribution, Number of observations, True Errors, Uniform Distribution

Introduction

According to the theory of measurements [9] and statistics [4], the accuracy $\sigma_{\bar{X}}$ of the mean \bar{X} of n random measurements of a single quantity can be presented by equation (1) if the variance of measurements σ^2 is finite. The quantity $\sigma_{\bar{X}}$ in engineering measurements is also a measure of uncertainty of the mean \bar{X} .

$$\sigma_{\bar{X}}^2 = \frac{\sigma^2}{n} \tag{1}$$

This means that when $n \rightarrow \infty$ than $\sigma_{\bar{X}} \rightarrow 0$. The process of decreasing $\sigma_{\bar{X}}$ with the increase of n is presented in Figure 1.

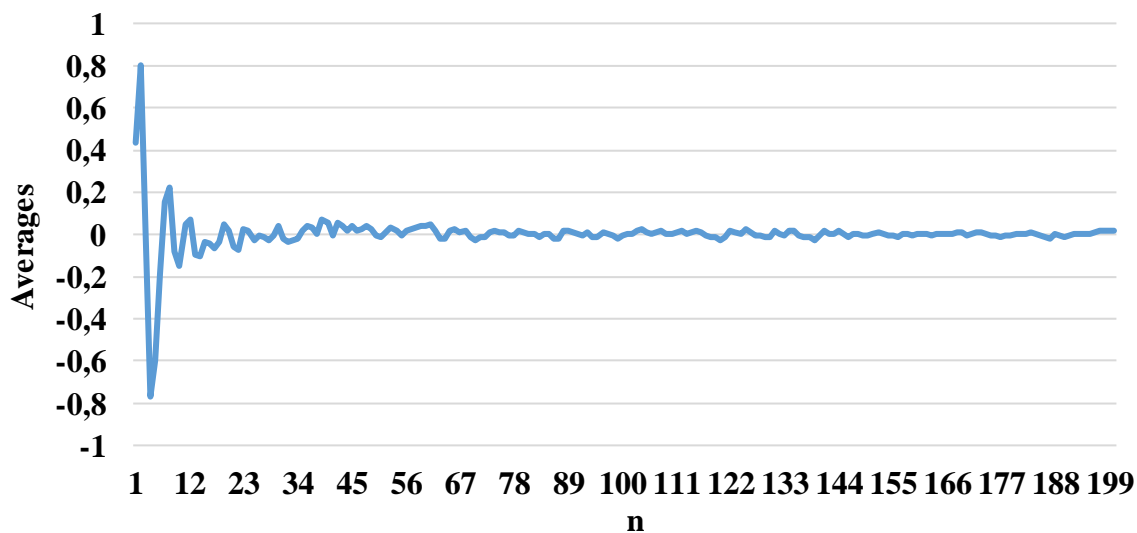


Figure 1: Averages of n random numbers from $N(0, 1)$ distribution.

Looking at Figure 1, one can see that the amplitudes of the fluctuations of averages of n random normally distributed numbers are getting smaller. As a result, the averages approach the theoretical expectation of $N(0, 1)$ distribution of 0, and their true errors are getting smaller. One can also see that the true error of the aver-

L

age of the first 27 random numbers is less than the average of the first 139 random numbers. According to the theory [4], the relationship (2) has to be valid and the uncertainty of \bar{X}_{139} to be less than that of \bar{X}_{27} , even though $\bar{X}_{139} \approx -0.026$ and $\bar{X}_{27} \approx -0.015$.

$$\sigma_{\bar{X}_{27}}^2 = \frac{\sigma^2}{27} > \frac{\sigma^2}{139} = \sigma_{\bar{X}_{139}}^2 \tag{2}$$

Based on the assumption that \bar{X}_{139} is twice more accurate than \bar{X}_{27} , the average \bar{X}_{139} will be preferred over \bar{X}_{27} in the routine engineering practice. However, such a choice could be the reason for the deterioration of the final results, which may reflect on making some wrong conclusions. Such a situation is illustrated in [3].

The main article objective is to estimate by generating random numbers from known distributions how often the original measurements have less true error than their average. In other words, we will know our expectations (true values). Because the uncertainty is associated with the entropy of the system in many disciplines, e.g., computer science [1], thermodynamics [2], medicine, biological sciences [6], etc., we will explore the relationship between the number of variables n , entropy of the used distributions, and the probability $Cv(n)$ that the average of the variables is closer to the distribution expectation than some of the variables.

Simulations

To estimate how often the average \bar{X} of n normally distributed random numbers x_1, x_2, \dots, x_n is more closely located to the known expectation μ , we performed the experiment described below.

1. We generated matrix $NI(50000, 100)$ that contains 5000000 random numbers from the standard Normal distribution $N(0, 1)$. So, our initial matrix NI has the form (3).

$$NI = \begin{bmatrix} x_{1,1} & \dots & x_{1,100} \\ \vdots & \ddots & \vdots \\ x_{50000,1} & \dots & x_{50000,100} \end{bmatrix} \quad (3)$$

$$NC1 = [Count(|NI|_{i,1} > |NS1|_{i,1}) \quad \dots \quad Count(|NI|_{i,100} > |NS1|_{i,100})] \quad (7)$$

5. Finally, we can find by dividing the members of matrix $NC1$ by 50000. Equation (8) presents these frequencies.

$$NF1 = [NC1_{1,1}/50000 \quad \dots \quad NC1_{1,100}/50000] \quad (8)$$

6. By repeating steps 1-5, we also calculated the frequencies of how often the mean \bar{X} of n normally distributed random numbers x_1, x_2, \dots, x_n from $N(0, 0.25)$ and $N(0, 9)$ distributions are more closely located to the known expectation $\mu=0$.

7. We also performed the above procedure, steps 1-6, for Uniform distributions $U(-1, 1)$, $U(-2, 2)$ and $U(-10, 10)$.

Because we generated large samples of size $n=50000$, we can suppose that determined frequencies

2. Based on the numbers in matrix NI , we generated matrix $NS1$ with means from the first to J -th member for each row I , as shown below.

$$NS1 = \begin{bmatrix} \frac{\sum_{j=1}^{k=1} x_{1,j}}{k} & \dots & \frac{\sum_{j=1}^{k=100} x_{1,j}}{k} \\ \vdots & \ddots & \vdots \\ \frac{\sum_{j=1}^{k=1} x_{50000,j}}{k} & \dots & \frac{\sum_{j=1}^{k=100} x_{50000,j}}{k} \end{bmatrix} \quad (4)$$

3. As next step, we prepared two matrices $|NI|$ and $|NS1|$ with absolute values of the members of NI and $NS1$ matrices, respectively.

$$|N1| = \begin{bmatrix} |x_{1,1}| & \dots & |x_{1,100}| \\ \vdots & \ddots & \vdots \\ |x_{50000,1}| & \dots & |x_{50000,100}| \end{bmatrix} \quad (5)$$

$$|NS1| = \begin{bmatrix} \left| \frac{\sum_{j=1}^{k=1} x_{1,j}}{k} \right| & \dots & \left| \frac{\sum_{j=1}^{k=100} x_{1,j}}{k} \right| \\ \vdots & \ddots & \vdots \\ \left| \frac{\sum_{j=1}^{k=1} x_{50000,j}}{k} \right| & \dots & \left| \frac{\sum_{j=1}^{k=100} x_{50000,j}}{k} \right| \end{bmatrix} \quad (6)$$

4. By comparing the corresponding members of $|N1|$ and $|NS1|$, we generated matrix $NC1(1, 100)$ that counts in its column j the number of times when $|NI| > |NS1|$.

(8) fairly present the probability of the mean \bar{X} of n normally and uniformly distributed observations to be more accurate, that is to say, more closely located to the quantity true value, than some of the observations.

Results

Figures 2-5 illustrate the probabilities $Cv(n)$ obtained by simulations and calculated by equation (9). Table 1 contains the coefficients of equation (9).

$$Cv(n) = 0.25 \cdot \log_b(2\pi e) \cdot (n^{-c} - n^{-a}) \quad (9)$$

As can be seen from Figures 2-5, there is a functional relationship between the probability $Cv(n)$, the standardized Normal distribution $N(0, 1)$ entropy [8], and the number of observations n .

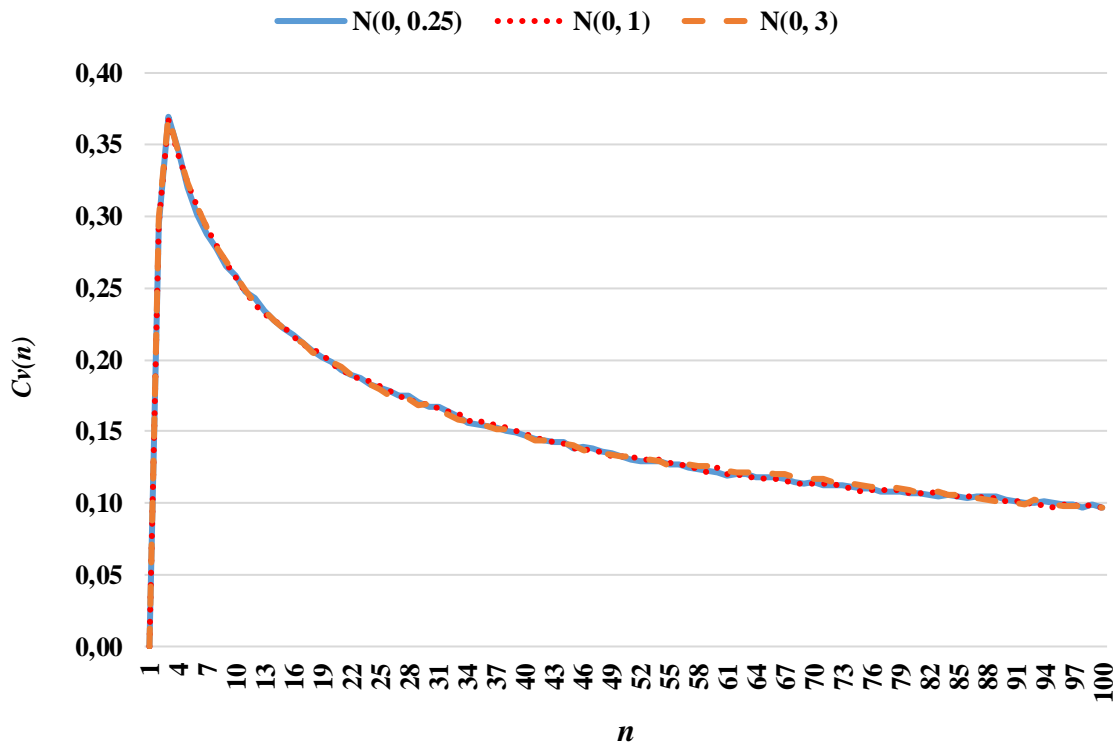


Figure 2: Probabilities $Cv(n)$ of the Normal distributions – $N(0, 1)$, $N(0, 0.25)$, and $N(0, 9)$, based on simulations of 50000 random numbers for each distribution and number n

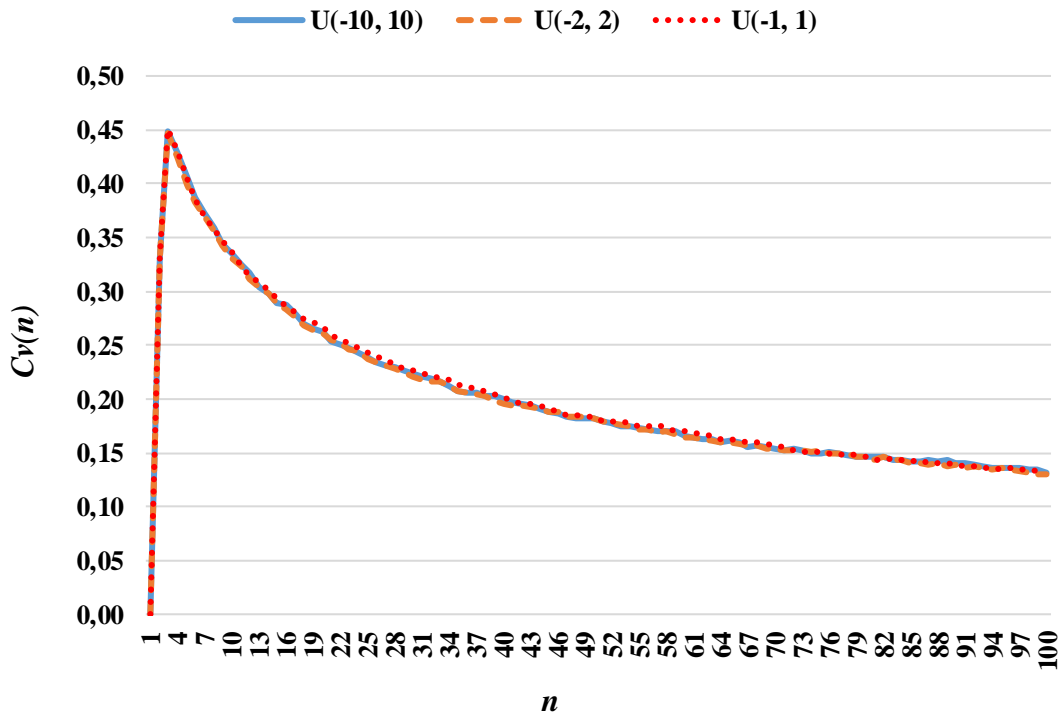


Figure 3: Probabilities $Cv(n)$ of the Uniform distributions – $U(-1, 1)$, $U(-2, 2)$, and $U(-10, 10)$, based on simulations of 50000 random numbers for each distribution and number n

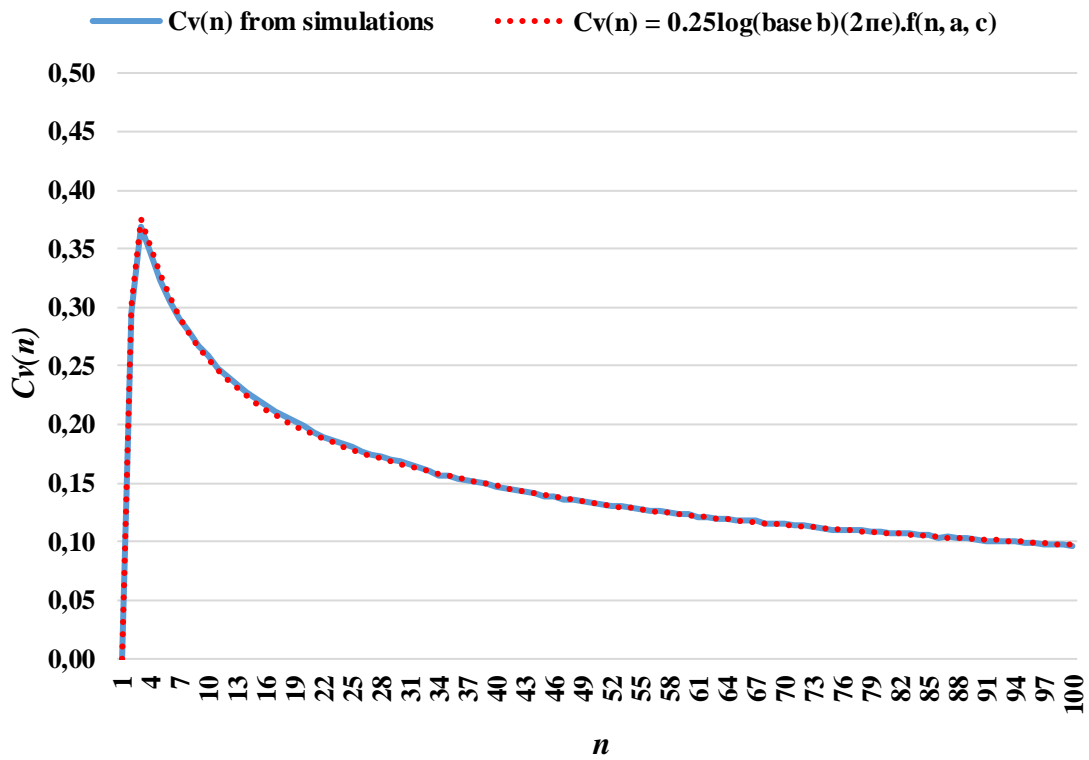


Figure 4: Means of the probabilities $Cv(n)$ of the Normal distributions – $N(0, 1)$, $N(0, 0.25)$, and $N(0, 9)$ based on 150000 random numbers and the probabilities $Cv(n) = 0.25 \log_b(2\pi e) \cdot f(n, a, c)$

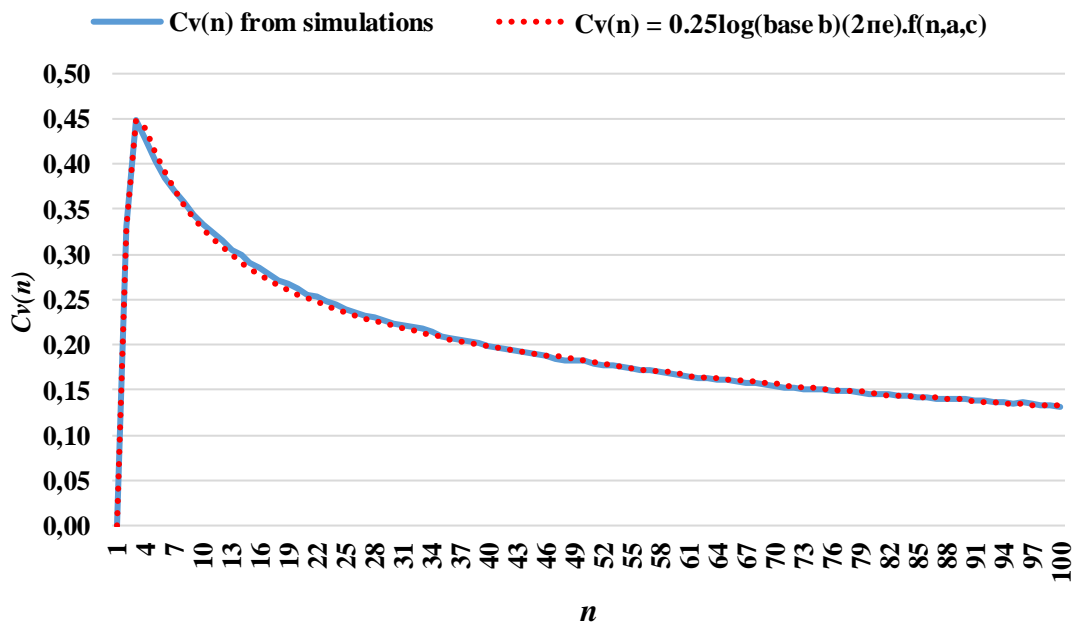


Figure 5: Means of the probabilities $Cv(n)$ of the Uniform distributions – $U(-1, 1)$, $U(-2, 2)$, and $U(-10, 10)$ based on 150000 random numbers and the probabilities $Cv(n) = 0.25 \log_b(2\pi e) \cdot f(n, a, c)$

Table 1

Coefficients of the Probability Density Function of $Cv(n)$ distribution.

Distribution	Range	Probability Density Function of $Cv(n)$	Coefficients		
			b	a	c
Normal	n=1, 3, 4, ..., 40	$0.25 \cdot \log_b(2\pi e) \cdot (n^{-c} - n^{-a})$	3	$\sqrt{2\pi}$	$\frac{1}{\sqrt{2\pi}}$
	$\sqrt{\pi}$			$\frac{1}{\sqrt{2\pi}}$	
	$41 \leq n \leq 100$		$\sqrt{2\pi}$	∞	$\frac{1}{2} \cdot \left(\frac{1}{\sqrt{2\pi}} + \frac{1}{2} \right)$
Uniform	n=1, 4, ..., 50		$\sqrt{2\pi}$	$\sqrt{2\pi}$	$\frac{1}{e}$
	n=2			$\sqrt{\pi}$	$\frac{1}{\sqrt{2\pi}}$
	n=3			$\sqrt{2\pi}$	$\frac{1}{\sqrt{2\pi}}$
	$51 \leq n \leq 100$			$\sqrt{2\pi} + 0.00432 \cdot (n - 1)$	$\sqrt{2\pi}$

Discussion

Figure 2 illustrates the probabilities $Cv(n)$ of the Normal distributions — $N(0, 1)$, $N(0, 0.25)$, and $N(0, 9)$ based on simulations of 50000 random numbers for each distribution and number. As can be seen, the probability density graphs of these distributions oscillate around each other in short ranges. If we increase the number of the generated random numbers, say from 50000 to 1000000, the probability density graphs will oscillate in shorter ranges or even cover each other. Thus, the probabilities $Cv(n)$ for Normal distributions are independent of the standard deviation of the distribution.

Figure 3 presents the same pattern of the probabilities $Cv(n)$ of the Uniform distributions — $U(-1, 1)$, $U(-2, 2)$, and $U(-10, 10)$, but this time the values of $Cv(n)$ are slightly higher than that of the Normal distributions. This fact implies that the probability $Cv(n)$ is invariant of the variance of a distribution but depends on the distribution. The higher $Cv(n)$ values for given n can be explained by the highest entropy of the Uniform distribution among all known distributions [5].

Figure 4 shows the means of the probabilities $Cv(n)$ of the Normal distributions — $N(0, 1)$, $N(0, 0.25)$, and $N(0, 9)$ based on 150000 random numbers and the probabilities $Cv(n)$ calculated by equation (9). A part of (9) is the expression (10), which is the entropy $H(N(0,1))$ of the standard normal distribution $N(0, 1)$ [8].

$$0.25 \cdot \log_b(2\pi e) = 0.5 \cdot 0.5 \cdot \log_b(2\pi e \cdot 1^2) = 0.5 \cdot H(N(0, 1)) \quad (10)$$

According to Table 1, the logarithm base varies depending on the number of observations n . Up to 40 observations $b = 3$, but if $n > 40$, then $b = \sqrt{2\pi}$. This can be explained by the fact that after the first 40 observations, there is a stabilization in the next averages. This explanation is clearly illustrated in Figure 1. One can see from Figure 4, that there is a full concordance between the results of simulations and forecasted values of $Cv(n)$. The coefficient of determination between both curves is $R^2 = 0.9992$. Therefore, there is a functional relationship between both curves.

