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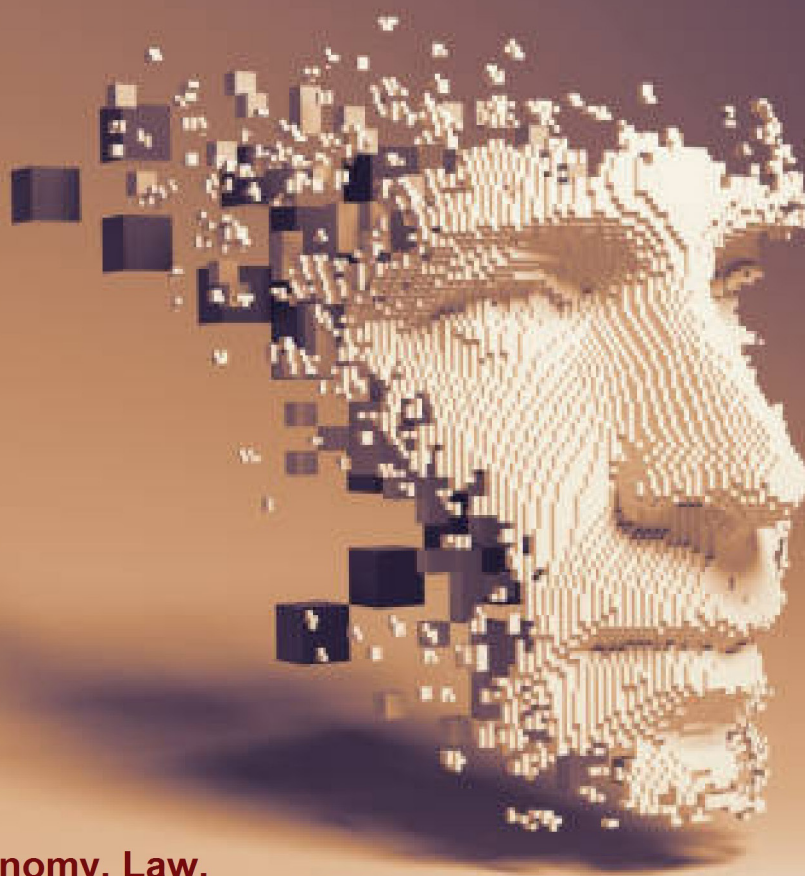
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CRIMINAL PROCEDURAL AND CRIMINALISTIC ASPECTS OF THE INTERROGATION OF THE ACCUSED IN CRIMINAL PROCEEDINGS IN THE REPUBLIC OF SERBIA

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Abstract: Process of proving a fact is a complex and diverse procedural activity of parties to criminal proceedings and the criminal court in order to establish legally relevant and other facts in criminal proceedings. The provisions of the Criminal Procedure Code of the Republic of Serbia regulate evidentiary proceedings. One of the most important evidentiary activity is the hearing of the accused. The purpose of the hearing of the accused is twofold, namely to present to the accused what he is accused of, for which criminal act he is accused of, and to give him the opportunity to defend himself through the hearing. In this way, the defendant becomes familiar with the evidence that exists against him. The subject of this paper is the criminalistic and criminal procedural aspects of the hearing of the accused, which are very closely related. The application of criminalistic rules is inextricably linked to the legal provisions governing the criminal procedure and provides a significant guideline in order to obtain the best possible testimony. A successful hearing of the defendant should result in obtaining a statement that is legal and complete. The complexity and importance of the selected topic of this paper also requires the application of a certain methodology. The basic methods that will be applied for the needs of this paper are the normative method, the method of qualitative content analysis, the descriptive method, as well as the method of data analysis and interpretation, with consultation and consideration of different views of distinguished authors.

Keywords: *interrogation of the accused, evidentiary proceedings, criminal procedure, criminalistic rules, Republic of Serbia*
Field: Social sciences (Law)

1. INTRODUCTION

The hearing of the defendant is one of the evidentiary actions in the criminal procedure, which is provided for and regulated by articles 85-90 of the Code of Criminal Procedure of the Republic of Serbia. According to the prevailing opinion in modern legal theory in the field of criminal procedural law in Serbia, hearing the accused is one of the most important evidentiary actions in criminal proceedings. The defendant's statement itself has a dual legal nature. First and foremost, it represents a means of defense for the accused, but at the same time, it is also an evidentiary action that the court may take into account when establishing the facts and assess at its own discretion. Therefore, "the statement of the defendant has a double function - on the one hand, it represents a means of proof, because the court values it individually, but also in connection with other available evidence, while, at the same time, it is also a means of defense of the defendant, because in this way the defendant shows his attitude towards the chargers" (Grubač, 2006: 259; Škulić, 2011: 208).