According to Table 1 and Figure 4, when $n > 40$, we can rewrite (9) as (11).

$$Cv(n) \approx 0.77205 \cdot n^{-0.45} \approx 0.77205 /^{2.222}\sqrt[n]{n} \quad (11)$$

Equation (11) clearly shows that $Cv(n \rightarrow \infty) = 0$. Consequently, when the number of observations $n \rightarrow \infty$, the probability of the average of these n observations has less true error than some of the observations is close to 0. Thus, there is an observation that is more accurate than the average. The challenge for us is to find it.

Based on equations (1) and (11) we can find the relationship (12) between the probability $Cv(n)$, the entropy of the standard normal distribution with base $b = \sqrt{2\pi}$, and the standard deviation $\sigma_{\bar{x}}$ of the average of n normally distributed observations with standard deviation σ when $n > 40$.

$$Cv(n) \approx 0.77205 /^{2.222}\sqrt[n]{n} \approx 0.77205 \cdot ^{1.111}\sqrt[\sigma_{\bar{x}}]{\sigma} \quad (12)$$

A similar relationship to (12) can be obtained for the cases when $2 \leq n \leq 40$.

Analyzing Figure 5, we can see the same pattern as that in Figure 4. The only differences are the values of the parameters a , b , and c . The probability $Cv(n)$ low is the same. The above conclusions are also the same. The coefficient of determination between both curves of the probabilities $Cv(n)$ produced by simulations and calculated by equation (9) is $R^2 = 0.9983$. If we increase the number of randomly generated values, the coefficient of determination R^2 will increase. Thus, we found the same functional relationship between the probability $Cv(n)$, the entropy of the standard normal distribution, and the number n of uniformly distributed random numbers.

Conclusions

In the current article, the $Cv(n)$ distribution was presented. This distribution gives the probability of a sample mean having less true error than the sample observations. Simulations, based on random number generations from Normal and Uniform distributions showed that the peak of the $Cv(n)$ distribution for both distributions is when the number of observations $n=3$. Even then, the probability $Cv(n) < 0.5$. The last means that in the analyzed sample the probability of existing an observation with less true error than the mean is

greater than 50%. The probability density function of the $C_V(n)$ distribution shows that $C_V(n) \rightarrow 0$ when $n \rightarrow \infty$. In other words, when $n \rightarrow \infty$ then the probability of the existence of an observation with less true error than the mean tends to be 100%. Therefore, there is an opportunity to increase the accuracy and certainty of the processing data results by developing new algorithms for finding these observations that have fewer true errors than the mean. This task seems real, especially when there is a known mathematical rule between measured quantities, for example, the angles and their sum in a polygon.

References

1. Bill Kay, Audun Myers, Thad Boydston, Emily Ellwein, Cameron Mackenzie et al., Permutation Entropy for Signal Analysis, dmtcs:12644 - Discrete Mathematics & Theoretical Computer Science, November 4, 2024, vol. 26:1, Permutation Patterns 2023 - <https://doi.org/10.46298/dmtcs.12644> (accessed on 14.11.2024).
2. Cole, D.C., Entropy Considerations in Stochastic Electrodynamics. Physics 2024, 6, 1222–1239. <https://doi.org/10.3390/physics6040075> (accessed on 14.11.2024).
3. Cvetkov, Vasil. "On initial data in adjustments of the geometric levelling networks (on the mean of

paired observations)" Journal of Geodetic Science, vol. 14, no. 1, 2024, pp. 20220170, <https://doi.org/10.1515/jogs-2022-0170> (accessed on 14.11.2024).

4. Dekking F.M., Kraaikamp C., Lopuhaä H. P., L. E. Meester, (2005), A Modern Introduction to Probability and Statistics: understanding why and how, London, Springer – Verlag.

5. Mansour Shrahili, Mohamed Kayid. Uncertainty quantification based on residual Tsallis entropy of order statistics[J]. AIMS Mathematics, 2024, 9(7): 18712-18731. doi: 10.3934/math.2024910.

6. Yan, C., Li, P., Yang, M., Li, Y., Li, J., Zhang, H., Liu, C. Entropy Analysis of Heart Rate Variability in Different Sleep Stages. Entropy 2022, 24, 379. <https://doi.org/10.3390/e24030379> (accessed on 14.11.2024).

7. <https://en.wikipedia.org/wiki/Entropy> (accessed on 14.11.2024).

8. https://en.wikipedia.org/wiki/Normal_distribution (accessed on 14.11.2024).

9. <https://en.wikipedia.org/wiki/Uncertainty> (accessed on 14.11.2024).

PEDAGOGICAL SCIENCES

FEATURES OF INTERNATIONAL ACADEMIC MOBILITY IN MODERN CONDITIONS

Faizullaeva Nilufar

professor of the department "Economic Theory"

Tashkent State Economic University

Uzbekistan

[DOI: 10.5281/zenodo.14289185](https://doi.org/10.5281/zenodo.14289185)

Abstract

Today, the essence of the process of academic mobility has become the subject of study by a wide range of scientists in the world. The authors analyze the semantic content of such phenomena as: academic and social mobility of a future specialist in connection with obtaining higher professional education. The article substantiates the relationship between educational quality and academic mobility. Today it is celebrated as an inevitable phenomenon dictated by global integration processes. After all, the world increasingly values correct constructive communications and the ability to build dialogic and partnership relationships.

Keywords: mobility, students, structure, development, academic environment

Introduction

A new look at global changes in society has brought to life the need to modernize education, construct a new educational environment, and professional education, which focuses on the development of foreign language competence and academic mobility in accordance with the value priorities of the individual.

One of the important problems of the modern process of modernization of the educational process of a university is the development of academic mobility of both students and teaching staff. The development of academic mobility of students in higher professional educational institutions is one of the highest priority areas in educational policy.

The structure of academic mobility assumes the unity and interconnection of the following aspects:

- implementation of professional knowledge and skills that meet international standards;
- the readiness of future specialists to perceive international technological innovations;
- expanding the profile of professional training of specialists;
- freedom and variability in choosing an educational route, educational modules and educational institutions;
- development of creativity and critical thinking of the individual;
- readiness of future specialists to actively use a foreign language.

The development of academic mobility of university students is implemented on the basis of the principles of continuity, variability, freedom of choice, framework implementation of the variable part of the main educational program (50% and 70% for undergraduate and graduate programs), pragmatism, and subjectivity.

Literature review

The concept of "academic mobility" was included in the pedagogical thesaurus in connection with the transition of the higher education system to a multi-level system of training specialists. From the perspective of the development of the international educational

space, academic mobility is aimed at optimizing international relations in the implementation of educational programs, student exchange and joint activities of teaching staff.

Academic mobility is consistent with the training of students in foreign universities, as well as the activities of teachers and staff in foreign educational or scientific institutions, which in pedagogical theory is interpreted as external (international) mobility.

Academic and other types of mobility cannot be reduced to specific actions, technologies and mechanisms associated only with the student exchange system of educational institutions. This is a rather complex and multifaceted process of management at a new stage of international cooperation on the exchange of training programs, the introduction into the educational process of universities of a multi-level system for training specialists of the new generation.

The formation of a modern organizational culture, consistent with the research activities of students, as a creative process of acquiring new knowledge and the meaning of the holistic life activity of the subject; means and methods of improving the quality of the educational process of a university is one of the ways to form individual and social mobility among students.

Methods

In order to determine the pedagogical conditions for the development of academic mobility of university students, informational conversations and surveys were organized and conducted. The respondents were students and employers. The content of the survey questions included students' opinions on the positive and negative aspects of mobile education, planning internships, and obtaining additional professional education at foreign universities.

The results of the survey made it possible to establish that 67% of students studying under the double degree system independently decided to study along this educational path.

It should be noted that 6% of students who have completed training under the double degree system plan to stay and work in their hometown, 25% intend to work in the metropolitan areas of their home state, and

69% of students plan to organize employment in other countries, for example in Korea, the United States of America, Germany.

A significant issue is the lack of interest in organizing mobile education and the introduction of a credit-modular system at a university represented by enterprises, institutions, and organizations acting as an employer as a consumer in the labor market of young specialists.

Study participants strongly believe that experience in international academic interaction provides graduates with the ability to work in an intercultural, global professional environment. A double diploma allows you to recognize and understand systems of linguistic, political, and practical phenomena, which ensures the formation of professional, general cultural and social competencies, and helps in establishing interpersonal relationships.

The data obtained from a survey of potential employers is interesting. Almost all the qualities and characteristics of future potential employees that students develop during their stay abroad are rated by employers as relatively important. These include: the ability to cooperate, reliability and responsibility, the ability to effectively solve problems, adaptability and the ability to respond to changes in the external environment. At the same time, respondents note the importance of such qualities as the ability to interact with people from a different culture, knowledge of the traditions of foreign countries and cultures, and readiness to work abroad. Любопытно, что энтузиазм и амбиции в работе по степени важности оказались в середине списка значимых показателей. Tolerance, analytical thinking, empathy, and the ability to work in a team turned out to be the last in importance for employers. At the same time, all employers agree that the experience of participating in academic mobility contributes to the development of professional and general cultural competencies, as well as the personal growth of a future specialist.

Results

In the process of developing a student's readiness for academic mobility as a personal quality in a future professional, a special role belongs to the development of innovative technologies of the educational process, which is based on the creation of a system of subject-subject relations between its participants. An important role belongs to identifying the conditions for the comprehensive development of students, including practical testing of strengths and abilities in various types of activities: educational, professional, project.

To identify the characteristics of students moving for training, internships, etc., we conducted an Internet survey of students who were abroad: internships in production (industrial practice), educational programs abroad, study, work, etc. The survey showed that 97% of students received significant influence on their own worldview (consciousness). This is explained by the fact that they lived in a foreign country without parental care, worked in a foreign language environment and earned money on their own. The thesis is confirmed that among the values of young people, family occupies

the highest position. Participants also point to an expansion of thinking: seemingly familiar concepts such as discipline, prudence, and responsibility are perceived in a new way. Traveling to a foreign country teaches you to appreciate your native spaces in a new way. Opportunities arise to re-set your own priorities, which strengthens your character.

83% of respondents indicated that the level of acquired knowledge in a foreign language was insufficient; there was a lack of vocabulary, knowledge of grammar, and sociocultural characteristics of the recipient country.

53% of those who studied abroad noted that the difference between the curricula of Uzbekistan and foreign countries is significantly different. The same applies to the organization of the educational process. For example, writing and defending theses takes place only under the guidance of a supervisor and is highly specialized. Typically, such work is performed on behalf of an enterprise or company. That is, scientists and students work on a specific project and then implement it into production. The educational process is organized in such a way that most of the time students work independently (2-3 days a week independent work, other days with teachers).

92% indicated a high level of technological support for the educational process, when all information about teachers, schedules, workloads, etc. can be found on the university website. Also, each teacher has his own blog, where he communicates with students. Computerization, in a certain way, also helps students in learning and searching for information. For example, the university installs special programs on student laptops to translate terms. This obviously makes it easier to work with textbooks. Students note that the use of the latest technologies in classes makes them interesting and meaningful.

The productive direction of the development of academic mobility of university students should contribute to personal self-affirmation, self-realization in the course of solving educational problems in the conditions of an attitude towards success and the desire for success.

The study identified the difficulties that arose among students who took part in international educational exchange programs while staying and studying in another country. This allows us to identify the causes of these difficulties and assist students in eliminating these causes in the process of formation and development of their academic mobility.

Analysis of the results shows that most of the difficulties encountered by students who took part in international exchange educational programs are related to the integration of students into a different cultural environment. The number of such subjects amounted to 38.2% of the total number of respondents. A significant number (21.8%) of difficulties are associated with the insufficient level of foreign language proficiency of students, as a result of which there is a decrease in communication capabilities. A lower percentage reflects the difficulties of integrating students into the educational or educational and professional environment of the host

country. It was revealed that about 10% of students experience difficulties in achieving educational or educational and professional goals in their own subject area. 18.1% of respondents participating in the experiment did not experience serious difficulties when participating in international exchange educational programs.

Conclusions

Academic mobility is one of the priority areas of international education, and the main pedagogical condition for its development is the process of inclusive learning for students. The main structural components of the pedagogical process are the following: establishing equal partnerships between the university and foreign educational institutions; implementation of the opportunity for students to test themselves in another system of organizing higher professional education; students obtaining additional knowledge in related fields.

These components are the conditions for a student to receive a double diploma. Through academic mobility, the student's internal need is realized, providing the student with integration into the production sphere through the space of relationships and interconnections.

So, academic mobility is, first of all, an opportunity for students, provided by partner universities, to form and improve their professional educational preparation through the choice of subjects, disciplines, courses, educational institutions in accordance with their inclinations and aspirations.

Academic mobility gives each student the opportunity to build his own educational trajectory within the

framework of the functioning of the system of higher professional education in general and the system of continuing education in particular. In order to build and implement an international educational trajectory, the future specialist needs to form and develop international educational competencies, and the university needs to ensure partnership interaction with the global educational community.

Literature

1. Antonova, N.L. Spatial mobility of student youth in a large city. // *Logos et Praxis*. – 2019. – T. 18. – № 3. – С. 102–111. – DOI 10.15688/lp.jvolsu.2019.3.11. – EDN SKCEQW
2. Brinyov N.S., Chuyanov R.A. Academic mobility of students as a factor in the development of the process of internationalization of education.
3. Gurova, N.A. International student mobility in the context of the traditions of the European Union // *Colloquium-journal*. – 2019. – № 21–3(45). – С. 13–14.
4. Pimonova, S.A. International student mobility as an element of internationalization of education // *University management: practice and analysis*. – 2019. – T. 23. – № 4. – С. 91–103. – DOI 10.15826/umpa.2019.04.031. – EDN AMJBEG.
5. Shirina, M.S. Educational potential of international student academic mobility // *Economic and humanitarian studies of regions*. – 2019. – № 6. – С. 96–99.

PHILOLOGICAL SCIENCES

MISSION OF WISDOM: APOPTHHEGMATA IN LITERARY DEPICTIONS OF CROSS-CULTURAL ENGAGEMENT

Bogdan Andrei

*Ph.D., Associated Prof., Faculty of Letters/
Faculty of Theology University of Oradea/
University of West Timișoara*

[DOI: 10.5281/zenodo.14289195](https://doi.org/10.5281/zenodo.14289195)

Abstract

This article investigates the function of aphorisms, brief expressions of wisdom, in literary representations of inter-ethnic contact. The main emphasis is laid on their missiological impacts. Combining the classical and contemporary materials, the paper constructs the history of how these wise sayings, originating from early Christian and philosophical traditions, come to be main narrative devices in the stories that deal with cross-cultural interaction. Through an in-depth discussion of some secondary texts like Fyodor Dostoevsky's *The Brothers Karamazov* and Chinua Achebe's *Things Fall Apart*, the essay reveals how epigrams serve as the means for moral, spiritual, and cultural exchanges to take place within the literary context. It is missiological to bring out the spiritual influence of these witticisms beyond the aesthetic delight, but also the unifying purpose they have played in historical and universal domains. Hence, Benjamin Lea and Sanneh proffers the discursive avenues in art forms such as translation through intentional transformation. The research, through the incorporation of both literary analysis and theological viewpoints, thus maintains the gravity of apophthegmata in the process of intercultural reflection and reconciliation. Using a comparative methodology, the essay explains that these wise yet pithy forms hold the same utility they have always had in handling the ethical quandaries of cultural integration in both historical and contemporary periods.

Keywords: apophthegmata, cross-cultural engagement, missiology, literary analysis, intercultural dialogue, narrative devices

1. Introduction

The study of apophthegmata, which are short and wise sayings that are often ascribed to smart people, has a rich and complex past that overlaps with both religious and literary traditions. Such brief expressions of truth, originally from the early Christian ascetic tradition as found in *Apophthegmata Patrum* (Chryssavgis, 2008, p. 15), have since become acquainted with numerous literary genres and styles and have been adopted even outside religious contexts. Poets such as Eliot in *The Waste Land* have mirrored their terse moral imagery, while others like Herman Hesse in *Siddhartha* expose similar forms to comprehend cultural and spiritual complexity (Hesse, 1922, p. 89). These sayings, brief and universal, play an essential role as referrals to different cultures framing the truth in the relevant cultural context although the issue may be understood worldwide (Caird, 1988, p. 103).

In the realm of literature, apophthegmata is oftentimes used as crucial narrative vehicles that participants and moral quandaries revolve around. In *The Brothers Karamazov*, Dostoevsky pivots around aphorisms to demonstrate the spiritual and cultural problems of a XIX century Russia torn between Western rationalism and Orthodox spirituality along with the Zosima character (Dostoevsky, 1980, p. 210). The same goes for Chinua Achebe's *Things Fall Apart* where Igbo proverbs are jotted in the body of the narration making the connections between apophthegm-like phrases and oral traditions, which staunchly interlink cultures but also draw attention to the broader ramifications of imperialism (Achebe, 2005, p. 64).

The abovementioned cases exemplify the fact that the saying of sayings, which is the secret quality of the apophthegmata, has in reality been the carrier of a debate between incongruent cultural and religious paths, which reflects both the tension and the fusion of the given cultures. The study of apophthegmata from the perspective of missiology, i.e., mission studies, not only provides another view of them but also shows that these sayings might be a very good means of passing the dynamics of cultural religious interaction within a theological framework. The dimension of missionary work guides the interpretation of apophthegmata as vehicles of ethical and religious transmissions which connect blurred and different cultures and narrations.

Lamin Sanneh, in his book *Translating the Message*, explains how the wisdom expressed in the form of condensed universal structures assists Christian missionaries in handing over the power to teach to indigenous traditions and hence develop dialogue and understanding among different religions (Sanneh, 1989, p. 145). The writings of Andrew Walls, accordingly, come to illustrate that cultural translation cuts across Christian mission, the act that normally carries the same function as aphorism, the brief argumentative rhetoric, in an outstanding way (Walls, 1996, p. 92). This process between theologies and culture and literature demonstrates apophthegmata are not mere static evidences of wisdom, but rather, they become active participants in cross-cultural dialogue. By delving into literature, one uncovers how these short expressions echo with universal themes but still retain their unique character and build on the historical and cultural narra-

tives of different peoples. Therefore, a study of literature will help us to understand how wisdom can be employed both as a narrative device and as a tool of religious mission in short and pungent expressions, thus paving the ground for further investigation.

2. The Nature and Function of Apophthegmata

The term apophthegmata derives from ancient Greek culture, where concise and thought-provoking sayings were vehicles for moral and philosophical instruction. The oral traditions of the classical world are the ones from which they come; often they are said to have been statesmen and philosophers such as those recorded in Plutarch's *Moralia*, which captures the ethical insights of figures like Socrates and Pericles (Plutarch, 2000, p. 215). These might be considered prototype examples, which show us that wise sayings were not just figures of speech but powerful tools for the development of a shared ethics and a personal moral code. The later appropriation of this tradition by early Christian communities points out the ability of apophthegmata to be adapted, which became the core teaching of the *Desert Fathers*, who were collecting the sayings in the *Apophthegmata Patrum*, thus providing a bridge between pagan and Christian moral frameworks (Chrysavgis, 2008, p. 22).

The sheer dimensions of apophthegmata are their brevity, clarity, and focus on universal verities that are comprehensible beyond the confines of particular cultural or historical settings. Unlike elongated stories these sayings attain their significance through a few words, usually making use of metaphor and paradox to cause reflection. For instance, the saying *A time will come when men will go mad. If they see someone who is not mad, they will attack him* is a symbol of the most profound spiritual as well as social critique within a single line (Ward, 1975, p. 3).

Likewise, Friedrich Nietzsche's aphorisms in *Thus Spoke Zarathustra* are aligned with this tradition as they express succinct existential doubts which connect with all times and places (Nietzsche, 1993, p. 124). Apophthegmata in both religious and literary contexts have the role of transmitters for knowledge, thus becoming the focus of boundary obfuscation between sacred and secular. In the Christian tradition, these sayings are used to give the spiritual guidance needed and to develop moral discernment. In literature, they usually are the main stories or the reflection points. The use of aphoristic dialogue in Dostoevsky's *The Brothers Karamazov* by Father Zosima shows how the art form of the apophthegmata can convey the deepest theological insights while still making the narrative more complex (Dostoevsky, 1980, p. 237). Moreover, the proverbs in *Things Fall Apart* by Chinua Achebe remain the basis of the narrative within Igbo oral culture at the same time that the novel engages with colonial critique and affirms indigenous thoughts (Achebe, 1958, p. 71). By giving a perennial wisdom a form that is compact, nevertheless, apophthegmata demonstrate their still strong ability to transcend different cultural, historical, and scholarly contexts.

3. The Role of Apophthegmata in Cross-Cultural Narratives

Apophthegmata with their short and inspirational nature have undoubtedly been the effective means through which moral and spiritual dialogue has been promoted among different cultures and times. Their innate universality is the chief reason they can appeal to various audiences, thus, overcoming the limitations of language or social differences. For example, the aphorisms in Hermann Hesse's *Siddhartha* reveal deeply moving truths about the inner journey and the process of realization, which are also presented in a unique manner that balances the Eastern philosophical teachings and the Western literary aesthetics (Hesse, 1922, p. 104). Equally, the aphorisms in Chinua Achebe's *Things Fall Apart* highlight the subtleties of Igbo thought, which simultaneously critique colonial power and affirm the long-standing vitality of traditional oral cultures (Achebe, 1958, p. 83). These works show that brief but meaningful words of wisdom may serve as points of contact between different cultural systems, thus, spearheading a mutual understanding by means of the timeless nature of those expressions. The empowering capabilities of apophthegmata can be derived from their ability to prompt critical thinking and inspire narrative transformation through the confrontation of various cultural paradigms.

Through the teachings of Father Zosima in Fyodor Dostoevsky's *The Brothers Karamazov*, this interactive process is illustrated which presents a moral system that is opposed to the individualist rationalism of Western thought and is based on the unifying spirituality inherent to Russian Orthodoxy (Dostoevsky, 1980, p. 245). This interchange of ideas via short sayings initiates far-reaching moral transformations in the characters and invites the readers to delve into the deeper layer of universal human issues. In the same way, the conversation between colonial and indigenous voices in Jean Rhys's *Wide Sargasso Sea* is a very brief reflection of the dislocation, at the level of existential, that is experienced by people who are on the periphery of cultural confrontation, thereby showing the fragmentation and reconstruction of identity in cross-cultural contexts (Rhys, 1966, p. 117).

In addition, apophthegmata, which stands for the core aspects of the narratives and themes, projects the complexities of cultural interaction mainly in short stories, as figuratively exemplified in literature. It is in Toni Morrison's *Beloved* that aphoristic wisdom is interwoven into the narrative which, on the one hand, conceals the intergenerational trauma of slavery and on the other hand, gives a glimpse of the personal strength that is inherent in oral history and communion with the ancestors (Morrison, 1987, p. 88). Also, Gabriel García Márquez's *One Hundred Years of Solitude* sums up the cyclical nature of history by reflecting the complex interdependence of cultures that arose from both colonial and indigenous forces through short, pithy sayings (García Márquez, 1967, p. 206). These fragments show how through the use of short, pithy sayings, the writers are able to provide the grounding for not only the narratives to be complex, but morality, spirituality, and cultural identity to also be analysed. Apophthegmata, being capable of showing great truths in compact form,

still remain the critical parts of the cross-cultural narratives for the discovery of such knowledge.

4. Missiological Insights from Literary Apophthegmata

Apophthegmata are a rich heritage in both religious and philosophical traditions, diluted with replete content and fervent theological and ethical insights can send forth a mission into the world. These short devices, because of their being rooted in deep moral truths, are not just verbal constructs but constitute the call to the discussion of the spiritual and cultural intricacies of human existence. For instance, the lessons of Abba Anthony in *Apophthegmata Patrum* are bravery. They combat self-centeredness, thus laying stress on the virtues of humility and community as the principal traits that accompany spiritual growth (Chryssavgis, 2008, p. 36). Likewise, the aphoristic insights of Fyodor Dostoevsky's *The Brothers Karamazov* delve into God's grace and human limitations, with theological questions presented in narratives that relate to the universal quest for redemption and meaning (Dostoevsky, 1880, p. 255). These thoughts give insight into the possibility of the power of brevity to change both individual faith and communal mission.

Apophthegmata, seen from the point of view of a different culture, appears as essential elements of the reconciliation of the disparities of cultures. Through presenting of various aspects of complex thoughts in simple words, they become the means of communication that overcomes language and cultural limitations, allowing for dialogue that fosters mutual respect and mutual empathy. Chinua Achebe's *Things Fall Apart* by means of Igbo proverbs is a device that creates the direct link between the indigenous epistemologies among the people with the new challenges of colonialism that have come about. This consequently leads to a subtle creation of the cultural encounter.

Similarly, the aphorisms in Hermann Hesse's *Siddhartha* embody the pursuit of spiritual masculinity well worth it, by weaving together elements of Hinduism and Buddhism with the portrayal of Western readers into a meditative experience with the Eastern philosophies (Hesse, 1992, p. 113). In addition, these literary devices of wisdom that bring out the common experiences they are the ones that are the driving forces of the reconciliation and cultural exchange thus they symbolize the missional principle of encountering the Other through humility and openness. From the angle of the adaptability of apophthegmata in narrative dialogues, storytelling offers a platform where moral reflection and spiritual transformation are potent in the mission. For instance, Zelena Morrison's *Beloved* where the insertion of aphoristic wisdom into the main storyline shows by colouring the memories and the telling of the stories redemptiveness in contrast to the historical trauma (Morrison, 1987, p. 112).

The themes of freedom and hope that the narrative resonates with yearnings to witness the restorative justice of God in communities that are broken. In the same way, the allegorical devices in Gabriel García Márquez's *One Hundred Years of Solitude*, which are liability and quote brief but poignant saying, help to build

the plot in a way that makes the reader think of the historical amnesia, which the whole nation (Latin America) prefers not to remember, thus the readers are invited to confront the continual effects of colonial legacies on their identities (García Márquez, 1967, p. 245). These examples show how storytelling, which has been enriched by the clarity and depth of apophthegmata, will be a profound medium for the mission of reconciliation, justice, and transformation in a world that is torn apart.

5. Conclusion

The relationship of literary and missiological aspects gives rise to the enormous power of apophthegmata to penetrate the borders and transform the dialogue. These short words of wisdom connected, on the one hand, to the religious traditions yet still being acceptable to a secular narrative show shared human need for truth, reconciliation, and, meaning. The abbot Poemen's words in *Apophthegmata Patrum* are a real exhibition of the humility of the spirit, while the stories in *The Brothers Karamazov* by Dostoevsky are one part of the coin that depicts the theological differences that still exist in numerous cultures and places (Chryssavgis, 2008, p. 42; Dostoevsky, 1980, p. 267).

These are instances of how apophthegmata can be used as a platform for human moral introspection and a convincing force to act which in turn emphasizes their role in getting spiritual maturation and social reformation. Thus, apophthegmata remains forever because of its flexibility to fit into the different cultural frameworks while they stick to their global movement. The deployment of Igbo African proverbs in Achebe's *Things Fall Apart* to demonstrate the native knowledge that can alienate colonial ideologies and become cultural identity is thus the beginning of a new global world literature as an example of how this is done (Achebe, 1958, p. 104).

In the same way, Toni Morrison's *Beloved* shows that wise thinking is applied to solve the trauma caused by slavery that has been passed across generations. This is done by overcoming the challenge of the longing for freedom and healing (Morrison, 1987, p. 129). All of them, in turn, point to the intimacy of the apophthegmata to cultural and historical shortages, their very role as tools for literary and missiological interaction. The mixture of theological insight and literary expression in apophthegmata places them as the medium of the driving instrument between the sacred and secular spheres. The cardinal novel, *Steppenwolf* by Hermann Hesse, displays this two-sided part throughout the book by sharing aphoristic sagacity that goes beyond the usual religious limitations and, at the same time, readers are also fully engaged in a journey of shared spirituality (Hesse, 1922, p. 137).

By the same token, without being verbose, Gabriel García Márquez's *One Hundred Years of Solitude* utilizes concise words to dive into the labyrinths of history and identity, and therefore, brings about the question of shared memory of people after having experienced it (García Márquez, 1967, p. 278). These have proven the fact that the potency of apophthegmata is not just in being the vehicle of the powerful truths of the past or even in their facilitating expedient the exposure of cultural

inhibitions and thus their place is of both literary and missiological.

Thus, finally, the place of apophthegmata in cross-cultural networks not only fills them with such a power as to be the life's problems' solution. These sayings that are so full of wisdom and light that they can impel, provoke and bring together are very strong. Be it the desert teachers or Achebe and Morrison, apophthegmata transfuse the spiritual wisdom through and through across these and other issues which link between the sacred and the secular, between personal and universal.

References

1. Achebe, C. (2005). *Things Fall Apart* (pp. 94-104). London: Heinemann.
2. Chryssavgis, J. (2008). *In the Heart of the Desert: The Spirituality of the Desert Fathers and*

Mothers (pp. 36-42). Bloomington, IN: World Wisdom.

3. Dostoevsky, F. (1980). *The Brothers Karamazov* (pp. 255-267). New York: Farrar, Straus, and Giroux.

4. García Márquez, G. (1967). *One Hundred Years of Solitude* (pp. 245-278). New York: Harper & Row.

5. Hesse, H. (1992). *Siddhartha* (pp. 113-137). New York: Penguin Classics.

6. Morrison, T. (1987). *Beloved* (pp. 112-129). New York: Knopf.

7. Fox, R. (1986). *Pagans and Christians: Religion and the Rise of Christianity* (pp. 90-155). New York: Knopf.

FACTOR ANALYSIS OF RECENT YOUTH SOCIO-POLITICAL VOCABULARY**Guliyeva Lyudmila***Senior teacher of the chair "Russian and eastern languages"**Nakhchivan State University, Azerbaijan*[DOI: 10.5281/zenodo.14289210](https://doi.org/10.5281/zenodo.14289210)**Abstract**

The article scrutinizes extralinguistic, intralinguistic and semi-linguistic factors that influence the political lexicon of the youngsters. The words of actual political discourse have been classified into several sections which have been spelled out in the article. Methodology is based on the survey conducted among the schoolchildren of 9-11 grades. The list of lexemes was divided into 3 main subgroups which were common vocabulary, terminological vocabulary and slang vocabulary. The terms have been analyzed in terms of extralinguistic, intralinguistic and semi-linguistic factors in the study. The study underlines that one word might be polysemantic depending on which terminology it refers to. One technical term may have a vulgar meaning in some cases for its sphere of usage.

Keywords: extralinguistic, intralinguistic, socio-political vocabulary, slang, discourse

Introduction

In order to clarify how extralinguistic and intralinguistic factors can impact the youth political lexicon, we will analyze the materials we have chosen. Some culture-bound terms are not translated and remain how they are [6]. Accepting the classification established in the scientific community, we considered the following thematic groups of socio-political vocabulary, identified by A.I.Dyakov: the words of the actual political discourse [1]:

- a) nomenclature names - persons (officials), departments, bodies, etc.;
- b) territories;
- c) terminology of electoral and related technologies (political marketing, etc.);
- d) names of political parties, movements, trends and their members (participants);
- e) political jargon;
- f) terms of law used in socio-political discourse; mass media:
- g) the actual terms;
- h) legal jargon;
- i) economic terms used in the socio-political discourse of the media;
- j) religious terms used in the socio-political discourse of the media;
- k) ethnographic terms used in the socio-political discourse of the media;
- l) technical terms denoting realities of great social significance;
- m) philosophical, cultural, sociological, linguistic and psychological terms denoting realities of great social significance.

Methodology

We conducted surveys among schoolchildren (students of grades 9-11) and students and selected lexical units that were influenced by internal and external factors and reflect various trends in the language. The messages of users of youth social networks on the Internet, in which socio-political vocabulary was used, were also analyzed [7].

After questioning groups of schoolchildren and students and analyzing comments on the Internet, we compiled the following list of lexemes (120 pieces), which we divided into three main subgroups: common

vocabulary, terminological vocabulary and slang vocabulary [3]. Separately (with an asterisk), we marked the words related to journalistic jargon [12].

Common vocabulary: power, freedom, censorship, war, taxes, propaganda, corruption, opposition, party, president, parliament, deputy, duma, elections, mayor, city hall, regime, democracy, migrants, sanctions, rally, patriot, patriotism, voter, course, liberal, leader, curtain, budget, protest, boycott, bribe, agenda, arena, political prisoner, reform, headquarters, program, crisis, interests, collusion, falsification, repression, riot police, arrest, search, process, constitution, tyranny, despotism, terrorism, coup, special services, state employees, beneficiaries, pro-government, pro-government, pro-Western, pro-Ukrainian, loosen, junta, conspiracy, aggravation, superpower;

Terminological vocabulary: geopolitics, speaker, values, electorate, liberalism, declarations, totalitarianism, neutrality, picket, renovation, privatization, populism, referendum, affiliated, lustration, state contract, investment, tender, annexation, offshore, lobby, lobby, escalation, politicization, appeal, feudalism, Islamism, conspiracy theorist;

Slang: primaries, cubes, cut, throw-in, throw-in, roundabouts, screw, paddy wagon, lawlessness, drank, boyars, tsar, national Bolsheviks, quilted jacket, quilted work, cotton wool, embroidery, bandera, the Kremlin, krymnashist, liberalist, potsreot, volunteer, package, braces, sofa, scoop, maidan. Different methods including GTM [11] and CLT [9] can be applied to teach these terms [10].

Data Analysis

The lexical units we are considering, for the most part, have a nominative character. Nouns make up more than 90% of the total number of lexemes (slightly less than 10% form verbs and adjectives, participles). When questioning, the respondents often indicated not individual lexemes, but phraseological combinations (for example, not "values", but "traditional values", not "arena", but "international arena", etc.).

We believe this is due to speech clichés that are well-established in political discourse, which in turn reflect the peculiarities of human perception: the epithet – "traditional" - is a reflection of the country's political course (i.e., an extralinguistic factor operates here).

As for the combination “international arena”, we see in it the need to remove the ambiguity of the pivotal word “arena” by concretizing it with an epithet. The very use of this word is based on metaphorization (an arena is a place of public competitions; according to J.Lakoff and M.Johnson, disputes, including international ones, are often described by the metaphor “a dispute is a war”), which we called a manifestation of the extralinguistic influence of features human perception.

In each of these groups of vocabulary, we analyzed the impact of factors influencing the evolution of the language. We also analyzed the impact of external and internal factors on each of the selected lexemes. It should be noted that some difficulty was caused by the differentiation of vocabulary between the groups of common and terminological. This is due to the trend towards the movement of meanings from stylistically marked to more neutral ones, which is characteristic of socio-political vocabulary in general (the influence of the semi-linguistic factor).

Discussion

The frequency of mentioning certain lexemes turned out to be interesting. So, for example, in the student group, which consisted mainly of people aged 23-26, such lexemes as “war”, “city hall”, etc. were more often mentioned. In the group of high school students and junior students (17-22), the most popular lexemes were “corruption” and “opposition”. In our opinion, this most clearly emphasizes the dependence of youth socio-political vocabulary on extralinguistic factors, in this case, on the age of the respondents, the sociocultural environment in which they are their political preferences, the influence of the media and the speech activity of authoritative personalities, etc.

Intralinguistic factors influence this lexeme not as actively as external ones. As we have already noted, the analysis of the influence of intralinguistic factors requires consideration of larger time intervals than the one we have chosen in this paper. However, one can see the influence of the tendency to abstract the meaning of the word. Corruption is perceived as “global evil”, “absolute evil”, “root of evil”, “social evil”, etc., it is considered “global” and “unstoppable” (real media headlines are reflected). In these examples, we can observe the removal of the stylistic marking of the word (although dictionaries give it with the mark bookish, we see that it tends to move into the category of common vocabulary), which, as we have already noted, according to linguists (in particular, A.A.Polikarpov), is a particular manifestation of the action of the factor stated above (i.e., the tendency to abstract the meaning of the word) [8].

The remaining lexemes were analyzed by us in a similar way. Let us dwell on some examples of the influence of external and internal factors, which seemed to us quite indicative.

It can be argued that among the internal factors, the factor of saving efforts has shown itself quite clearly: there are abbreviations generated by compressive word formation, abbreviations of words (media, Russian Orthodox Church, National Bolsheviks, state contract, etc.); short foreign words are borrowed, the

Russian equivalent of which is too long; (brexit, primaries, etc.), the number of verbal nouns with the meaning of action (stuffing) is increasing. Some words bear the anthroponomastic features [4].

The words “screw”, “carousels”, etc. also reveal a tendency to polysemy under the influence of extralinguistic factors (and the very ability of words to detect this tendency is an intralinguistic factor). The influence of the realities of the surrounding world is expressed in these words by metaphorizing the meaning: the main meaning of the word “screw” is turning a screw, screw, bolt, etc. along a thread, thread, screw it in or turn it out. The figurative meaning in which the word exists in the political lexicon of young people (participants in rallies, protest movements, etc.) is to grab someone using physical violence, deprive them of freedom of movement, twist. Besides, the word “screw” has a vulgar meaning, as well [5].

The word form “carousels” is the plural of the word “carousel” (from Italian *carosello*, from *carro* “wagon” + *sello* “saddle”), which has the main meaning: an entertainment attraction, a rotating platform with seats in the form of horses, boats, etc. n. for skating. This lexical-semantic variant tends to be used in the plural, and it is possible that with the disintegration of polysemy, it will move into the category of pluralia tantum. We trace the influence of the intralinguistic factor in the elimination of excessive synonymy. In this regard, the history of the word is interesting: “referendum”, denoting a popular vote on any important issue for the life of the country.

There is also a synonymous word “plebiscite” in the language, but it is used much less frequently in modern political discourse. We traced the dynamics of these words in the National Corpus of the Russian Language: We found that the word “referendum” is becoming more and more popular (this is also influenced by the extralinguistic factor associated with political processes in the world), and the word “plebiscite” is disappearing.

There is also a change in the meanings of words that belonged to the political slang of the previous era. For example, the word “sofa”, in our opinion, a kind of slang homonyms representing the significant aspect of the meaning of the lexeme “sofa”. The adjective sofa in the 90s usually referred to the word “party”, and this combination meant “a party whose members can all fit on one sofa.” With the disappearance of the political phenomenon, this lexeme moved into the category of historicisms, and sofa is now a synonym for the slang word kitchen that existed in Soviet times and denotes a person who loves to talk about politics, but does not understand it (sofa expert, sofa troops, sofa politician). This term may cause some challenges while learning [2].

Conclusion

In conclusion, we note once again that the influence of extralinguistic and intralinguistic factors should not be considered separately from each other, but in combination this approach reflects the very essence of the language, the unity of the content plan and the expression plan. The classification proposed by us is to a certain extent conditional and cannot be considered

complete, but nevertheless, due to the lack of development of the topic and the lack of a single clear terminological basis in linguistics for studying the concept of “factors influencing the evolution of a language”, it can be considered the initial stage in the development of this material.

References

1. A. I. Dyakov. “The causes of borrowings of anglicisms in modern Russian language”. In: *Yasyk i Cultura* 1 (2003).
2. Alaviyya, N., & Babayev, J. (2023). CHALLENGES ENCOUNTERED BY LEARNERS OF ENGLISH AS A SECOND LANGUAGE. *Norwegian Journal of development of the International Science* No, 122, 91.
3. BABAYEV, J. (2022). SLANG AND ITS CHARACTEISTIC FEATURES. In *EUROPEAN RESEARCH* (pp. 152-154).
4. Babayev, J. (2024). Usage Sphere and Lexico-Stylistic Features of Anthroponomastics. *EuroGlobal Journal of Linguistics and Language Education*, 1(2), 38-43.
5. Babayev, J. (2024). Usage Sphere and Recognition Rate of Vulgarisms. *Global Spectrum of Research and Humanities*, 1(2), 49-54.
6. Babayev, J., & Alaviyya, N. (2023). TRANSLATION PROCEDURES OF CULTURE BOUND-TERMS (CBTs). *Journal of Science*. Lyon, 48.
7. Dumas, Bethany K.; Lighter, Jonathan (1978). "Is Slang a Word for Linguists?". *American Speech*. 53 (5): 14–15. doi:10.2307/455336. JSTOR 455336
8. Grabias, Stanisław (1997). *Język w zachowaniach społecznych* (in Polish). Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej. pp. 140–141.
9. Javid Babayev. How to teach a foreign language through CLT. Publisher.agency: Proceedings of the 4th International Scientific Conference «Interdisciplinary Science Studies» (December 1, 2023). Dublin, Ireland, 2023. 212
10. Javid, B., & Sayyara, S. (2024). The Most Ideal L2 Teaching Method. *International Journal of Religion*, 5(7), 367-378.
11. Javid, B. (2023, May). Characteristics of Grammar-Translation method. In V International Scientific and Practical Conference «Modern science: theoretical and practical view.
12. Moss, Caroline (September 9, 2013). "Our Updated Guide To Twitter Slang, Lingo, Abbreviations And Acronyms". *Business Insider*. Archived from the original on December 28, 2014. Retrieved December 2, 2014
13. Sonneveld, H., Loenning, K.: (1994): "Introducing terminology", in *Terminology*, p. 1–6

POLITICAL SCIENCES

FACTORS HINDERING THE DEVELOPMENT OF CIVIL SOCIETY IN GEORGIA

Khatia Markozashvili

Doctor of Public Administration

Associate Professor, Grigol Robakidze University

[DOI: 10.5281/zenodo.14289241](https://doi.org/10.5281/zenodo.14289241)

Abstract

Every state must adopt a well-considered political course and foster an active civil society, including non-governmental organizations and other civic unions, as these elements serve to strengthen and unify the nation. When analyzing the contemporary political situation, both in political and academic circles, the lack of a robust civil society or its weakness is frequently highlighted among the challenges faced by society and the country.

Keywords: civil society, post-socialist transformation, civil society organizations.

1. Factors Hindering the Development of Civil Society in Georgia

Since Georgia gained independence, discussions on the reasons for the failure and/or delays in the post-socialist transformation have become increasingly relevant. For more than thirty years, Georgia has been a model of unfulfilled opportunities and dashed hopes. Low development rates and a challenging social backdrop stem from the underdevelopment of democracy, which, in turn, is linked to the underdevelopment of civil society.

The formation of civil society begins with the emergence of civil organizations in their early forms. There is no universally accepted definition of a civil organization. According to EU policy documents, a civil organization is defined as "a non-governmental, non-profit structure that is impartial and non-violent, where individuals unite to achieve common goals and implement ideas, whether they are political, cultural, societal, or economic in nature." A civil organization actively collaborates with both citizens and the government, influencing policy formation and the decision-making process.

Civil society organizations play a crucial role in policymaking, influencing the formation of policy agendas, as well as ensuring their oversight and monitoring. A strong civil society fosters an inclusive and participatory process, allowing the ideas of all stakeholders to be shared and reflected in relevant policy decisions, laws, regulations, and strategies. Achieving this requires civil society organizations to possess appropriate experience, skills, internal cohesion, and public trust.

Numerous studies conducted in Georgia reveal a very low level of civic engagement among its citizens. According to a public opinion survey supported by GPAC,⁵⁸ only 1–5% of the population reports membership in a non-governmental organization or trade union, about 0.8% belongs to an official cultural or sports un-

ion, and less than 5% indicate having any form of connection with civil organizations. Furthermore, the level of political engagement is similarly low, with only 2% of the population affiliated with a political party.

These findings underscore the limited role of civil society and its low involvement in the socio-political life of the country. This lack of engagement negatively impacts Georgia's political agenda, leading to reduced government accountability, shortcomings in democratic governance, challenges in civic education, and hindered socio-economic development.

Despite the low levels of public involvement, approximately 15,000 NGOs are registered in Georgia—a figure that has often been the subject of criticism, particularly given the country's population of 3.7 million. Nonetheless, the creation of NGOs has continued unabated. In light of the current situation, it is essential for society to focus on increasing the level of civil society activity and engagement.

In the scientific literature, civil society is often treated as a singular entity, with little emphasis on the concept of institutional⁵⁹ civil society.⁶⁰ At the same time, the term is frequently used exclusively to refer to institutional civil society. This underscores the need for the introduction and recognition of a new term in academic discourse—a qualitatively different phenomenon, distinct from both natural and institutional civil society and entirely unrelated to traditional civil societies. For countries undergoing post-socialist transformation, particularly Georgia, this phenomenon can be termed as "professional civil society," commonly referred to as "grant-guzzling."⁶¹

In traditional democracies based on civil society, a significant portion of public activity stems from volunteerism, and a notable share of project funding is derived from private donations through "fundraising" and "crowdfunding." In these systems, civil society institutions emerge as guiding forces, steering initiatives where volunteers continue to play a substantial role.