The testimony of the defendant is any statement that the defendant gives in that capacity about the criminal offense charged against him and other issues of the criminal case that is the subject of the trial. The testimony of the accused "is given great attention because, as a rule, he knows best whether and how he committed the criminal offense he is charged with" (Mirkov, 2021: 826). Also, "the position of the defendant in criminal proceedings is particularly interesting, because it is about a person whose rights may be restricted (for example, the right to freedom) or his property may be reduced (for example, by imposing a fine). For this reason, it cannot be said that the defendant is uninterested in the final outcome of the proceedings. Unlike a witness who, for example, happened to be at the scene of a crime by chance, and therefore may be completely indifferent and unmotivated for the course of criminal proceedings, the same cannot be said for the defendant" (Mirkov, 2019: 162).

The subject of this paper is the criminalistic and criminal procedural aspects of the hearing of the accused, which are very closely related. The connection between criminal procedural law and criminalistics consists in the fact that criminalistics, when developing scientific methods of investigation and trial, starts from the basic theoretical premises of the science of criminal procedural law. It is precisely these scientific methods that are applied in criminal proceedings with the aim of enabling investigative

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and judicial authorities to fully achieve the objectives of the judiciary. Criminal procedure prescribes legal frameworks and forms for the activity of court proceedings, and criminalistics gives this legal framework practical content.

The complexity and significance of the chosen topic require the application of a specific methodology. The primary methods that will be applied for the purposes of this paper are the normative method, the method of qualitative content analysis, the descriptive method, as well as the method of data analysis and interpretation, with reference to and consideration of various viewpoints of prominent authors.

The statement of the accused can be obtained only through their interrogation. The interrogation of the accused "aims at two things: to present to the accused what they are being charged with, i.e., the criminal offense they are accused of, and to provide them, through the interrogation, with an opportunity to defend themselves." (Bejatović, 2014: 296).

2. CRIMINAL PROCEDURE ASPECT OF HEARING OF THE ACCUSED

According to Article 2, paragraph 1, item 2 of the Code of Criminal Procedure, the accused is a person against whom an indictment has been filed but not yet confirmed, or against whom a criminal complaint, private prosecution, or a motion for the imposition of a security measure of mandatory psychiatric treatment has been filed, and the main trial or hearing for the imposition of a criminal sanction has not yet been determined, that is, a term that serves as a general term for the suspect, the defendant, the accused, and the convicted person.

In theory, there is a prevailing view that "the accused is a natural person, and exceptionally a legal entity, against whom criminal proceedings are conducted at the request of an authorized prosecutor, with the aim of determining whether they have committed a criminal offense and whether the conditions for imposing a criminal sanction are met" (Brkić, 2014: 185). It is also held that "the accused is a person against whom criminal proceedings have been initiated and are being conducted due to a well-founded suspicion that they have committed a criminal offense, and who is an independent principal procedural subject bearing the function of defense" (Stevanović & Stanojević, 2005: 90). Additionally, there is the opinion that "the term 'accused' refers to a natural person against whom an authorized prosecutor files and pursues a criminal charge, while the court conducts criminal proceedings to determine whether the person is criminally responsible and whether the conditions exist for imposing an appropriate criminal sanction" (Grubač, 2004: 190).

The defendant is the main procedural subject and party in the criminal proceedings, completely procedurally equal to the authorized prosecutor. The equality of the defendant as a party is achieved by his right to both material and formal defense, but also by the presumption of innocence, as an essential principle that regulates the position of the accused in criminal proceedings, and at the same time an important part of the rule of law and a democratic society. According to the provisions of Article 3 of the Code of Criminal Procedure, everyone is considered innocent until his guilt for a criminal offense is determined by a final court decision. State and other bodies and organizations, media, associations and public figures are obliged to comply with this rule and not to violate the rights of the defendant with their public statements about the defendant, the criminal act and the procedure. When speaking of the violation of the presumption of innocence, public statements made by state authorities that severely infringe upon the rights of the accused are often the first thing that comes to mind. However, a far more problematic violation of the presumption of innocence is reflected in the widespread belief among judicial authorities that an accused person who chooses to remain silent does so because they are certainly guilty (Beljanski et al., 2019: 11).