⁵⁸ https://crrc.ge/wp-content/uploads/2024/02/final_gpac_2014_civic_engagement_report_04.08.2014_geo.pdf

⁵⁹ <http://www.nplg.gov.ge/greenstone3/library/collection/civil2/document/HASH24605b417cf29ce3be098b.3?p.s=TextQuery>

⁶⁰ <https://www.cipdd.org/upload/files/POLICY.PDF>

⁶¹ <https://caucasusbarometer.org/ge/ks2017ge/ACTGRAN/>

In contrast, civil society in post-socialist transformation countries—especially in Georgia—develops differently. Civil society institutions are established not as an organic expression of internal societal demand, but as externally initiated entities heavily reliant on grants from foreign and international funds.⁶² These organizations do not operate based on private volunteer donations but are driven by grants allocated by major foundations and staffed by contracted "professionals," either on a long-term or short-term basis. This externally driven and grant-dependent model diverges significantly from traditional volunteer-based civil societies.

In reality, what we are observing is not the presence of genuine civil society institutions but rather an imitation of them. These are entities that outwardly resemble civil society but fail to embody its core principles, as they are established on a professional rather than grassroots basis. The large number of NGOs in the country highlights the weakness of the state sector. NGOs often step in to participate in the creation or management of services that the state is unable to implement effectively.

The NGO sector assumes responsibility for addressing the needs of specific target groups, working alongside the state sector to deliver services that are crucial for society. Naturally, the proliferation of NGOs in a country signals areas where the state is falling short. From this perspective, there is hope that professional civil society may one day evolve into a genuine civil society. However, this transformation will likely occur only when the workforce within the non-governmental sector is "diluted" with volunteers.

This shift could be further supported by the growing trend of a middle class in the country, which is essential for fostering volunteerism and creating a more authentic civil society.

2. Non-Governmental Organizations

The number of NGOs in Georgia is disproportionately large,⁶³ driven by several factors, with financial interest being a primary motivator.⁶⁴ When access to funding becomes an objective, declared goals often serve as mere formalities rather than genuine missions. Additionally, the damaged image of political parties has led certain individuals to position themselves as more credible by "working" within non-governmental organizations.

Young people are often drawn to NGOs as an easy way to earn money, which subsequently fuels their ambitions. For many, politics then becomes an even simpler path to gaining status and resources with minimal effort. This dynamic has led to the emergence of a distorted form of institutional civil society in Georgia—

one defined by professional civil society rather than grassroots engagement.

In a country characterized by high rates of higher education but low employment opportunities, professional civil society has become a springboard for many, serving as a stepping stone to political careers or economic advancement.

Among the key factors impeding the development of civil society in Georgia are the low level of communication between NGOs and the public, as well as the general lack of information about non-governmental organizations.⁶⁵ Experience shows that the communication strategies employed by civil society organizations with their target audiences are often limited in scope and accessibility, even on social media platforms.⁶⁶

Addressing this issue partially requires improving public relations campaigns, involving individuals with high reputation and expertise within civil society organizations, adopting innovative technologies and outreach methods to connect with broader segments of society, and fostering long-term, close cooperation with beneficiaries.

Additionally, civil society organizations often encounter various challenges when engaging with state agencies. For instance, the formats of interaction between analytical public organizations and government bodies frequently fail to achieve their intended outcomes. Even when these organizations produce high-quality, professional products, the state may avoid collaborating with them. This avoidance is often attributed to criticisms that such organizations are overly critical or politicized. As a result, the valuable contributions of these organizations are sometimes disregarded, further hampering their effectiveness.

It is also common for the government, due to the low visibility of the NGO sector in the political sphere, to disregard it as a creator of the public agenda and perceive it as incapable of contributing meaningfully to the policymaking process. In its communication with the sector, the government often emphasizes that NGOs rely solely on donor funding, casting doubt on the sector's effectiveness and leaving its initiatives and recommendations largely ignored.

Experience shows⁶⁷ that the communication strategies of analytical organizations are often unappealing to state agencies. Similarly, organizations engaged in monitoring and human rights protection face significant difficulties in obtaining timely or complete information from state structures. Delays in the information re-

⁶²

<https://csogeorgia.org/storage/app/uploads/public/60c/1e9/e2d/60c1e9e2d0685306575183.pdf>

⁶³ <https://csogeorgia.org/ge/post/viskonsinis-shtatis-gamotsdileba>

⁶⁴ <https://eu4georgia.eu/the-world-ngo-day/#:~:text=There%20are%20nearly%2010%20000,%2C%20prevention%2C%20promotion%20and%20transformation>

⁶⁵

<https://csogeorgia.org/storage/app/uploads/public/5cd/dc3/2d3/5cd32d33877279473948.pdf>

⁶⁶ https://ec.europa.eu/programmes/erasmus-plus/project-result-content/302cfeb1-1f33-4067-ade5-a21b5d5b02e4/Challenges_and_pathways_for_promoting_Democratic_Principles_and_Civic_Education_in_Georgia.pdf

⁶⁷ <https://www.ctc.org.ge/wp-content/uploads/2019/12/Civil-Society-Report-2012.pdf>

trieval process are almost routine, and it is not uncommon for the responses provided by state agencies to be incomplete.⁶⁸

To enhance the effectiveness of non-governmental organizations, it is crucial to raise professional standards and diversify communication channels with state authorities. By addressing these challenges, NGOs can better position themselves as credible and impactful contributors to the public agenda and the policymaking process.

Service provider organizations encounter various difficulties in their interactions with the state. These organizations, which deliver essential services such as medication distribution,⁶⁹ juvenile justice programs, and psychological assistance, play a critical role in addressing human needs. However, according to representatives of organizations receiving state grants, the funding provided is often insufficient to deliver high-quality services.

Moreover, service provider organizations frequently take on dual roles, simultaneously serving as both service providers and monitoring or human rights organizations. This duality creates additional challenges, as the demands of monitoring and advocacy can conflict with their primary service delivery functions.

The relationship between public organizations and donors also presents notable issues.⁷⁰ Often, these relationships lack a genuine sense of partnership, despite both parties sharing the same goal: maximizing social benefits for the community and beneficiaries in the country where the donor operates. In some segments of society, there is a prevailing perception that these relationships are one-sided and unbalanced, with the imbalance stemming from the unequal power dynamics between donors and public organizations. This disparity can hinder effective collaboration and the achievement of shared objectives.

The vast majority of civil society organizations (CSOs) in Georgia rely heavily on international funding,⁷¹ with more than 95%⁷² of their funding coming from international donors. Consequently, only a small number of organizations are organizationally sustainable and able to remain focused on their mission and maintain their independence in relationships with donors, even amid shifting circumstances.

In recent years, state funding has emerged as an alternative source of support, but not all CSOs are willing to accept funding from the state. Many organizations are concerned that state funding may compromise their independence or affect their ability to operate freely.

Additionally, international donors contribute minimally to fostering philanthropy at the local level and

show limited interest in supporting CSO-led fundraising campaigns. This lack of support hinders CSOs in finding alternative funding sources and developing sustainable operations. Donors often provide limited encouragement for CSOs to generate additional income through entrepreneurial activities, even within funded programs. In the rare cases when donors support entrepreneurial initiatives, they seldom permit partner organizations to sell the products they create, further constraining the financial sustainability and growth of these organizations.

One of the concerns frequently expressed by civil society institutions about donors is the overly strict financial and administrative controls imposed on grantee organizations. However, the civil sector also acknowledges that the existing accountability requirements have contributed to their organizational development. These controls help improve management skills and foster the establishment of more efficient and sustainable internal management systems.

Looking ahead, public organizations must focus on diversifying their funding sources to ensure greater financial stability. For the Georgian non-governmental sector, it will be essential to collaborate with both the state and foreign donors, particularly in areas such as service provision, fostering local philanthropy, and supporting CSO-led fundraising campaigns. Strengthening these efforts will enhance the sector's ability to operate sustainably and effectively meet societal needs.

Conclusion

Civil society has undergone a long and challenging process of formation and development. From the era of ancient Greek democracy to the fall of Rome, it experienced its first significant rise, particularly in Athens and Rome between the 6th and 1st centuries BC. However, following the period of civil wars in the 1st century BC, it began to decline under the dominance of permanent military dictatorships. Later, during the Renaissance, Reformation, and Enlightenment, civil society reemerged in Western Europe, where its development has continued to evolve to this day, with its scope steadily expanding.

In Georgia, the roots and signs of civil society appeared sporadically throughout history. However, due to well-known objective reasons, meaningful development of civil society was not possible until the collapse of the Soviet Union. Currently undergoing a protracted post-socialist transformation, Georgia increasingly recognizes the critical role of civil society in fostering democratic development.

Since gaining independence, Georgia has faced numerous political crises. Every government change

⁶⁸ https://ec.europa.eu/programmes/erasmus-plus/project-result-content/302cfeb1-1f33-4067-ade5-a21b5d5b02e4/Challenges_and_pathways_for_promoting_Democratic_Principles_and_Civic_Education_in_Georgia.pdf

⁶⁹ <https://www.hsph.harvard.edu/wp-content/uploads/sites/2410/2014/03/Georgian.pdf>

⁷⁰ <https://www.ctc.org.ge/wp-content/uploads/2019/12/Civil-Society-Report-2012.pdf>

⁷¹ <https://www.csr.dg.ge/storage/files/doc/%E1%83%90%E1%83%A0%E1%83%90%E1%83%A1%E1%83%90%E1%83%AE%E1%83%94%E1%83%9A%E1%83%9B%E1%83>

<https://www.ctc.org.ge/wp-content/uploads/2019/12/Civil-Society-Report-2012.pdf>

⁷² <https://www.ctc.org.ge/wp-content/uploads/2019/12/Civil-Society-Report-2012.pdf>

has effectively amounted to a regime change, often characterized by revolutionary shifts on multiple levels. Consequently, Georgia has lacked the extended periods of peace essential for the organic formation of civil society. Nonetheless, these political crises have acted as catalysts, prompting the gradual formation of civil society in response to these challenges.

In reality, the Georgian public, which has repeatedly anticipated rapid reforms and swift economic growth from successive governments, has consistently faced disappointment. This recurring dissatisfaction stems from the inability of any government to fully meet the population's needs and expectations, further underscoring the necessity for a robust and independent civil society.

As a result of repeated disappointments, the Georgian public's messianic expectations toward the government have diminished, and there has recently been a growing readiness among people to take initiative and address issues themselves.

Since the collapse of the Soviet Union, it has been evident that a developed civil society is essential for the establishment and advancement of democracy. Advocates of post-socialist transformation have shown significant concern for fostering civil society in Georgia. However, the irony lies in the fact that this excessive focus and "care" inadvertently led to the opposite outcome. Instead of fostering genuine civil society, a distorted version—termed "professional civil society"—emerged.

As previously mentioned, this professional civil society meets the formal criteria of civil society but qualitatively represents the opposite essence. A combination of economic hardships, high unemployment rates, political instability, and the authoritarian tendencies of the authorities (notably during the National Movement's rule), along with the professionalization of civil society, has collectively hindered the development of a true, grassroots civil society in Georgia.

Political instability, unemployment, low economic development, and high income inequality have rendered Georgia's middle class small, weak, and vulnerable.⁷³ The middle class represents the critical mass needed to "unload" the burden of a politicized and professionalized civil society. Compounding these challenges, the destructive legacy of Soviet-era vices and parasitism—warned against by Merab Mamardashvili—continues to exert influence.

Mamardashvili identified Georgia's cultural peculiarities as a primary obstacle to democratization. He emphasized that without transitioning from an ideological culture to a democratic one, Georgia's democratization process would remain delayed, contradictory, and opaque. His insights find resonance in Francis Fukuyama's discussion of "cultural wars,"⁷⁴ which outlines four stages in the consolidation of democracy. Mamardashvili's concept of replacing ideological culture with democratic culture aligns with Fukuyama's fourth stage, the cultural consolidation of democracy.

Synthesizing the perspectives of Mamardashvili and Fukuyama, one can conclude that Georgia is now at a pivotal moment, ready to cultivate a truly civilized civic nation. This transformation will occur at Fukuyama's most complex and profound level—culture—and must be driven by a robust civil society. Civil society serves as the vital link between democratic institutions and citizens, enabling the cultural foundation necessary for sustainable democratization.

The development of the civil sector in Georgia under current conditions depends primarily on the civil society organizations (CSOs) themselves, followed by the government of Georgia and Georgian society as a whole.

The cautious stance of the current government, combined with the inflexibility and lack of functionality within some parts of the civil sector, creates a unique opportunity. This environment fosters the potential for the emergence of a non-politicized, internally donation-dependent, and sustainable civil society. Such a civil society would be oriented toward addressing the genuine needs and demands of the Georgian public.

References

1. Francis Fukuyama: *"Culture Wars and Civil Society."* "Ariel," 1998. Tbilisi, 2000.
2. Merab Mamardashvili: *"Conversations About Philosophy."*
3. Merab Mamardashvili: *"Consciousness and Civilization."* 2020 edition.
4. *"Civil Society and the Democratic Peace."* *Journal of Conflict Resolution*, Vol. 64, Issue 1 (January 2020), pp. 32–62. Hegre, Havard (Cited 6 times); Bernhard, Michael (Cited 3 times); Teorell, Jan (Cited 4 times). DOI: 10.1177/0022002719850620.
5. *"Governance, Democratic Innovation, and Civil Society Organizations at the End of the Modern State."* *Europoly: Continuity and Change in European Governance*, Vol. 13, Issue 2 (2019), pp. 149–178. Hernandez-Legorreta, Cutberto.
6. Ushangi Samadashvili: *"Middle Class in Georgia: Situation, Challenges, Opportunities."* [Link](#)
7. *University Course of Civic Education: Democracy and Citizenship.* (Reading material for students, 2nd edition). Authors: Greer Burrows, Zviad Abashidze, Ketevan Mukhiguli, Salome Dundua, Tamar Karaia.
8. United States Agency for International Development: *Project for the Protection of Civil Interests.* Partners: Georgia Civil Development Center "Alternative," Civil Society Institute, UN Association of Georgia, Center for Strategic Research and Development of Georgia. Contributions by Gia Nodia.
9. Michael Edwards: *"Introduction—Civil Society and the Geometry of Damian Relations,"* Chapter 1. 2019. [Link](#)
10. Caucasus Institute for Peace, Democracy, and Development: *An Assessment of Georgia's Civil Society: Report of the CIVICUS Civil Society Index*, 29.

⁷³ https://civil.ge/wp-content/uploads/2019/11/FINAL-IRI-Poll-Presentation-Georgia_October_2019_GEO.pdf

⁷⁴ https://kulturiskvlebebi.weebly.com/uploads/1/8/3/7/18376403/3_leqcia.pdf

11. https://civil.ge/wp-content/uploads/2019/11/FINAL-IRI-Poll-Presentation-Georgia_October_2019_GEO.pdf

12. https://kulturiskvleebi.weebly.com/uploads/1/8/3/7/18376403/3_leqcia.pdf

13. <https://www.hsph.harvard.edu/wp-content/uploads/sites/2410/2014/03/Georgian.pdf>

14. <https://www.ctc.org.ge/wp-content/uploads/2019/12/Civil-Society-Report-2012.pdf>

PSYCHOLOGICAL SCIENCES

THE RESEARCH OF NEWLYWED COUPLES' PRE-MARITAL EXPECTATIONS AND THE FULFILLMENT OF THESE EXPECTATIONS DURING THE MARRIAGE PROCESS IN KYRGYZSTAN

Kasım kızı Nurzat

Psychological Counselor

Kyrgyz-Turkish Manas University, Faculty of Humanities, Guidance and Psychological Counseling Program, Bishkek, Kyrgyzstan.

ORCID: 0009-0004-7200-6177

Efiliti Erkan

Assoc. Prof. Dr.

Kyrgyz-Turkish Manas University, Faculty of Humanities, Department of Educational Sciences, Bishkek, Kyrgyzstan

ORCID: 0000-0003-1158-5764

DOI: [10.5281/zenodo.14289253](https://doi.org/10.5281/zenodo.14289253)

Abstract

The aim of this research is to examine the pre-marital expectations of newlywed couples in Kyrgyzstan and explore how these expectations are fulfilled during the marriage process. In this study a qualitative research method was employed, using a case study model. The participants of the study voluntarily took part in the research. The study group consists of 16 individuals, including 12 women and 4 men, all married for a maximum of five years, from different regions of Kyrgyzstan. Data were collected through semi-structured interviews. The research data were analyzed using content analysis.

Keywords: Marriage, Expectation, expectations from marriage

Introduction

The family, as an institution, exerts a profound influence on an individual's life from birth to death, shaping not only physiological aspects but also economic, cultural, and social dimensions. It plays a crucial role in emotional development, personality formation, and behavioral guidance [1]. As the smallest unit of society, the family carries two fundamental meanings. The first refers to the family in which we are born and raised, the one that determines our place in the world and where we inherit our identity and legacy. The second refers to the family that individuals create through their own efforts, established through the institution of marriage. According to the modern perspective, marriage is an indispensable part of the formation of the family [2].

Marriage is more than a legal agreement; it is an emotional commitment in which spouses provide mutual support, navigate challenges together, and express love and devotion to one another. The decision to marry represents a shared promise to build a family, nurture children, support each other through life's disappointments, celebrate achievements, and embrace a shared journey [3].

People are social beings, and interpersonal relationships play a central role in their lives. Undoubtedly, marriage is one of the most important social relationships, as individuals have psychological, emotional, sexual, and spiritual expectations from it as a social institution. However, paradoxically, while marriage is expected to be the primary source of emotional and personal fulfillment for individuals, it is unfortunately experiencing its most fragile period today [4]. Perspectives, ideas, and opinions are key factors that shape an individual's attitude toward marriage. People's perceptions of marriage are closely tied to their expectations

of it and the value they place on marriage and future family relationships. Understanding these perspectives is essential, as marriage is not only a step toward forming a family but also a means of fulfilling material and emotional needs and establishing the foundation of society [5].

The role expectations of different individuals can vary widely. When starting a family, people may hold differing expectations about their roles and responsibilities. Research on the roles of young people can reveal these differences in role expectations. Achieving harmony between roles can increase satisfaction and lay a stronger foundation for a harmonious family life. Early recognition of these differences is critical to fostering healthy family relationships. Marriage role expectations encompass people's thoughts and views on how things should be or will be in marital relationships. There are two important aspects in this evaluation process: individuals form expectations regarding both their own roles and those of their partner. The expected roles in marriage can be divided into two categories: traditional and egalitarian. In traditional roles, male authority is considered dominant, and tasks and responsibilities in marriage are divided according to gender norms. In egalitarian roles, however, both men and women collaboratively discuss and share their duties and responsibilities, with the assumption of equal authority and decision-making in the relationship [6].

The degree of harmony in marriage depends on how realistic and compatible the expectations are. The closer both partners' expectations are to each other, the easier it is to achieve harmony. If the expectations of the husband and wife differ, problems are inevitable. For instance, if one partner wants children while the

other does not, or if one partner expects a more romantic relationship while the other is unable to be romantic, such situations can lead to conflicts [7]. Expectations affect the quality and duration of marriage. Research shows that marital expectations are universal. Since marriage is based on mutual expectations, unmet expectations often lead to challenges in relationships. People with differing expectations may experience less satisfaction and eventually grow distant from each other. Studies highlight that high and unrealistic expectations, when unmet, can be a cause of unhappiness [8].

Based on the literature review, the problem statement of this research is: "What are the pre-marital expectations of newlywed couples in Kyrgyzstan, and how are these expectations fulfilled during the marriage process?"

The aim of this research is to investigate the pre-marital expectations of newlywed couples in Kyrgyzstan and how these expectations are fulfilled during the marriage process.

Method

In this study, a qualitative research method using the case study model was employed. The study group consists of individuals who voluntarily participated in the research. It includes a total of 16 individuals, comprising 12 women and 4 men, all of whom have been married for a maximum of 5 years, and are from different regions of Kyrgyzstan. Data were collected using the semi-structured interview technique, a method designed to obtain in-depth information on specific topics.

Findings

The responses to the first research question, "What do you think a happy marriage is?" have been analyzed and are presented in Table 1.

Table 1.

Participants	Responses	f
K1, K2, K3, K4, K6, K7, K8, K9, K10, K11, K12, K13, K15, K16	Mutual understanding	14
K4, K5, K6, K7, K8, K10, K11, K12, K13, K14, K15	Mutual love and respect	11
K4, K6, K7, K8, K9, K10, K11, K12, K13, K16	Support Between Spouses	10
K1, K4, K14, K15	Attention	4
K5, K10, K6	Mutual trust	3
K1, K3, K5	Equality between spouses	3
K6, K7	Valuing each other	2

Upon examining Table 1, it is evident that nearly all participants (14 out of 16) emphasized the importance of "mutual understanding" between spouses as essential for a happy marriage. Participant K2 stated: "A happy marriage is when your spouse understands you perfectly." A significant majority of participants (11 out of 16) also highlighted that "love and respect" are necessary for a happy marriage. Participant K10 noted: "A happy marriage is a loving spouse." For many participants (10 out of 16), "support" between spouses was identified as a key element of marital happiness. As participant K6 explained: "A happy marriage

is when we always support each other and genuinely rejoice in each other's successes." Additionally, a few participants pointed out other factors such as "attention", "trust", and "equity between spouses" as indicators of a happy marriage. K3 remarked: "A happy marriage is not just about loving, understanding, and trusting each other; first, one must choose the right partner, because for a marriage to be happy, spouses must be equal to one another."

The responses to the second research question, "What were your expectations from marriage before you got married?" are analyzed in Table 2.

Table 2.

Participants	Responses	f
K1, K4, K6, K7, K10, K14, K15, K16	Support and respect	8
K1, K2, K4, K5, K6, K9, K14	Understanding	7
K1, K3, K5, K10, K14, K15	Living in harmony and prosperity	6
K4, K5, K6, K7, K9, K14	Loving and being loved	6
K1, K3, K4, K7, K9, K15	Attention	6
K1, K5, K7, K9, K13	Improvement in quality of life	5
K11	Routine life	1

Table 2 reveals that half of the participants (8) primarily expect support and respect from marriage. K16: "My expectations from marriage were that my spouse and I would behave respectfully toward each other, support each other in everything, help each other, and overcome difficulties together." Some participants (7) also mentioned that, above all, they expected their spouses to be understanding. K2 stated: "My only expectation

from marriage is that my spouse fully understands me." Some participants expressed expectations of living in harmony and well-being, loving and being loved, and having their spouse show interest in them. K5 noted: "My expectation from marriage was mutual love." Some participants shared that before marriage, they expected to live separately from their spouse's parents, to

be good parents to their future children, to live according to religious rules, and to see an improvement in their quality of life after marriage. K7: "I thought that after getting married, I wouldn't cook at home and would order food from a restaurant."