The hearing of the defendant is a very important evidentiary activity, because his statement contains facts that benefit or harm the defendant (Matijašević, 2024: 327).

The hearing of the defendant is an evidentiary action that will be carried out only if the defendant is available to the court, i.e. if the defendant is tried in his presence. The interrogation of the accused is an evidentiary action that will be carried out only if the accused is available to the court, that is, if the trial is conducted in the presence of the accused. According to legal requirements, "for criminal proceedings to be successfully conducted, it is necessary to ensure the presence of certain individuals, primarily the accused" (Matijašević Obradović & Zarubica, 2018: 2). Exceptionally, this evidentiary action will not be carried out in a situation if the defendant is not available to the court, and the conditions for a trial in absentia are met (according to Article 381 of the Code of Criminal Procedure, the accused may be tried in absentia only when there are particularly justified reasons to try him even though he is absent, provided that he is on the run or not available to state authorities, and the decision on the trial in absentia is made by the chamber, on the motion of the public prosecutor).

During the hearing, the defendant can have an active approach, that is, he can give a statement about the criminal offense he is charged with, and he can, on the other hand, have a passive approach, refraining from any statement. Therefore, it is important "to give the defendant the opportunity to be heard, and whether he will use that right or not depends only on him" (Škulić & Bugarski, 2015: 265).

The aim of this evidentiary action is to hear the accused in the first place about everything he has to say regarding the accusation against him. Only after giving a statement, he can be asked questions if there is a need to clarify some circumstances that were not mentioned or remained vague, unclear or contradictory.

During the course of the criminal proceedings, the accused is questioned several times and in various stages of the proceedings - in the investigation, at the main trial before the court of first instance, at the main trial before the court of second instance. The hearing of the defendant in criminal proceedings is carried out by the holder of the public prosecutor's office or the court. Exceptionally, in accordance with the provisions of Article 289, paragraph 4 and paragraph 5 of the Code of Criminal Procedure, under the conditions and in the cases prescribed by law, it is possible to interrogate the suspect in the pre-investigation procedure, which is carried out by the police. It should be emphasized here that it should be emphasized that "a specific condition for the interrogation of a suspect by the police is that the suspect must have given both their consent to be interrogated and their statement in the presence of legal counsel. The record of this interrogation may be used as evidence in the proceedings and must be submitted without delay to the public prosecutor, if they were not present during the interrogation" (Škulić & Bugarski, 2015: 269).

The interrogation of the accused consists of two parts: "The first part is conducted by the authority leading the specific phase of the proceedings in which the interrogation is undertaken, by collecting information from the accused to establish their identity, informing the accused of their rights, and warning them of their legal obligations. The second part substantively represents the interrogation concerning the criminal event" (Bejatović et al., 2013: 66).

Therefore, after the prerequisites for hearing the defendant have been met, the defendant who wants to present his defense is further heard about the criminal event. The Code of Criminal Procedure also prescribes the rules for questioning the accused.

According to the provisions of Article 86, paragraphs 1-3 of the Code of Criminal Procedure, the defendant is heard orally, with decency and with full respect for his personality. The defendant has the right to use his notes during the hearing. During the hearing, the defendant will be allowed to state in an unhindered presentation about all the circumstances against him and to present all the facts that serve for his defense. When the defendant finishes his statement, and it is necessary to complete or clarify the testimony, he will be asked questions that must be clear, definite and understandable, must not contain deception, nor be based on the assumption that he has admitted something that he did not admit, and must not represent an inducement to answer.

If the accused later statements differ from the earlier ones, and especially if the defendant retracts his confession, the questioning authority may, in accordance with the provisions of Article 86, paragraph 4 of the Code of Criminal Procedure, invite him to state the reasons why he gave different statements, i.e. why he retracted his confession. Then, if the accused is deaf, he will be asked questions in writing, if he is mute, he will be asked to answer in writing, and if he is blind, during the hearing, the contents of the written evidence will be explained to him orally. If, however, the interrogation cannot be conducted in this manner, an interpreter who can communicate with the accused shall be called. If the accused does not understand the language of the proceedings, questions shall be posed to them through a translator.

A record is kept of the defendant's hearing.