The responses to the question "How well were your expectations from marriage met after getting married?" which is the third question of the research, have been analyzed in Table 3.

Table 3.

Participants	Responses	f
K2, K3, K4, K9, K12, K13, K15, K16	Fully fulfilled	8
K5, K6, K7, K10	Most expectations were fulfilled, but some aspects did not align	4
K11	Half of the expectations were fulfilled	1
K1	Most expectations were not fulfilled	1
K14	None of the expectations were fulfilled	1

Upon reviewing Table 3, it can be seen that half of the participants (8 out of 16) had their expectations from marriage fully met. K15: "My expectations before the marriage were completely fulfilled after I got married. In fact, my marriage is going even better than I expected." Four participants mentioned that their expectations were largely fulfilled, but there were some aspects that did not align. K6: "I made this decision consciously, so my expectations were generally correct. But, like most women, I probably expected to be given 24/7 attention, but unfortunately, that's impossible."

The remaining participants indicated varying levels of fulfillment: some felt that only half of their expectations were met, while others experienced unmet expectations or no fulfillment at all. K11: "My expectations from marriage were 50/50 fulfilled during the marriage process. Despite my fears that our relationship wouldn't be the same as before, after getting married, our relationship strengthened, and our trust in each other increased."

The responses to the question "How did your expectations before marriage affect your marriage process?" which is the fourth question of the research, have been analyzed in Table 4.

Table 4.

Participants	Responses	f
K2, K4, K6, K7, K8, K10, K11, K12, K13, K14, K15	Did not affect	11
K3, K9, K16	Had a positive effect	3
K1, K5	Led to disappointment.	2

When Table 4 is examined, the vast majority of participants (11) stated that their expectations before marriage did not affect the marriage process at all. K4: "I don't think my expectations had any effect on my marriage." Some participants (3) mentioned that the fulfillment of their expectations during the marriage process positively affected their marriage. K16: "I believe my expectations had a positive effect on my marriage because all expectations and desires were discussed and understood beforehand. It was clear what we wanted and expected from each other, and this

greatly facilitated the marriage process." The remaining participants indicated that their expectations negatively affected their marriages and, in general, led to disappointment. K5: "I was disappointed as my expectations were not met, but apart from that, I don't think my expectations had any impact on my marriage."

The responses to the question "How did your responsibilities change after getting married?" which is the fifth question of the research, have been analyzed in Table 5.

Table 5.

Participants	Responses	f
K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14	Distribution of responsibilities between spouses according to social expectations	14
K1, K3, K4, K5, K6, K7, K8, K10, K11, K12, K14	The emergence of responsibilities for housework and childcare	11
K2, K9, K13	Taking on the responsibility for the family's financial situation.	3
K15, K16	Equal sharing of responsibilities.	2

In Table 5 it can be seen that the vast majority of participants (14) shared their marriage responsibilities with their spouses according to societal expectations after getting married. K11: "Not much changed. The en-

tire financial upkeep of the house is my husband's responsibility. I continue to do tasks typically assigned to women, like cleaning, cooking, and taking care of the children." K10: "I started spending more time creating warmth and comfort in the home. I try to conform to

the behaviors expected of a wife in our society." Some participants (12) mentioned that after marriage, they had to take on the responsibilities of housework and childcare. K7: "My responsibilities have increased significantly; the entire household upkeep and the children are now my responsibility."

Conclusion and discussion

When examining the indicators of a happy marriage, the vast majority of participants stated that couples should be understanding, a significant portion emphasized the importance of love and respect between spouses, and some mentioned that spouses should support each other, show appreciation, provide attention, and demonstrate trust. Additionally, the research concluded that for a marriage to be happy, certain variables are necessary, such as equality between spouses, living according to religious rules after marriage, having children, accepting each other as they are, being able to take responsibility, and creating shared memories together. In Özgüven's study conducted nearly 30 years ago, having children was considered an indicator of a happy marriage by almost half of the participants. However, in this study, only a small number of participants supported the same view. Therefore, this study does not align with the earlier literature on this aspect.[9]

When the findings related to marriage expectations are examined, it has been determined that most participants expect mutual support and respect from marriage, as well as understanding from their spouses. Some participants also expressed that they expect to live in harmony and well-being in marriage, to love and be loved, to receive attention from their spouses, and to experience an improvement in their quality of life. The remaining participants mentioned expectations such as living according to religious rules, having freedom of action, living separately from their spouse's parents, being good parents to their future children, as well as the possibility of life becoming routine after marriage and having no expectations from marriage at all. According to another study conducted among university students to examine marriage expectations, female students expressed a desire for their partner's religious beliefs to be similar to their own, while male students indicated that they expected their partner to be knowledgeable about and fulfill their religious duties.[10] In the results of our study, it was found that only a small number of participants included religion in their marriage expectations, so our study does not show consistency with the literature.

When examining the fulfillment of pre-marital expectations, it was found that most participants had their expectations fully met after marriage. Some participants reported that their expectations were largely met, although some discrepancies existed. A smaller group of participants indicated that only half of their expectations were fulfilled, while a few noted that their expectations were barely met or not met at all.

When the findings related to the impact of pre-marriage expectations on the marriage process are examined, the majority of participants indicated that their

expectations had no effect on their marriage. Some participants mentioned that the fulfillment of their expectations during the marriage process positively affected their marriage. However, some participants stated that their expectations negatively impacted their marriage and that, in general, they were disappointed. According to Devecioğlu [11], whether marriage expectations are met or not affects the marriage process. The fulfillment of expectations increases marital satisfaction, while unmet expectations decrease it. In the results of this study, participants stated that the fulfillment of their marriage expectations positively affected their marriage, while the lack of fulfillment negatively affected it. Therefore, the work conducted by Devecioğlu supports the findings of this study.

When the findings regarding changes in responsibilities after marriage are examined, the vast majority of participants stated that responsibilities were shared between spouses according to societal expectations after marriage. All female participants in the study reported taking on the responsibilities of housework and childcare after marriage, while all male participants stated that they took on the responsibility for the family's financial situation. A very small portion of participants mentioned that after marriage, they shared responsibilities equally, meaning both spouses were equally responsible for the family's financial situation and housework. In a study conducted by Bener [12], it was found that the expectations of female and male students regarding family and marital life differed from each other. It was concluded that female students held a more traditional perspective on family and marriage compared to male students. The clear conclusion drawn from this study is that gender roles play a significant role. Bener's study in Turkey revealed that young people have a traditional view of marriage, which supports the findings of this study.

There is a study that emphasizes the importance of spouses having the same attitudes, rather than an equal or traditional approach, when it comes to marital role expectations. The expectations of spouses regarding marital roles are of great importance in shaping their views on marriage. When spouses have similar expectations, the likelihood of conflict decreases, and marital harmony increases. On the contrary, in couples with opposing expectations, marital harmony tends to be lower, as one partner's expectations are not met. [13] When the opinions of the couples participating in this study were gathered, it was generally found that husbands and wives were in agreement about sharing responsibilities. Those who held traditional views expected women to handle housework and men to provide for the family. These couples reported being satisfied with their marriages, as these expectations were fulfilled after marriage.

References

1. Akşemsettinoglu, S. (2020). Investigation of the relationship between childhood abuse experiences, relationship satisfaction, and marriage expectations of individuals in romantic relationships [Master's Thesis]. Gaziantep University.
2. Yeter, N. (2017). Examination of the relationship between women's job satisfaction and

marital adjustment. [Master's Thesis]. Istanbul Ticaret University.

3. Heitler, S. (1997). *The power of two*. Oakland, CA: New Harbinger Publications. ISBN: 1572240598.

4. Coontz, S. (2005). *Marriage, a history: From obedience to intimacy or how love conquered marriage*. New York, NY: Viking.

5. Willoughby, B. J. (2010). Marital attitude trajectories across adolescence. *Journal of Youth and Adolescence*, 39(11), 105-131.

6. Yıldız, E. (2020). The relationship between university students' attachment styles and marriage expectations [Master's Thesis]. Bahçeşehir University.

7. Yıldız, M. (2017). Development of the marriage maturity scale. *Life Skills Psychology Journal*, 1(1), 24-34.

8. Foster, F. L. B. (2007). Premarital preparation and marital satisfaction: What Utah individuals are doing to prepare for marriage and how premarital preparation can enhance marital satisfaction. Utah State University.

9. Özgüven, İ. E. (1994). University students' preferences regarding marriage and partner selection. 1st Family Congress Book. Ankara.

10. Çizmeciöglü, R. (2020). Examination of the relationship between marriage maturity and marriage expectations [Master's Thesis]. Istanbul Ticaret University.

11. Devecioğlu, P. (2020). The role of attachment dimensions, marriage attitudes, and expectations in predicting relationship satisfaction among engaged individuals [Master's Thesis]. Bahçeşehir University, Institute of Health Sciences, Istanbul.

12. Bener, Ö. (2013). Attitudes of young people towards marriage and family life. *Karabük University Journal of Social Sciences Institute*, 3(1), 1-16.

13. Odell, M., & Quinn, W. H. (1998). Congruence, desire for change, and adjustment during the first year of marriage. *Marriage and Family Review*, 27(1-2), 91-112.

INVESTIGATION OF MARITAL COMPATIBILITY OF COUPLES IN KYRGYZSTAN ACCORDING TO THEIR DEMOGRAPHIC CHARACTERISTICS**Zakutbekova Sezim**

Master of Kyrgyzstan-Turkey Manas University, Institute of Social Sciences, Psychological Counseling And Guidance Program, Kyrgyzstan, Bishkek
ORCID: 009-0004-9746-0106

Efiliti Erkan

Assoc. Prof. Dr.
Kyrgyzstan-Turkey Manas University, Department Of Educational Sciences, Psychological Counseling And Guidance Program, Kyrgyzstan, Bishkek
ORCID: 0000-0003-1158-5764
[DOI: 10.5281/zenodo.14289277](https://doi.org/10.5281/zenodo.14289277)

Abstract

The purpose of this research is to investigate the marital compatibility of married individuals in Kyrgyzstan according to their demographic characteristics. The study examines whether there are significant differences in marital compatibility levels according to the number of children, economic status, duration of marriage, type of marriage, and employment status of married individuals. In order to achieve the defined research objective, a descriptive survey model was used as a quantitative research method. The study group consisted of 173 married individuals selected based on volunteerism in Kyrgyzstan, with 38 men and 135 women participating. The "Personal Information Form" created by the researcher to collect socio-demographic information and the "Updated Marital Compatibility Scale" were used as data collection tools. The data obtained from the participants were analyzed using the SPSS 24.0 program. To assess the differentiation of variables, the relationship of dependent variables with two categorical variables was analyzed using independent samples t-test. For analyses with multiple categorical variables, ANOVA (Analysis of Variance) was used.

Keywords: Marriage, Married Individuals, Compatibility, Marital Compatibility, Demographic Characteristics.

Introduction

Throughout history, humans have felt the need to be part of a community. For this reason, the concepts of marriage and family are of vital importance for the survival of individuals and the continuity of social life. The existence of the family is crucial for individuals to fulfill their social needs, such as sharing, loving and being loved, reproduction, and communication [1].

The family, which is a small unit of society, is supported by the institution of marriage. The fact that spouses are raised in different environments and have different personality structures makes it difficult to achieve continuous fulfillment and satisfaction in the marital relationship. It is at this point that the concept of marital compatibility emerges [2].

A harmonious marriage is one in which individuals who share common views on issues related to marriage and family and are able to solve problems in an appropriate manner form the marriage. In marital compatibility, the state of the marital relationship is evaluated rather than individual feelings [3]. One of the important points emphasized in marital compatibility is that individuals should be able to make each other happy. In a study supporting this idea, it was found that continuing an unhappy marriage is negatively related to overall well-being, life satisfaction, self-esteem, and general health [4]. Therefore, the concept of marital compatibility also includes the concept of marital happiness. Concepts such as love, respect, trust, and commitment positively influence the marital relationship, while effective communication, awareness, the expression and understanding of emotions bring happiness to the marriage [5].

In marriage, compatibility problems between men and women may arise for various reasons, including personal, cultural and demographic factors. For this reason, compatibility and conflict within the family are important for the continuation of married life and personal evaluations regarding the family institution [6]. In recent years, an increase in divorces has been observed in Kyrgyzstan. According to data from the National Statistics Committee of the Kyrgyz Republic, 45.5 thousand couples applied for marriage registration in 2023, while 12,550 divorces occurred. When compared to statistics from 2011, it was found that the number of marriages decreased by 11,000, while the number of divorces increased by 3,900. This situation further emphasizes the importance of research on the sustainability of marriages and marital compatibility. Based on these data, this study aims to answer the following question: To what extent do the demographic characteristics of married individuals in Kyrgyzstan affect marital compatibility?

Purpose of the Study:

The aim of this research is to examine the marital compatibility of couples in Kyrgyzstan according to some demographic characteristics. Sub-objectives related to these are shown below.

1. Do the marital compatibility levels of married individuals differ significantly according to the number of children?
2. Do the marital compatibility levels of married individuals differ significantly according to their economic status?

3. Do the marital compatibility levels of married individuals differ significantly according to the duration of marriage?

4. Do the marital compatibility levels of married individuals differ significantly according to the type of marriage?

5. Do the marital compatibility levels of married individuals differ significantly according to the working status of married individuals?

Method

In this study, a descriptive survey method was used to examine the marital compatibility levels of married individuals in Kyrgyzstan in terms of demographic variables. The population of the study consists of married individuals in Kyrgyzstan. The study group is made up of a total of 173 married individuals, including 38 men and 135 women, who were selected on a voluntary basis from those living in Kyrgyzstan. Two

types of data collection tools were used in the study. These are: 1. *Personal Data Form*: A personal information form created by the researcher to collect demographic data. 2. *Revised Couple Compatibility Scale*: The Revised Couple Compatibility Scale is the 14-item version of the Couple Compatibility Scale developed by Spanier, revised by Busby and colleagues, and adapted into Turkish by Gündoğdu. The translation of the scale into Kyrgyz was carried out by Efilti and Cumgalbekov [7]. To determine the construct validity of the scale, Exploratory Factor Analysis (EFA) was conducted, and to assess its reliability, Cronbach's Alpha internal consistency coefficients were calculated.

Findings

The analysis results related to the first sub-goal of the study, which is the question "Do the marital compatibility levels of married individuals show significant differences based on the number of children?" are presented in Table 1.

Table 1.

Marital Compatibility Levels by Number of Children

	Group	N	X	Ss	F	p
Marital Compatibility	no	21	3,43	,55	,437	,853
	1 child	28	3,43	,69		
	2 children	36	3,28	,71		
	3 children	45	3,34	,74		
	4 children	28	3,39	,54		
	5 children	13	3,20	,71		
	7 children	2	3,44	,12		

($p < .05$)

In Table 1, the results related to whether marital compatibility significantly differs based on the number of children show that marital compatibility does not significantly differ based on the number of children ($F = 0.437$; $p > 0.05$). In other words, there is no significant difference in the levels of marital compatibility based on the number of children. When examining the arithmetic mean values, it was found that individuals

without children and those with one child had higher levels of marital compatibility compared to the other groups.

The analysis results related to the second sub-goal of the study, which is the question "Do the marital compatibility levels of married individuals show significant differences based on monthly income?" are presented in Table 2.

Table 2.

Marital Compatibility Levels by Monthly Income

	Group	N	X	Ss	F	p
Marital Compatibility	15 ve alti	56	3,30	,55	1,904	,112
	16-29	50	3,35	,81		
	30-45	43	3,43	,66		
	46-60	16	3,69	,57		
	60 ve üstü	8	3,62	,54		

($p < .05$)

In the table above, the results regarding whether marital compatibility differs significantly according to monthly income show that marital compatibility does not differ significantly according to the monthly income variable ($F = 1.904$; $p > 0.05$). In other words, there is no significant difference in marital compatibility levels according to monthly income. However, when the arithmetic average was examined according to the income levels of the participants, it was observed

that as income increased, marital compatibility also increased. It was determined that the group with the highest marital compatibility also had the highest income level, while the group with the lowest marital compatibility had the lowest income level.

The analysis results related to the third sub-goal of the study, which is the question "Do the marital compatibility levels of married individuals show significant differences based on the duration of marriage?" are presented in Table 3.

Table 3.

	Group	N	X	Ss	F	p
Marital Compatibility	1 and below	19	3,44	,58	,403	,806
	1-5	32	3,45	,52		
	6-15	50	3,39	,66		
	16-25	39	3,28	,76		
	26 and over	33	3,31	,79		

Marital Compatibility Levels by Duration of Marriage

(p<.05)

In Table 3, the results related to whether marital compatibility significantly differs based on the duration of marriage show that marital compatibility does not significantly differ based on the duration of marriage ($F = 0.403$; $p > 0.05$). In other words, there is no significant difference in the levels of marital compatibility based on the duration of marriage. When examining the arithmetic mean values, it was found that individuals

married for 1-5 years had higher levels of marital compatibility compared to the other groups.

The analysis results related to the fourth sub-goal of the study, which is the question "Do the marital compatibility levels of married individuals show significant differences based on the type of marriage?" are presented in Table 4.

Table 4.

	Group	N	X	Ss	F	p
Marital Compatibility	Own choice	119	3,35	,66	,120	,887
	through arranged marriages	25	3,42	,63		
	through abduction	29	3,39	,75		

Marital Compatibility Levels by Marriage Type

(p<.05)

In Table 4, the results related to whether marital compatibility significantly differs based on the type of marriage show that marital compatibility does not significantly differ based on the type of marriage ($F = 0.120$; $p > 0.05$). In other words, there is no significant difference in the levels of marital compatibility based on the type of marriage.

The analysis results related to the fifth sub-goal of the study, which is the question "Do the marital compatibility levels of married individuals show significant differences based on their employment status?" are presented in Table 5.

Table 5.

Marital Compatibility Levels by Employment Status

Marital Compatibility		N	x	Ss	sd	t	p
Employment Status	yes	121	3,4	,74	,16	1,0	,312
	no	52	3,2	,49	,14		

(p<.05)

The test results in the table show that marital compatibility does not significantly differ based on employment status ($t = 1.0$; $p > 0.05$). In other words, there is no significant difference in the levels of marital compatibility based on employment status. However, when examining the mean scores of employed and unemployed married individuals, it was found that the mean score of employed individuals was higher than that of unemployed individuals, and this difference was statistically significant.

Results and discussion

Based on the first sub-goal of the study, the findings related to whether marital compatibility levels of married individuals differ according to the number of children revealed no significant difference between the number of children and marital compatibility. However, when examining the arithmetic mean values, it was found that couples without children and those with one child had higher levels of marital compatibility compared to the other groups. There could be several reasons why couples without children have higher marital compatibility scores. First, couples without children

may have more time and energy for their marriage. These couples may have more opportunities to strengthen their relationship and spend quality time together. Additionally, not having children can reduce financial and emotional stress for couples, which could positively impact marital compatibility. The care of a single child may be more manageable compared to the additional responsibilities and stress that come with having multiple children. This situation may allow couples to spend more time with each other and manage parenting-related stress more effectively.

Supporting this research, there are studies in the literature showing that couples without children have higher marital compatibility. In a study by Kubat [8], it was concluded that the number of children has no effect on marital happiness. Therefore, the findings of this research are consistent with those studies. On the other hand, in a study by, it was found that families with children had higher marital compatibility compared to families without children. While children may help keep the family together, they can also trigger conflicts between couples [9].

Based on the second sub-goal of the study, the findings related to whether marital compatibility levels of married individuals differ according to their monthly income showed that marital compatibility levels do not significantly differ based on the monthly income variable. However, when examining the arithmetic mean values based on participants income levels, it was observed that as income increased, marital compatibility also increased. It was found that the group with the highest level of marital compatibility also had the highest income level, while the group with the lowest marital compatibility had the lowest income level. Some studies in the literature have found that couples with lower economic conditions experience low economic status and job insecurity (especially for married men) are negatively related to marital compatibility [10]. Based on the third sub-goal of the study, the findings related to whether marital compatibility levels of married individuals differ according to the duration of marriage revealed no significant difference between marital compatibility and the duration of marriage. When examining the arithmetic mean values, it was found that couples who had been married for 1-5 years had higher levels of marital compatibility compared to the other groups. Similar to the findings of this study, Kubat [8] and Özmen Süataç [2] found in their research that as the duration of marriage increases, marital compatibility decreases, and that compatibility is higher in the early years of marriage.

Based on the fourth sub-goal of the study, the findings related to whether marital compatibility levels of married individuals differ according to their type of marriage showed that marital compatibility did not significantly differ based on the type of marriage. However, when examining the arithmetic mean values, it was found that those who married through arranged marriages had higher levels of marital compatibility compared to the other groups.

Arranged marriages typically involve the active participation of families and society. In such marriages, families may be involved in the process of evaluating whether the couple is compatible, and they can play a supportive role in the couple's married life. The support of families can help couples overcome challenges more easily and may enhance marital compatibility. Arranged marriages usually take place between people with similar social, cultural and economic status. Couples with similar values and beliefs may experience less conflict in their married life. Those who marry in this way may have fewer expectations from each other and the marriage may be based on more rational decisions, which may cause fewer problems in the relationship. On the other hand, couples who marry voluntarily or by running away often sign marriages where romantic feelings and individual preferences are at the forefront. Unrealistic expectations can lead to disappointment and relationship dissatisfaction. In such marriages, couples may come from different socio-cultural backgrounds, which can cause compatibility issues. However, couples who marry by choice or elopement often have a strong emotional bond, which can be considered an advantage of such marriages.

In a study conducted by Şendil and Korkut [11], it was found that marital compatibility was significantly higher among couples who married by mutual agreement compared to those who married through arranged marriages. In another study, it was found that individuals who married by their own choice had significantly higher marital compatibility than those who married through arranged marriages [12]. Based on the fifth sub-objective of the research, the findings regarding whether marital compatibility levels differ according to employment status revealed that there was no significant difference. However, when the mean scores of employed and non-employed married individuals were examined, it was found that employed individuals had higher mean scores for marital compatibility compared to non-employed individuals, and this difference was statistically significant.

According to the findings of Erdoğan's [13], study on the relationship between marital compatibility, psychological well-being, and loneliness, it was determined that the scores of participants who were actively employed in a job were significantly higher than those of non-employed participants, particularly in the overall marital compatibility score and the agreement sub-dimension. According to the results of Gergin's [14], study examining the marital compatibility of married women with employment and non-employment status, it was found that employed women had a higher level of marital happiness compared to non-employed women.

References

1. Özbek, C. (2018). Examination of the relationships between spouse evaluation, marital adjustment, marital satisfaction, and sexual satisfaction in married individuals. Master's Thesis. Near East University, Institute of Social Sciences, Clinical Psychology Department, Nicosia.
2. Özmen-Süataç, A. (2010). Investigation of marital adjustment in terms of interpersonal style and anger. Master's thesis, Ege University, İzmir.
3. Polat, D. (2006). Examination of the relationships between marital adjustment, tendencies toward infidelity, and conflict tendencies in married individuals in terms of some variables. Master's Thesis. Ankara University, Institute of Social Sciences, Psychology (Social Psyc) Department, Ankara.
4. Kublay, D., & Oktan, V. (2015). Marital adjustment: An investigation in terms of value preferences and subjective happiness. *Turkish Psychological Counseling and Guidance Journal*, 5(44), 25-35.
5. Erus, S. M. (2019). The mediating role of emotional intelligence and marital adjustment in the relationship between mindful awareness and subjective well-being in marriage. Doctoral Thesis. Yıldız Technical University, Institute of Social Sciences, Istanbul.
6. Çeliksoy, Ü. (2021). Examination of marriages in different age groups in terms of marital adjustment, family evaluation, and subjective well-being. Master's Thesis. Çanakkale Onsekiz Mart University, Family Counseling Department, Family Counseling Science Department, Çanakkale.

7. Efilti, E., Zhumgalbekov, A. (2024). Adaptation of the "Family Harmony" scale to the Kyrgyz language: Determining its validity and reliability. *Journal of Universities of Kyrgyzstan*, No. 3, 111-116. Эфилти Э., Жумгалбеков А.Ж. (2024). «Үй-бүлөлүк гармония» шкаласын кыргыз тилине адаптациялоо: валиддүүлүгүн жана ишенимдүүлүгүн аныктоо. *Известия ВУЗов Кыргызстана*,
8. Kubat, D. E. (2012). Examination of the relationship between tendencies toward infidelity and marital satisfaction in married individuals. Unpublished Master's Thesis. Haliç University, Institute of Social Sciences, Istanbul.
9. Bedir, İ. (2018). Investigation of variables predicting marital satisfaction in married individuals. Master's Thesis. Arel University, Institute of Social Sciences, Psychology Master's Program, Istanbul.
10. Pepping, C. A., & Halford, W. K. (2012). Attachment and relationship satisfaction in expectant first-time parents: The mediating role of relationship-enhancing behaviors. *Journal of Research in Personality*, 46(6), 770-774. DOI: <https://doi.org/10.1016/j.jrp.2012.08.005>.
11. Şendil, G., & Korkut, Y. (2008). Examination of couple adjustment and marital conflict in married couples from the perspective of demographic characteristics. *Psychology Studies*, 28, 15-34.
12. Arif, N., & Fatima, I. (2015). Marital satisfaction in different types of marriage. *Journal of Social and Clinical Psychology*, 13(1), 36-40.
13. Erdoğan, T. (2022). The relationship between marital adjustment, psychological well-being, and loneliness. Unpublished Master's Thesis. Konya: Karatay University: Graduate Education Institute.
14. Gergin, K. (2023). Examination of marital adjustment in married working women and non-working married women. *Social, Humanities, and Administrative Sciences Journal*, 2023, 6(2), 183-204. DOI: 10.26677/TR1010.2023.1178 ISSN: 2667-422X Journal website: www.sobibder.org

SOCIAL SCIENCES

MANIFESTATIONS OF PROFESSIONAL BURNOUT SYNDROME AMONG SOCIAL WORKERS WORKING WITH INDIVIDUALS WITH INTELLECTUAL DISABILITIES IN DAY ACTIVITY CENTERS

Roma Fabijonavičiūtė – Genienė

*Lecturer; Klaipeda Higher Education Institution,
Faculty of Health Sciences; Klaipeda, Lithuania*

Skaidrė Račkauskienė

*Lecturer; Klaipeda Higher Education Institution,
Faculty of Health Sciences; Klaipeda, Lithuania*

Dainora Jurgaitytė

Social worker; Social Services Center "Klaipėdos lakštute"

[DOI: 10.5281/zenodo.14289350](https://doi.org/10.5281/zenodo.14289350)

Abstract

This article elucidates the manifestations of burnout syndrome among social workers engaged with individuals with intellectual disabilities and examines timely intervention strategies. Social workers often report psychophysiological symptoms, such as chronic fatigue, which affect both their professional and personal lives, along with reduced activity levels and a lack of energy. Additionally, they experience significant social and psychological symptoms, including high levels of stress and increased irritability. The study also highlights the diversity of existing preventive measures against professional burnout. Institutions commonly offer professional development training and supervision to their employees. Furthermore, social workers actively engage in self-care and well-being practices, such as participating in preferred activities, taking outdoor walks, or engaging in other physical activities, to mitigate the effects of burnout syndrome.

Keywords: burnout syndrome, intellectual disability, day center, social worker.

Introduction. Burnout syndrome was first described in 1974 by American psychoanalyst Herbert Freudenberger. He observed that professionals such as healthcare workers, police officers, and social workers, who work closely with people and provide assistance, are more prone than others to experience exhaustion and chronic fatigue, negatively impacting their productivity and quality of life (1). Historically, the concept and understanding of burnout syndrome originated from stress research focused on the well-being and health of professionals. Over time, burnout syndrome became widely recognized as a phenomenon linked to emotionally demanding professions that involve significant emotional responsibility. In recent years, burnout syndrome has gained increasing attention due to rising workplace stress and the fast-paced nature of modern work and life (2). An expanding body of research and literature now examines burnout syndrome, its effects on employees and organizations, and strategies for mitigating and overcoming its risks.

In the professional field of social work, discussions about burnout syndrome, its manifestations, and prevention are not new. Social service institutions, guided by EU-regulated normative documents (*such as the OSH Framework Directive (89/391/EEC) and the International Association of Schools of Social Work (IASSW) Ethics in Social Work*), along with the normative legal framework developed in Lithuania based on these guidelines, have established various formal and informal measures to protect employees from burnout, taking into account the nature of work with clients. The scientific discussion on this topic is extensive but remains insufficient. Foreign researchers such as Hombrados-Mendieta et. al (3), Neumann et. al (4), as well

as Elbarazi et.al (5), actively examine the manifestations, causes, and intervention methods of burnout syndrome, aiming to identify timely solutions for recognizing and preventing professional burnout. In Lithuania, the phenomenon of professional burnout in the social services sector has been studied by Gudžinskienė et al. (6). Despite ongoing research and preventive measures being implemented in practice, burnout syndrome remains a significant issue in both social work practice and the field of scientific inquiry. In their studies, Nagle et. al (7) Samusevica et al (8), as well as Tolutiene et. al (9), emphasize the importance of investigating burnout manifestations by differentiating research based on the nature of client work and the types of institutions. This approach allows for a more thorough identification of the early signs of burnout syndrome and enables the development of timely intervention strategies. Consequently, the research questions addressed in this thesis are: (1) How do the early signs of burnout syndrome manifest in social workers working with individuals with intellectual disabilities in a day activity center? (2) What preventive measures are effective in mitigating the risk of burnout syndrome?

Methodology. Research Methods: Analysis of scientific literature. **Data Collection Methods:** A quantitative research approach was employed using a written survey. **Data Analysis Method:** Statistical data analysis. **Characteristics of the Quantitative Sample:** The study population consisted of social workers employed in day activity centers, providing social services to individuals with intellectual disabilities, and possessing at least 3 years of professional experience. A total of 120 participants (n = 120) took part in the study. The average age of the respondents was 43 years, with

an average of 11 years of professional experience. All participants in the study were women. The research adhered to the ethical principles associated with quantitative research.

Professional Challenges Faced by Social Workers

For the majority of individuals, professional activity constitutes a significant aspect of life, as it occupies a substantial portion of their time. Thus, both the nature of the profession and the work environment have profound effects on a person's mental, physical, and emotional well-being (10). According to these authors, an imbalance between professional demands, emerging challenges, and available resources may result in a heightened risk of professional burnout. The current study investigated the challenges encountered by social workers within their professional teams. The results indicate that a significant proportion of social workers (43.33%) reported a lack of openness and effective communication among colleagues, which often leads to conflicts and disagreements. Gudžinskienė et al. (6) also highlight interpersonal challenges as critical factors contributing to burnout syndrome among social workers.

In the study, respondents identified inadequate support as the least significant issue within their teams (26.66%). However, half of the social workers surveyed cited the lack of information sharing as the most pressing challenge. Additionally, 41.66% of respondents noted insufficient mutual connections among colleagues as a significant issue, while 40% pointed to internal competition as a prevalent challenge. A smaller percentage (11.66%) mentioned gossip, lack of knowledge, and unprofessional communication among team members as persistent concerns. Notably, a minority (4.5%) indicated that they experience no significant challenges, reporting high levels of team satisfaction and collaborative problem-solving.

Social work is a profession requiring a high degree of adaptability and versatility, as practitioners assist clients in adjusting to their environments, integrating into communities, and enhancing their social functioning. This role often involves challenging tasks, as each client presents unique circumstances. Kavaliauskienė et al. (10) emphasizes that social workers engage with di-

verse social groups and clients, often confronting complex and conflicting situations that generate significant stress and tension. The author further notes that interactions with clients and their environments, client advocacy, and collaboration with various institutions can cause emotional and physical strain, potentially leading to adverse psychological outcomes for the worker.

The study reveals that 41.66% of social workers perceive excessive workloads and disproportionate responsibility for clients as major challenges. Additionally, 33.33% of social work professionals identified the lack of support when working with individuals with intellectual disabilities as a critical issue. A majority of respondents also highlighted low client motivation as a primary challenge in their work, with half of the social workers indicating that performing tasks on behalf of clients to achieve faster results poses a significant challenge. Bubnys et al. (11) state that choosing the profession of a social worker and performing such duties, a person's motivation gains special significance: it helps to achieve a high professional level, valuing one's work as meaningful and striving for good results, aiming to motivate individuals with intellectual disabilities. Given the dynamic nature of social work, which continually evolves with new methods and practices, it is crucial for social workers to remain open to ongoing learning and professional development. According to Ballan et al. (12), continuous professional growth enhances both the quality and efficiency of social work. Despite these demands, the study found that concerns about insufficient knowledge and skills were relatively low among respondents (21.66%).

Manifestations of Professional Burnout

People whose professions involve caring for others, such as social workers, often deplete their positive emotional resources over time, experience stress, and struggle to cope with its consequences. If this state persists, complete physical and mental exhaustion may occur, affecting a person's motivation, attitude, and behavior (10). A study conducted by Makasheva et al. (13) professional burnout manifests as emotional exhaustion, a lack of energy, and a loss of interest in work, often leading to decreased productivity and motivation. This syndrome can arise from intense workloads, stressful conditions, the monotony of activities, or a lack of professional self-fulfillment.

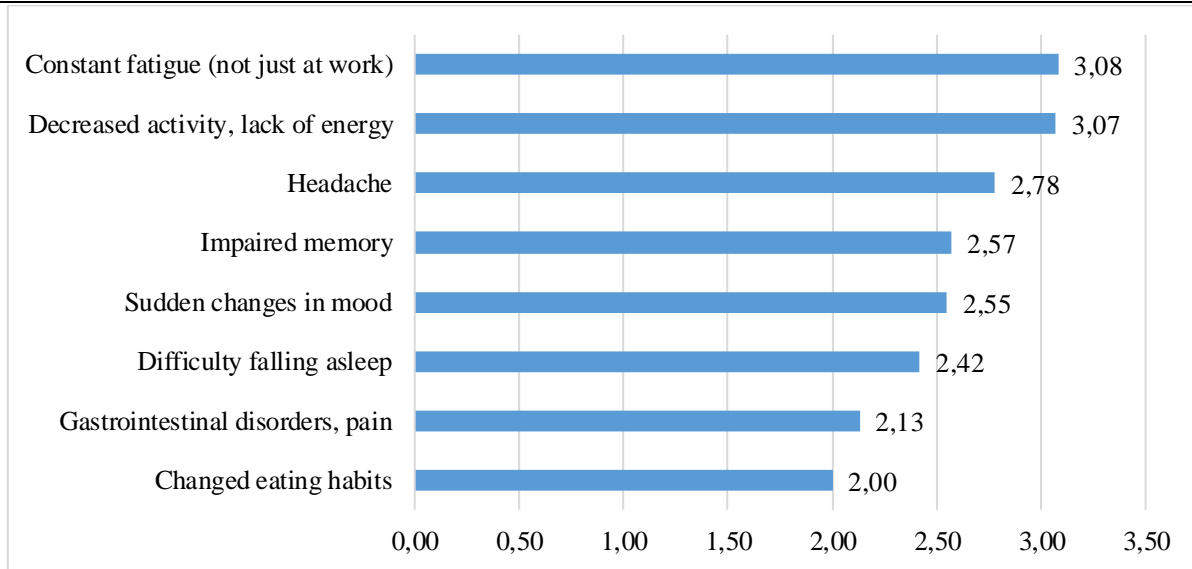


Chart 1. Assessments of Psychophysiological Manifestations Experienced by Social Workers

The study results indicate that social workers most frequently report experiencing constant fatigue, occurring approximately 1-2 times per month, as one of the prevalent psychophysiological symptoms. This fatigue is evident not only in their professional activities (mean score: 3.08) but also manifests as reduced overall activity and energy levels (mean score: 3.07). Mikalauskas et. al. (14) define emotional exhaustion as a state of emotional overexertion and depletion of personal re-

sources, characterized by feelings of confusion, inadequacy in social interactions, diminished energy, and an inability to meet imposed demands.

Social workers also rated the frequency of other symptoms, such as headaches (mean score: 2.78), memory impairment (mean score: 2.57), sudden mood changes (mean score: 2.55), and difficulties with falling asleep (mean score: 2.42), relatively high.

The present study examined the social-psychological manifestations of professional burnout among social workers.

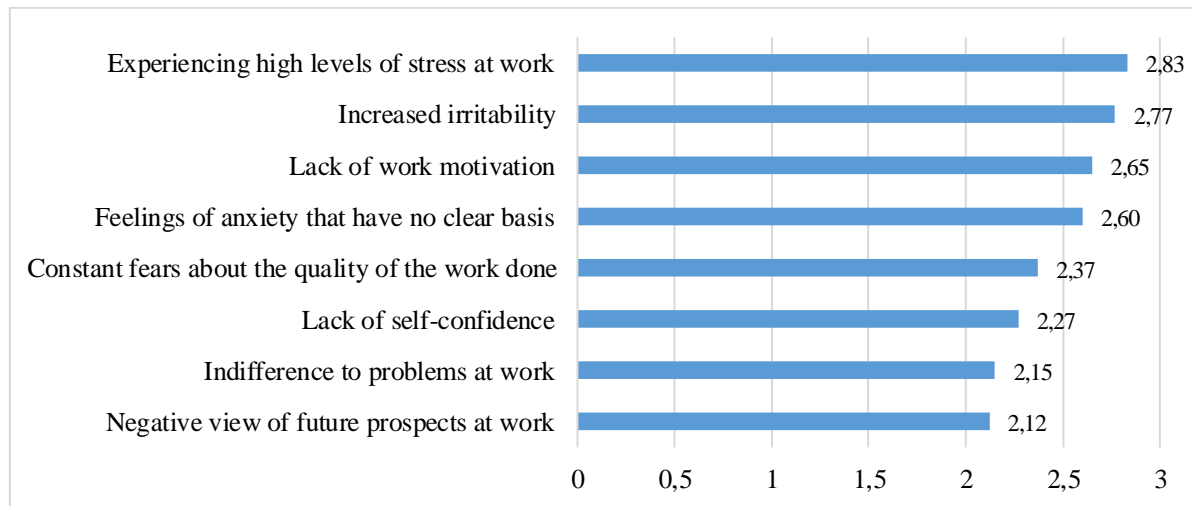


Chart 2. Assessments of Social-Psychological Manifestations Experienced by Social Workers

The results indicate that social work professionals most frequently experience elevated levels of work-related stress (mean score: 2.83) and increased irritability (mean score: 2.77). According to Makasheva et. al (13), work-related stress arises when the work environment demands significant energy, concentration, and emotional resources from the professional, which may exceed their capacity to perform their duties effectively. As a result, when individuals are unable to meet these demands, they experience stress. Participants in the study reported experiencing diminished motivation for their work (mean score: 2.65) and a sense of anxiety without a clear cause (mean score: 2.60). Concerns

about the quality of their work were reported slightly more than 1-2 times per half-year (mean score: 2.37). Additionally, feelings of self-doubt (mean score: 2.27), indifference toward work-related problems (mean score: 2.15), and perceiving negative future prospects in their professional roles (mean score: 2.12) were among the least frequently reported symptoms. Stočkus (15) identifies depersonalization as a critical manifestation of professional burnout, characterized by a detached and indifferent attitude toward others. This reaction is often a self-protective measure to avoid further emotional exhaustion and disappointment. However, the study's findings suggest that indifference to work-

related challenges and a pessimistic outlook are less common among social workers who work with individuals with intellectual disabilities.

In further examining the manifestations of professional burnout syndrome, the study aimed to assess the frequency with which social workers experience behavioral indicators of burnout.

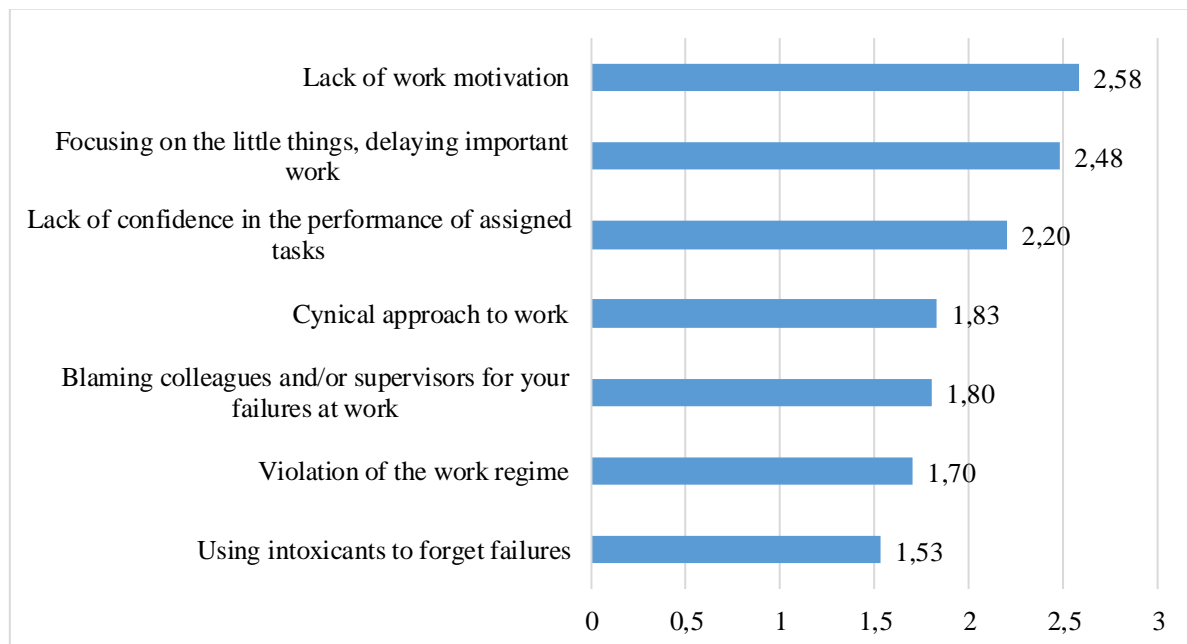


Chart 3. Behavioral Manifestations of Professional Burnout

The results indicate that among these behavioral manifestations, social workers most commonly report a lack of motivation for their work (mean score: 2.58) and a tendency to focus on trivial tasks while postponing more important responsibilities (mean score: 2.48). Changes in a specialist's behavior can signal that they are experiencing difficulties and exhibiting signs of behavioral burnout. Sarisik et. al (16) highlight that individuals who evaluate themselves negatively, express dissatisfaction with their work, and struggle to complete assigned tasks experience reduced personal achievement and diminished motivation. This inability to effectively perform tasks leads to feelings of worthlessness, decreased task quality, and reduced self-confidence and perceived expertise.

The study's findings indicate that a lack of work motivation among social workers is the most prevalent behavioral manifestation of burnout, which, in turn, results in procrastination of essential tasks and an excessive focus on minor details. Beer et. al (17) found that employees under constant stress and challenging work conditions often resort to harmful habits as coping

mechanisms, which can have long-term negative effects on their health. However, this study revealed that only a very small proportion of social workers resort to such harmful habits or the use of intoxicating substances for relief (mean score: 1.53), marking it as the least frequent behavioral manifestation. Less commonly, social workers reported adopting a cynical attitude toward their work (mean score: 1.83) and blaming colleagues or supervisors for their failures (mean score: 1.80), with these behaviors occurring approximately 1-2 times per half-year.

Preventive Measures for Coping with Professional Burnout

Gudžinskienė et. al (6) assert that for an individual to remain healthy, satisfied, and efficient in their work, it is essential to provide not only conditions that ensure safety and health but also a work environment that fosters overall well-being. According to Šidlauskaitė-Stripeikienė et. al (18), prevention is a crucial aspect of social work, with benefits that extend across economic, societal, and individual levels in addressing the various challenges faced by society.

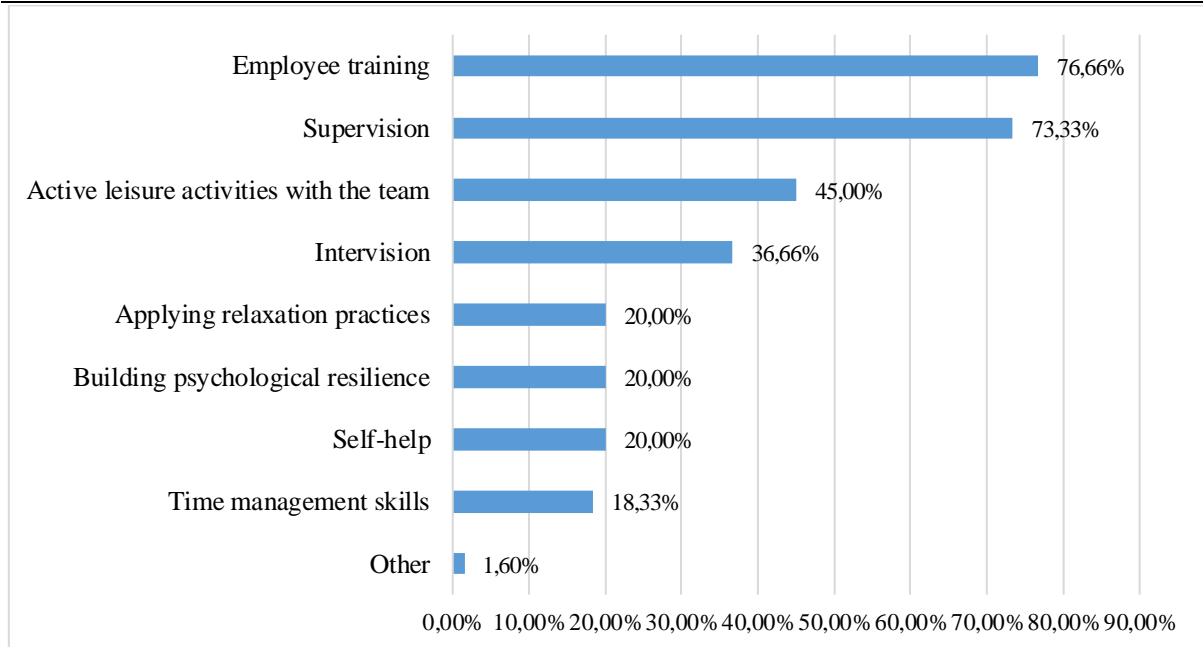


Chart 4. Preventive Measures Applied in Workplaces

During this study, social workers were surveyed regarding the preventive measures implemented in their workplaces. The majority of respondents indicated that the most common preventive strategies include employee training and supervision. Tolutienė et. al (9) emphasizes that employee training serves as an effective preventive measure, benefiting professionals both in their career development and personal lives. The acquisition of stress management skills enables specialists to cope more effectively with stressful situations, thereby reducing the risk of burnout. In research conducted by Abromaitienė (19), social workers and educators who participated in supervision sessions reported positive outcomes, such as gaining deeper self-awareness, understanding colleagues better, sharing experiences, receiving support, viewing situations from different perspectives, fostering a sense of unity in the work environment, finding renewed motivation, and increasing self-confidence.

Social workers in the current study reported that workplaces are less likely to organize active leisure activities and team engagement, with 45% of respondents indicating the availability of such measures. Additionally, 36.66% of respondents noted that their workplaces employ intervention strategies as a preventive approach to address burnout. However, less frequently implemented preventive measures include relaxation practices, psychological resilience training, and self-help

strategies (20%). Time management (18.33%) emerged as the least commonly utilized preventive measure for reducing burnout. Čiarnienė et. al (20) argue that time management is an effective preventive strategy, helping individuals set clear goals and prioritize their activities. Despite its benefits, social workers in this study reported that time management is among the least frequently applied strategies for preventing burnout in their workplaces. Notably, 1.60% of respondents indicated that no preventive measures are currently in place at their workplace.

After assessing the preventive measures implemented by workplaces, the study also explored how social workers take personal responsibility for self-care and the preventive strategies they apply to reduce their risk of professional burnout. Given that social work is particularly characterized by frequent exposure to negative situations and emotions—such as client counseling and managing stressful circumstances—specialists are often required to remain resilient and composed. Despite this, social workers must find appropriate ways to express and process these emotions. The prolonged accumulation of negative emotions, coupled with a lack of effective coping strategies, can eventually lead to adverse effects on both personal and professional well-being. Therefore, it is crucial that social workers receive support not only from their workplace but also develop self-care practices.

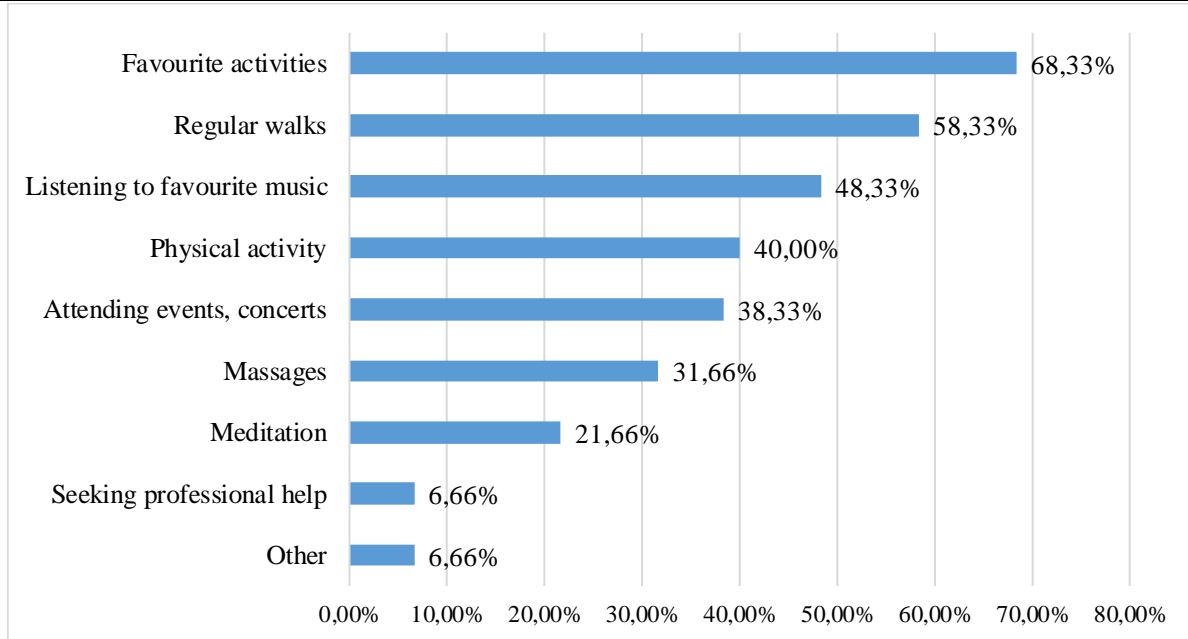


Chart 5. Preventive Measures Social Workers Apply to Themselves

The study revealed that social workers actively engage in self-help strategies, with one of the most common being participation in a favorite activity (68.33%). Over half of the respondents indicated that engaging in hobbies serves as a preventive measure, helping them disconnect from work-related stress. Additionally, physical exercise and spending time outdoors are frequently chosen methods for stress relief. Gudžinskiė et.al (9) highlights that having a hobby and experiencing relaxation through leisure activities can significantly reduce symptoms of professional burnout, emphasizes the importance of planning leisure activities as a preventive measure. This approach enables social work professionals to effectively manage their time and energy, maintain a healthy lifestyle, and achieve a balance between work and personal life.

A study by Stoćkus (15) confirmed the benefits of physical activity, especially walking in improving both leisure and work-related well-being. Also claims that meditation can help individuals calm their minds, stay present, and alleviate accumulated stress. In the current study, 58.33% social workers confirmed the benefits of physical activity, but reported infrequent use of meditation as a self-care measure, and they also rarely sought professional help. Other preventive measures utilized by social workers include listening to favorite music (48.33%), engaging in physical activities (40%), and attending events or concerts (38.33%). Additionally, some social workers reported using massage therapy (31.66%) and practicing meditation (21.66%) to mitigate the effects of burnout.

Conclusion. Burnout syndrome among social workers employed in day activity centers and working with individuals with intellectual disabilities is characterized by psychophysiological, social-psychological, and behavioral changes. The findings of the study reveal that psychophysiological symptoms are the most frequently reported. Participants highlighted chronic fatigue as a prevailing issue, negatively impacting both

their professional performance and personal lives. Additionally, they noted diminished energy levels and a reduced ability to engage in activities. Social-psychological manifestations of burnout were also prominent, with social workers frequently reporting high levels of stress and heightened irritability. Although behavioral symptoms were mentioned less frequently, they included a decline in work motivation, resulting in procrastination on critical tasks while prioritizing less important ones, which ultimately undermines work quality and productivity.

An analysis of existing preventive measures and the findings of this study indicate that institutions providing services to individuals with intellectual disabilities predominantly implement professional training and supervision as their main strategies to combat burnout syndrome. Conversely, self-help and time management practices were the least utilized institutional measures. Despite organizational efforts, social workers themselves actively adopt personal preventive strategies to maintain their well-being. The study highlights that many social workers frequently engage in activities they enjoy, spend time outdoors, or participate in physical exercises. These activities serve as effective methods to alleviate burnout symptoms, promote relaxation, and restore a sense of balance between their professional and personal lives.

References

1. Jenaro C, Flores N, Arias B. Burnout and coping in human service practitioners. *Professional psychology: research and practice*. 2007; 38(1), 80 – 87. doi.org/10.1037/0735-7028.38.1.80
2. Ryan C, Bergin M, Wells JSG. Work-related stress and well-being of direct care workers in intellectual disability services: a scoping review of the literature. *International journal of developmental disabilities*. 2019; 67(1), 1–22. doi.org/10.1080/20473869.2019.1582907

3. Hombrados-Mendieta I, Cosano-Rivas F. Burnout, workplace support, job satisfaction and life satisfaction among social workers in Spain: A structural equation model. *International Social Work*. 2013; 56(2), 228-246. doi.org/10.1177/0020872811421620
4. Neumann JL, Mau L, Virani S, Dendez EM, Boyle DA, Boyle NJ et al. Burnout, Moral Distress, Work–Life Balance, and Career Satisfaction among Hematopoietic Cell Transplantation Professionals. *Biology of Blood and Marrow Transplantation*. 2018; 24(4), 849- 860. doi.org/10.1016/j.bbmt.2017.11.015
5. Elbarazi I, Loney T, Yousef S, Elias A. Prevalence of and factors associated with burnout among health care professionals in Arab countries: a systematic review. *BMC Health Services Research*. 2017; (17), 491. doi.org/10.1186/s12913-017-2319-8
6. Gudžinskienė V, Pozdniakovas A. Organizational reasons that cause professional burnout syndrome in social workers. *Social inquiry into well-being*. 2021; 19(1), 26-47. DOI: 10.13165/SD-21-19-1-02 [Published in Lithuanian]
7. Nagle E, Griskevica I, Rajevska O, Ivanovs A, Mihailova S, Skurzkalne I. Factors affecting healthcare workers burnout and their conceptual models: scoping review. *BMC Psychol*. 2024; 12, 637. doi.org/10.1186/s40359-024-02130-9
8. Samusevica A, Striguna S. Prevention of Burnout Syndrome in Social Workers to Increase Professional Self-Efficacy. *Engineering Proceedings*. 2023; 55(1), 13. doi.org/10.3390/engproc2023055013
9. Tolutienė G, Zubrickienė I. Burnout syndrome: social workers' attitude towards the correlation between professional development and professional burnout and ways of coping with. *Studies – Business – Society: Insights into the Present and Future*. 2022; 1(7), 240-254. doi.org/10.52320/svv.v1iVII.252 [Published in Lithuanian]
10. Kavaliauskienė V, Balčiūnienė R. Occupational burnout and its expression in the context of professionalization of social work. *Bridges*. 2014; 4(69), 17-35. doi10.15181/tbb.v68i4.947 [Published in Lithuanian]
11. Bubnys R, Milašiūtė E. Determinants of professional motivation of social workers working with people with disabilities. *Society. Integration. Education. Proceedings of the International Scientific Conference*. 2020; 5, 61-71. doi.org/10.17770/sie2020vol5.5065
12. Ballan M. S, Hyk J. C. Autism spectrum disorders. *Evidence-Based Practice in School Mental Health: Addressing DSM-5 Disorders in Schools* (2). 2019, 91-130. doi.org/10.1093/oso/9780190886578.003.0003
13. Makasheva N, Makasheva J, Gromova A., Ish-tunov S, Burykhin B. The problem of professional burnout in stress management. *SHS Web of Conferences*. 2016; 28. doi:10.1051/shsconf/20162801132
14. Mikalauskas A, Širvinskas E, Macas A, Padaiga Ž. Burnout among anesthesiology and intensive care residents. *Health sciences in Eastern Europe* 2016; 26 (6), 109-113. doi 10.5200/sm-hs.2016.100 [Published in Lithuanian]
15. Stočkus A. Prevention and reduction of physical education teachers' burnout: results of an educational project. *Bridge*. 2014; 1 (66), 151-168. doi 10.15181/tbb.v66i1.784 [Published in Lithuanian]
16. Sarisik M, Bogan E, Zengin B, Dedeoglu B.B. The impact of burnout on organizational commitment. A study of public sector employees in Turkey. *Journal of Global Business Insights*. 2019; 4(2), 106-118. doi10.5038/2640-6489.4.2.1066
17. Beer O.W.J, Philips R, Quinn C.R. Exploring stress, coping, and health outcomes among social workers. *European Journal of Social Work*. 2020; 04-23, 317-330. doi.org/10.1080/13691457.2020.1751591
18. Šidlauskaitė-Stripeikienė I, Stripeikis O. “When is a person changing?”: psychological and social perspective of prevention. *Social Work. Experience and Methods*. 2016; 18, 69-76. doi 10.7220/2029-5820.18.2.4 [Published in Lithuanian]
19. Abromaitienė L. Benefits of supervision: experience of social workers and pedagogues. *Social Work. Experience and Methods*. 2018; 22, 83-93. Doi10.7220/2029-5820.22.2.5 [Published in Lithuanian]
20. Čiarnienė R, Vienažindienė M. The conceptual model of time management. In *Book of Proceedings. Mediterranean Journal of Social Sciences*. 2014; (6). Doi:10.5901/mjss.2014.v5n13p42

TECHNICAL SCIENCES

ANALYSIS OF MASS AND DIMENSIONAL CHARACTERISTICS OF ULTRAVIOLET BALLAST WATER TREATMENT SYSTEM ELEMENTS

Berestovoi I.O.

*Ph.D., Associate Professor of the Department "Ship Power Plants and Systems"
Danube Institute of National University "Odessa Maritime Academy," Ukraine*

[DOI: 10.5281/zenodo.14289359](https://doi.org/10.5281/zenodo.14289359)

Abstract

The article analyzes the mass and dimensional characteristics of the elements of ultraviolet ballast water treatment systems, which are crucial for ensuring the environmental safety of navigation. In particular, the study examines the impact of system capacity on the space and weight of its components, such as coarse filtration filters, UV reactors, and power supply units. The results demonstrate that with the increase in system capacity, both the linear dimensions and weight of the main elements rise. This allows for predicting mass and dimensional parameters when designing new ships or retrofitting existing ones. The obtained dependencies can also be used for the development of new ballast water treatment systems or the expansion of the range of existing ones.

Keywords: ultraviolet treatment, ballast water, mass and dimensional characteristics, system capacity, area, dimensions, weight, coarse filtration filter, UV reactor.

Introduction. At the current stage of maritime development, the protection of the marine environment from invasive species during ballasting and deballasting operations is a critical issue. According to the International Convention for the Control and Management of Ships' Ballast Water and Sediments [1], starting from September 8, 2024, all commercial vessels engaged in international trade must comply with the D2 standard. This essentially means that ships must be equipped with ballast water treatment systems.

Problem Statement. When designing new ships or retrofitting those in operation, it is essential to consider the space and weight of the ballast water treatment system elements. Given that the most environmentally friendly systems are disinfection systems using ultraviolet (UV) treatment—since they do not produce or introduce chlorine-containing substances—this study investigates the impact of the capacity of ultraviolet ballast water treatment systems on the mass and dimensional characteristics of their elements. Despite numerous studies focused on the effectiveness of ballast water treatment systems [2-6], the influence of system capacity on the mass and dimensional parameters of its individual elements has not been sufficiently studied.

Objective. The aim of this work is to analyze the mass and dimensional characteristics of the elements of ultraviolet ballast water treatment systems and to establish functional dependencies of these characteristics on system capacity.

Materials and Methods. The study utilized statistical data on the mass and dimensional characteristics of elements of ultraviolet ballast water treatment systems obtained from manuals, catalogs, and other informational sources of companies such as AlfaLaval [7], Desmi OceanGuard [8], Wartsila [9], Hyundai [10], Optimarin [11], covering a capacity range from 60 to 3500 m³/h.

The primary methods of analysis included trend line analysis, theoretical analysis, and synthesis of results.

Research results. The main elements of the ballast water treatment system [1, 7-11] include: a coarse filtration filter (32, 40, or 50 μm, depending on the manufacturer), a UV reactor, a control panel, a power supply unit for the UV reactor, and, in some cases [7, 10], a separate cleaning-in-place (CIP) unit for the UV tubes of the reactor. Analysis of sources [7, 8, 9] allowed for the determination of the linear dimensions of key elements of ultraviolet ballast water treatment systems (Table 1).

Table 1

Mass and Dimensional Characteristics of Ultraviolet Ballast Water Treatment System Elements

Model	Q ₀ m ³ /h	Control panel				UV power panel				Filter				UV reactor				
		l, m	b, m	h, m	m, kg	l, m	b, m	h, m	m, kg	l, m	b, m	h, m	m, kg	l, m	b, m	h, m	m, kg	
Wartsila	AQ-125-UV	125	1	0,3	1	110	1,2	0,5	1,4	200	0,8	0,5	2,3	330	0,8	0,5	0,9	125
	AQ-300-UV	300	1	0,3	1	110	1,2	0,5	1,8	350	1	0,7	2,3	510	1	0,7	1,3	285
	AQ-500-UV	500	1	0,3	1	110	1,2	0,5	2	450	1	0,7	3	885	1	0,7	1,3	320
	AQ-750-UV	750	1	0,3	1	110	2x1,2	0,5	2	750	1,3	1,1	3,3	1460	1,2	0,7	1,3	490
	AQ-1000-UV	1000	1	0,3	1	110	3x1,2	0,5	2	1350	1,3	1,1	3,3	1600	1,2	0,7	1,3	490
Desmi	135-340	135	0,38	0,6	0,2	25	0,61	0,59	1,8	262	0,95	0,45	0,45	131	0,78	0,8	0,44	150
	190-340	190	0,38	0,6	0,2	25	0,61	0,59	1,8	262	1	0,45	0,4	192	0,78	0,8	0,44	150
	250-500	250	0,38	0,6	0,2	25	0,61	0,59	1,8	272	1,15	0,5	0,5	288	0,9	0,8	0,45	190
	340-750	340	0,38	0,6	0,2	25	0,61	0,68	2,2	349	1,2	0,5	0,5	322	0,85	0,8	0,52	222
	500-1000	500	0,38	0,6	0,2	25	1,21	0,58	1,8	498	1,3	0,65	0,65	527	0,99	0,8	0,54	331
	750-1500	750	0,38	0,6	0,2	25	1,2	0,7	2,2	677	1,55	0,7	0,7	757	1,03	0,8	0,63	390
	1000-2100	1000	0,38	0,6	0,2	25	1,2	0,7	2,2	788	1,75	0,8	0,8	900	1,1	0,8	0,72	580
AlfaLaval PureBallast	300	300	0,65	0,31	1,1	50	0,9	0,48	2	250	0,49	0,5	1,2	82	0,7	0,7	1,31	250
	600	600	0,65	0,31	1,1	50	1,35	0,61	2	370	0,73	0,72	1,58	241	0,86	0,8	1,4	320
	1000	1000	0,65	0,31	1,1	50	1,35	0,61	2	400	0,77	0,79	1,75	370	1,03	1	1,5	400
	1500	1500	0,65	0,31	1,1	50	2,38	0,61	2	760	0,78	0,79	2,25	480	1,12	1,1	1,48	650

The data showed that: the linear dimensions of the UV reactor range from 0.44 m to 1.5 m, and the weight ranges from 125 kg to 650 kg; the dimensions of the filter range from 0.45 m to 3.3 m, and the weight ranges from 82 kg to 1600 kg. The dimensions of the power supply unit for the UV reactor vary from 0.48 m to 2.38 m, and the weight from 200 kg to 1350 kg. The size and weight of the control panel are practically independent of the system's capacity. The overall trend indicates an increase in mass and dimensional characteristics with an increase in system capacity.

At the same capacity, the weight of some elements, such as the filter and the power supply unit, can

vary by up to 4 times, and the linear dimensions by up to 2 times. This indicates a significant influence not only of capacity but also of other factors: orientation (horizontal or vertical), design features, type of UV lamps used, and specifics of capacity determination (which can differ by a factor of 3 depending on the UV transmittance of water [12]), among others.

Despite these differences, data analysis revealed linear dependencies both for the space occupied by system elements (Fig. 1) and for their weight (Figs. 2 and 3) relative to the ballast water treatment system capacity.

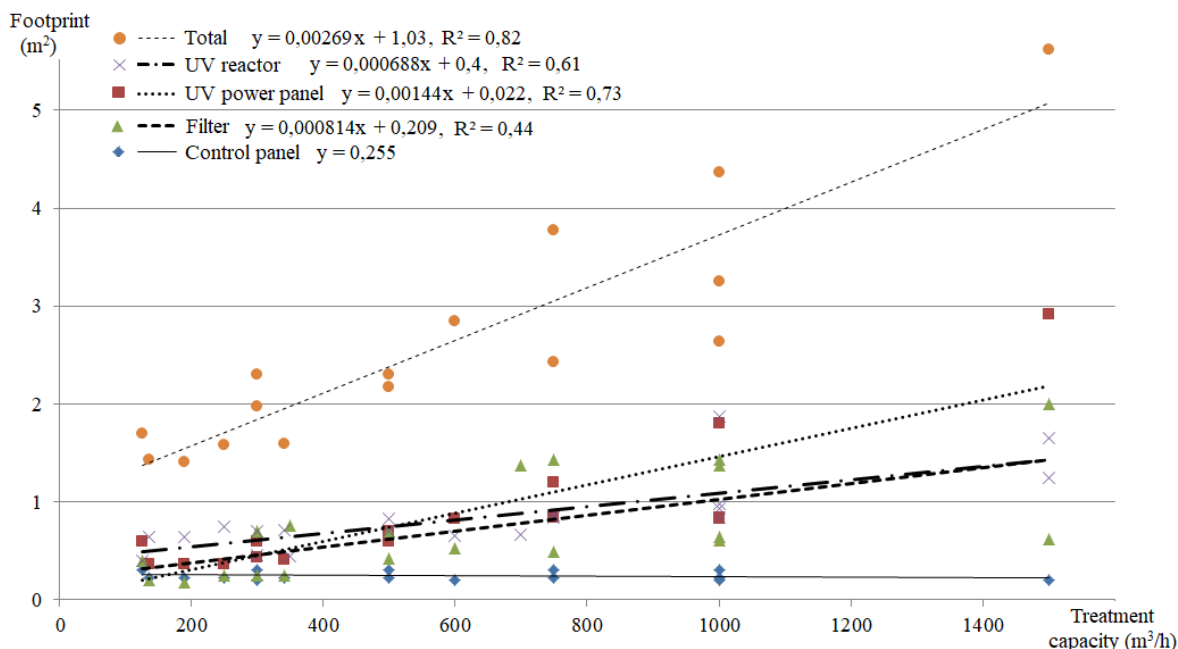


Fig. 1. Dependence of the space occupied by ballast water treatment system elements on system capacity.

Trend analysis showed that the coarse filtration filter and the UV reactor occupy almost the same area, which, on average, increases by 0.7-0.8 m² for every 1000 m³/h of system capacity. The area occupied by the

power supply unit for the UV reactor significantly increases with system capacity, while the control panel remains almost unchanged.

Mass analysis identified significant differences in the weight of coarse filtration filters from different manufacturers (Fig. 2).

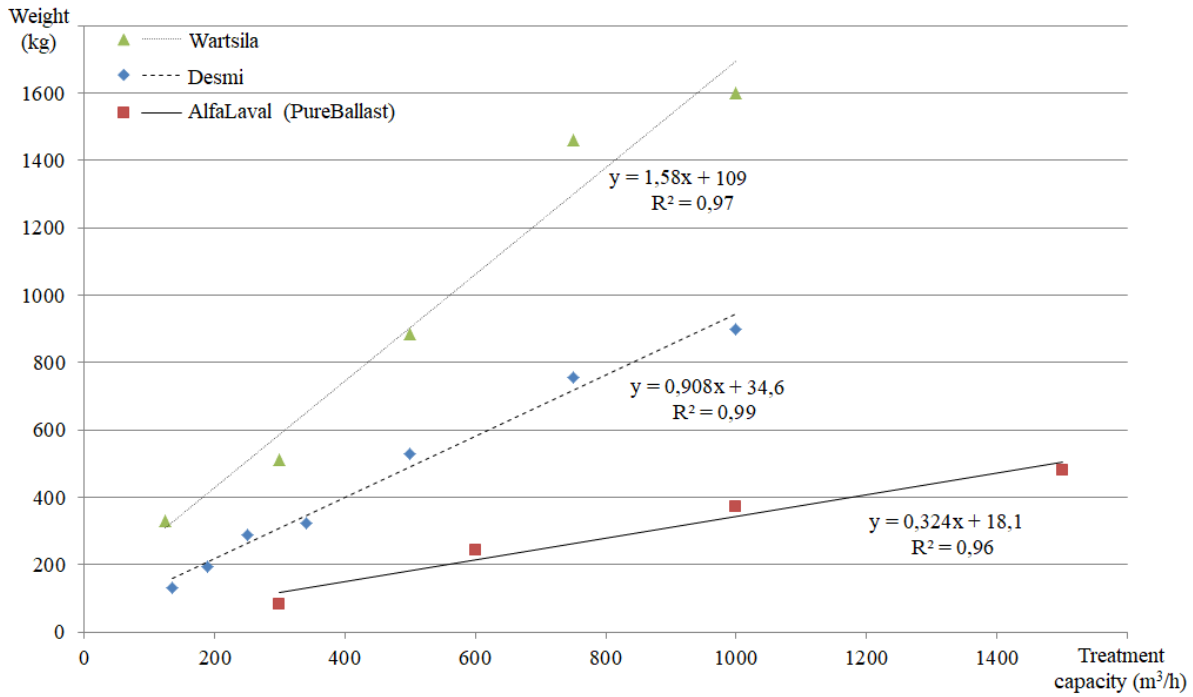


Fig. 2. Change in the weight of the coarse filtration filter depending on the capacity of the ballast water treatment system.

Despite the significant differences in filter weight from various manufacturers at the same system capacity (up to 4 times), there is a clear linear relationship between the filter's weight and system capacity, allowing the prediction of filter weight with further increases in system capacity.

Mass analysis of other elements, such as the UV reactor and its power supply unit, showed smaller fluctuations at the same capacity. A linear relationship is also maintained for these components (Fig. 3).

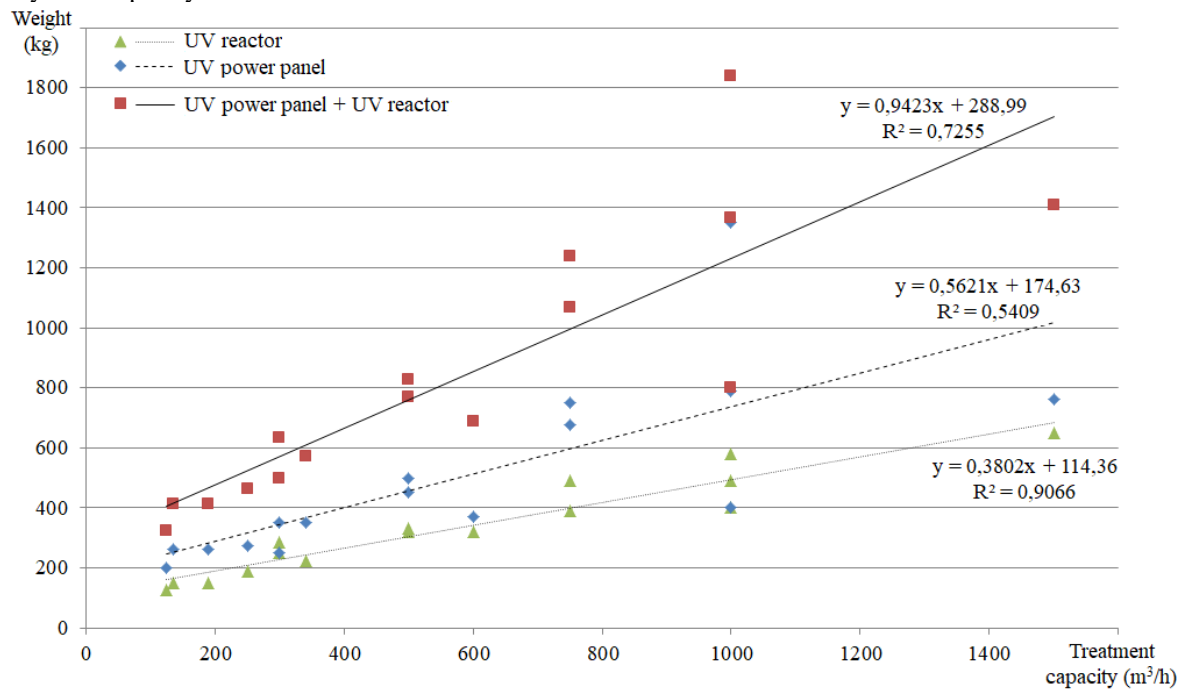


Fig. 3. Change in the weight of the UV reactor and its power supply unit depending on the capacity of the ballast water treatment system.

The linear dependencies of the ultraviolet ballast water treatment system elements indicate that increasing the system's capacity is achieved through a proportional increase in treatment elements (UV lamps), leading to a corresponding increase in the power supply unit for these lamps. The capacity increase in the coarse filtration filter is also due to an increase in the filtration area.

Conclusion. The obtained results make it possible to perform a preliminary assessment of the mass and dimensional characteristics of elements of ultraviolet ballast water treatment systems. This contributes to the effective design of new ships or the renovation of existing ones and allows for predicting the size of elements when designing new ballast water treatment systems or expanding the range of existing systems.

References

1. International Convention for the Control and Management of Ships' Ballast Water and Sediments / International Maritime Organization. International Conference Ballast Water Management for Ships, February 2004, p. 38.
2. American Bureau of Shipping, Guide for Ballast Water Treatment. 2022. p. 90.
3. Satir T. Ballast water treatment systems: design, regulations, and selection under the choice varying priorities. Environmental Science and Pollution Research. 2014. Vol. 21, no. 18. P. 10686–10695. URL: <https://doi.org/10.1007/s11356-014-3087-1> (date of access: 24.11.2024).
4. Berestovoi I., Smyrnova I., Maslov I. Impact assessment of the power and size parameters of ultraviolet reactors on the performance of ballast water treatment systems. Transport Development, 4(19), 2023. P. 87-96. <https://doi.org/10.33082/td.2023.4-19.07> (date of access: 24.11.2024).
5. Global Maritime Transport and Ballast Water Management / ed. by M. David, S. Gollasch. Cham : Springer International Publishing, 2024. URL: <https://doi.org/10.1007/978-3-031-48193-2> (date of access: 24.11.2024).
6. Berestovoi I. Analysis of mass-dimensional and energy performance indicators of ship ballast water treatment systems. Danish Scientific Journal, 89, 2024. P. 81-84. <https://doi.org/10.5281/zenodo.14009158> (date of access: 24.11.2024).
7. Alfa Laval Co. Alfa Laval PureBallast 3 Std & Ex. Alfa Laval Co., 2022. 8 p. URL: <https://www.alfalaval.com/globalassets/documents/microsites/pure-ballast/pdf/latest/pureballast-3-std--ex-updated-2022.pdf> (date of access: 24.11.2024).
8. Desmi Co. CompactClean Bulker, Non-EX, Loose Components. Desmi Co., 2022. 2 p. URL: https://desmioceanguard.com/media/s5ggx14t/cc_bulker-non-ex_loose-components.pdf (date of access: 24.11.2024).
9. Wartsila Co. Aquarius UV Ballast Water Management System. Wartsila Co., 2019. 2 p. URL: <https://www.wartsila.com/docs/default-source/product-files/bwms-files/brochure-o-aquarius-uv.pdf> (date of access: 24.11.2024).
10. Hyundai Welding Co. HiBallast EcoBallast, Ballast Water Treatment System. Hyundai Welding Co., 2019. 36 p. URL: http://www.hyundaiwelding.com/data/file/ballasterWater/HWC_HHI-BWTS%20Introduction_20181207.pdf (date of access: 24.11.2024).
11. Optimarin Co. Care for our Oceans, Environmental Treatment of Ballast Water. Optimarin Co., 2014. 22 p.
12. Berestovoi I., Smyrnova I., Maslov I. The impact of ultraviolet transmittance on the power of UV reactors in ballast water treatment systems [Вплив показника пропускання ультрафіолетового опромінювання води на потужність ультрафіолетового реактора системи очищення баластних вод]. Norwegian Journal of development of the International Science No 144. 2024. P. 117-119. URL: <https://doi.org/10.5281/zenodo.14169149> (date of access: 24.11.2024).

Murad Abdullayev*Master`s student in Computer Engineering
Azerbaijan State University of Oil and Industry
Baku, Azerbaijan*[DOI: 10.5281/zenodo.14289370](https://doi.org/10.5281/zenodo.14289370)**Abstract**

Web development is a rapidly advancing and influential area of technology, shaping the way businesses, individuals, and organizations communicate and interact online. This field includes two main components: front-end and back-end development. The front-end is the visible and interactive part of a website or application that users directly engage with, while the back-end involves server-side logic, databases, and data processing. This article specifically focuses on front-end programming, discussing the foundational technologies of HTML, CSS, and JavaScript, and examining modern frameworks like React, Angular, and Vue.js, which enable developers to build more dynamic and responsive web interfaces. With these tools, front-end development offers solutions for creating visually appealing and intuitive user interfaces, significantly improving user experience and satisfaction.

Keywords: web development, front-end programming, user interface, HTML, CSS, JavaScript, UI/UX design, web technologies.

Introduction

In the digital age, web development has become an essential component of virtually all industries, from retail and banking to education and entertainment. With the majority of consumers now accessing services and information online, businesses are investing heavily in building functional, interactive, and user-friendly websites and applications. Web development can be divided into front-end and back-end segments. The front-end focuses on what users see and interact with, while the back-end manages the database, server logic, and other technical aspects of a website. This article delves into front-end programming, exploring its core technologies and their roles in the creation of a seamless digital experience.

Problem in Front-End Development

In today's web development landscape, one of the most pressing challenges in front-end programming is delivering a consistent, responsive, and high-performance experience across a wide variety of devices and browsers. Users access websites from a range of devices—such as smartphones, tablets, laptops, and desktops—with different screen sizes, operating systems, and browser types. This diversity often leads to challenges in maintaining consistent layouts, high-speed loading times, and reliable interactions across devices. Traditional tools like basic CSS and JavaScript libraries are sometimes insufficient for meeting the demands of modern, complex applications.

Another significant problem is optimizing performance without compromising the user interface's quality. As web applications grow in complexity, they can experience slow loading times, unresponsive elements, or excessive resource consumption, particularly on lower-end devices or slower networks. A slow or unresponsive interface can negatively affect user engagement, lead to lower retention rates, and impact overall business success.

Proposed Solution

Front-end development relies on three primary technologies that form the foundation of any website or web application. Each plays a unique role in creating and enhancing the user experience.

To overcome these challenges, modern front-end development relies on a combination of advanced frameworks, libraries, and optimization techniques that help developers deliver a consistent, fast, and user-friendly experience:

1. Responsive Design Techniques

Responsive design, implemented through CSS media queries and flexible grid systems, allows websites to adjust layouts automatically based on the device's screen size. By adopting frameworks such as Bootstrap or CSS Grid, developers can build interfaces that adapt seamlessly to various devices, ensuring an optimal viewing experience without the need for separate mobile or desktop versions.

2. Use of Component-Based Frameworks

Modern front-end frameworks like React, Angular, and Vue.js offer component-based architectures, which allow developers to build applications with reusable, modular UI components. This approach enhances maintainability and consistency across the application, as any changes in component design are automatically updated wherever the component is used. These frameworks also support state management tools (e.g., Redux, Vuex), which simplify data handling across components, reducing the likelihood of errors that can cause inconsistencies.

3. Performance Optimization Techniques

○ **Code Splitting and Lazy Loading:** These techniques help reduce initial page load time by loading only essential resources first and deferring other resources until they are needed. For example, images and scripts that are not immediately visible can be loaded only when the user scrolls to them. This significantly improves loading speed and reduces resource consumption, especially on mobile devices.

○ **Asynchronous JavaScript (AJAX):** AJAX allows data to be fetched from the server asynchro-

nously, enabling background data updates without requiring a full page reload. This approach ensures smoother, real-time interactions without slowing down the user interface.

- **Image and File Optimization:** Compressing images and minifying JavaScript and CSS files help reduce file sizes, allowing faster loading times and smoother performance on lower-end devices.

4. Enhanced CSS and JavaScript Management

CSS preprocessors like Sass and Less enable developers to write more organized and efficient CSS, using features such as variables, nesting, and functions to simplify code. For JavaScript, leveraging modern JavaScript ES6+ features (such as let/const, template literals, and arrow functions) allows for cleaner, more efficient code, reducing processing demands on the client side.

5. Testing Across Devices and Browsers

Ensuring consistency across a wide range of devices requires extensive testing. Tools like BrowserStack and CrossBrowserTesting allow developers to simulate different environments, screen sizes, and operating systems, ensuring that the design performs reliably across various platforms. Automated testing frameworks, such as Jest or Cypress, further streamline testing by automating repetitive tasks, making it easier to catch issues that could impact user experience.

By implementing these solutions, front-end developers can create interfaces that are not only visually appealing but also performant and consistent across devices. These approaches collectively improve usability, enhance engagement, and ensure that users have a positive experience regardless of the device or network they are using.

Modern Front-End Libraries and Frameworks

With the evolution of web development, several libraries and frameworks have emerged to streamline the front-end development process and make it more efficient. These tools help developers create complex, scalable applications with minimal coding.

React is a popular JavaScript library developed by Facebook for building user interfaces. It uses a component-based architecture, where each UI element is treated as an individual component. This approach enables developers to reuse components across different pages or projects, saving time and maintaining consistency. React's virtual DOM improves application performance by updating only the parts of the user interface that have changed.

Angular is a full-fledged front-end framework developed by Google. Unlike React, which focuses solely on the view layer, Angular offers a complete framework with built-in tools for data binding, dependency

injection, and form validation. Angular's two-way data binding feature synchronizes the model and the view, ensuring that changes in the application state are immediately reflected in the user interface. This feature, along with Angular's structured architecture, makes it ideal for large-scale applications with complex requirements.

Vue.js is a progressive JavaScript framework that is lightweight and versatile, combining elements of both React and Angular. Vue's simplicity and scalability have made it a popular choice for projects ranging from small websites to large enterprise applications. Vue is also highly customizable, allowing developers to integrate it incrementally into projects without requiring a full code rewrite. This flexibility, combined with its extensive documentation and active community, makes Vue an accessible and developer-friendly option.

Conclusion

Front-end development has become a cornerstone of modern web applications, enabling companies and developers to create interfaces that are both functional and visually appealing. By leveraging advanced tools like React, Angular, and Vue.js, front-end developers can build applications that are responsive, interactive, and user-friendly. Addressing challenges such as cross-device compatibility and performance optimization is critical in delivering a consistent and satisfying user experience. As digital experiences become increasingly vital for customer engagement, the demand for skilled front-end developers and innovative technologies will continue to grow, driving further advancements in this field.

References

1. "HTML and CSS: Design and Build Websites" by Jon Duckett
2. "JavaScript and JQuery: Interactive Front-End Web Development" by Jon Duckett
3. "Eloquent JavaScript: A Modern Introduction to Programming" by Marijn Haverbeke
4. "CSS: The Definitive Guide" by Eric A. Meyer
5. "Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics" by Jennifer Niederst Robbins
6. "JavaScript: The Good Parts" by Douglas Crockford
7. "Responsive Web Design with HTML5 and CSS3" by Ben Frain
8. "HTML5: The Missing Manual" by Matthew MacDonald

**Deutsche internationale Zeitschrift
für zeitgenössische Wissenschaft**

...
№93 2024

Deutsche internationale Zeitschrift für zeitgenössische Wissenschaft ist eine internationale Fachzeitschrift in deutscher, englischer und russischer Sprache.

Periodizität: 24 Ausgaben pro Jahr
Format - A4

Alle Artikel werden überprüft.
Freier Zugang zur elektronischen Version des Journals

- Edmund Holst (Salzburg) AT
- Michaela Meissner (Köln) DE
- Klara Amsel (Liège) BE
- Briana French (Cambridge) GB
- Joleen Parsons (Manchester) GB
- Dragomir Koev (Sofia) BG
- Stanislav Štěpánek (Praha) CZ
- Valeriya Kornilova (Kyiv) UA
- Dmitriy Aksenov (Lviv) UA
- Valentin Bragin (Moscow) RU
- Mirosław Bednarski (Warsaw) PL
- Daniela Villa (Florence) IT
- Mattia Molteni (Rome) IT
- Sylwia Krzemińska (Ljubljana) SI
- Käte Kraus (Vienna) AT
- Eleonora Lehmann (Berlin) DE
- Alexander Dressler (Marseille) FR
- Zdzisław Małecki (Warsaw) PL
- Adrián Borbély (Budapest) HU

**German International Journal
of Modern Science**

...
№93 2024

German International Journal of Modern Science is an international, German/English/Russian/Ukrainian language, peer-reviewed journal.

Periodicity: 24 issues per year
Format - A4

All articles are reviewed.
Free access to the electronic version of journal.

- Edmund Holst (Salzburg) AT
- Michaela Meissner (Köln) DE
- Klara Amsel (Liège) BE
- Briana French (Cambridge) GB
- Joleen Parsons (Manchester) GB
- Dragomir Koev (Sofia) BG
- Stanislav Štěpánek (Praha) CZ
- Valeriya Kornilova (Kyiv) UA
- Dmitriy Aksenov (Lviv) UA
- Valentin Bragin (Moscow) RU
- Mirosław Bednarski (Warsaw) PL
- Daniela Villa (Florence) IT
- Mattia Molteni (Rome) IT
- Sylwia Krzemińska (Ljubljana) SI
- Käte Kraus (Vienna) AT
- Eleonora Lehmann (Berlin) DE
- Alexander Dressler (Marseille) FR
- Zdzisław Małecki (Warsaw) PL
- Adrián Borbély (Budapest) HU

Artmedia24

Anschrift: Industriestraße 8,74589 Satteldorf
Deutschland.

E-mail: info@dizzw.com

WWW: www.dizzw.com

Chefredakteur: Reinhardt Roth

Druck: Einzelfirma Artmedia24, Industriestraße
8,74589 Satteldorf Deutschland

Artmedia24

Address: Industriestrasse 8,74589 Satteldorf
Germany.

E-mail: info@dizzw.com

WWW: www.dizzw.com

Editor in chief: Reinhardt Roth

Printing: Artmedia24, Industriestrasse 8,74589 Sat-
teldorf Germany.

Der Redaktionsausschuss der Zeitschrift ist nicht
verantwortlich für die veröffentlichten Materialien.

Für den Inhalt der Artikel sind die Autoren
verantwortlich

Die Meinung der Redaktion spiegelt nicht unbedingt
die Meinung der Autoren wider.

Bei Nachdrucken muss die Zeitschrift zitiert werden.

Das Material wird im eigenen Wortlaut des Autors
veröffentlicht.

Editorial board of journal is not responsible for the
materials published there.

Authors are responsible for the content of articles.

Opinion of editorial board may not coincide with the
opinion of authors.

In case of materials reprinting - link to journal is re-
quired.

Materials are publishing in author's edition.

ISSN (Print) 2701-8369

ISSN (Online) 2701-8377

Edition: № 93/2024 (November) – 93th

Passed in press in November 2024

Printed in November, 2024

Printing: Artmedia 24, Industriestrasse 8,
74589 Satteldorf, Germany.

artmedia²⁴

© Artmedia24

© Deutsche internationale Zeitschrift für zeitgenössische Wissenschaft / German International Journal
of Modern Science