In terms of its substance relative to the indictment, i.e., what the accused is being charged with, "there are two basic types of statements given by the accused: confession and denial. This applies only if the accused actively defended themselves, meaning they provided a statement. If the accused remained completely passive, that is, defended themselves by remaining silent, such a form of defense can never imply a confession but must be treated as a complete denial" (Škulić, 2013: 211).

Finally, the statement of the accused is assessed like any other piece of evidence, in accordance with the principle of free evaluation of evidence and the judge's free conviction. The fact that the accused has chosen not to present a defense or respond to the questions posed must not be considered an aggravating circumstance, nor may it be evaluated as evidence in any way.

3. THE CRIMINALISTIC ASPECT OF HEARING OF THE ACCUSED

The application of criminalistics as a science is inextricably linked to the planning of the initial phase of the preliminary stage of criminal proceedings—the pre-investigation procedure (Vodinelić, 1996: 21). The tactics, techniques, and psychology of interrogating the accused depend on their procedural status. For a successful interrogation, “a broad knowledge of general and criminal psychology is necessary, along with a certain level of experience, as well as familiarity with the personality of the accused and their typical patterns of behavior” (Aleksić & Škulić, 2011: 203).

Criminalistic tactics recommend that appropriate conditions for this investigative action must be ensured and emphasize that confronting the accused during the interview and hearing is counterproductive and contrary to proper tactics, as it prevents the establishment of trust.

The hearing should be focused on “obtaining objective facts, it should be conducted neutrally, and if a confession is made, one should not show joy about it. The hearing of the accused is best done when he is caught in the act immediately after deprivation of liberty, before he has yet managed to construct his defense. The hearing should be started when the subject is known and when the interrogation has been prepared and planned. It is necessary to determine the tactics that should be elaborated in a plan containing where, when and how to conduct the hearing, the sequence of the interrogation and hearing, questions which should be presented, the evidence that will be used and for what purpose. The success of the hearing depends on a number of elements of a material, psychological and tactical nature” (Aleksić & Škulić, 2011: 204).

When it comes to elements of a material nature, they include the place of the hearing, time of the hearing and knowledge of the case as one of the necessary conditions for a successful hearing of the accused.

In case of the elements of the psychological nature, the questioning authority should prepare all the conditions for the upcoming hearing. They should have the data for the psychological evaluation of the personality, given that they are the best indicators for determining the interrogation tactics. Namely, “criminalists very carefully examines the personality of the criminal, his knowledge, skills, modus operandi he applies during the execution and concealment of crimes, customs, understandings, way of life and psychology, all with the aim of developing the most expedient methods for detecting, proving, elucidating and preventing criminal acts” (Aleksić, Škulić & Žarković, 2004: 174). By getting to know the accused’s personality, “the interrogator can: properly establish contact with the accused; assess and understand the relationship of the accused with other participants in the crime, establish the motive for committing the crime and correctly choose the interrogation tactics” (Simonović, 2004: 183-184).

During the hearing of the defendant, his reactions to the questions should be observed and monitored. During the hearing of the defendant, the questioning authority should not show its feelings, but should be objective and calm.

When it comes to the element of a tactical nature, “it is recommended that the hearing be conducted by only one judge because confessions and inner intimate life are reluctant to be presented to a wider circle of people, and it is more difficult to establish contact with more people. This rule should be deviated from when it comes to hearing a woman, for whom there is information that she is mentally unbalanced and prone to excesses. Such hearings, if not performed by a woman, should be performed in the presence of several people in order to avoid false accusations by these women.” (Aleksić & Škulić, 2011: 205).

The defendant should be informed of his rights in the procedure, his physical and legal identity and the order of presentation of evidence should be determined. The event should be presented and examined in the order in which it happened, and such presentation helps the defendant to recall the event, and also has a certain psychological effect.

Practice has shown that “the defendant’s fear of the authorities restrains the defendant and calls into question the success of the interrogation and hearing. Practice also holds that using a system of indirect rather than direct questions is generally more effective, although this ultimately depends on the specifics of each individual case. The success of the hearing should not be measured by whether a confession is obtained, and in cases where a confession is given, it is necessary to thoroughly examine the motives behind the confession and then verify it.” (Aleksić & Škulić, 2011: 205).

It is considered that “immediately providing a detailed alibi by the defendant is a sign of justified suspicion. The suspect most often supports his claim by citing other persons who can confirm the truth of his statement, offering and attaching various documents that prove his presence in another place, that is, pointing to objects and traces that, by their existence, place and time of origin, age, etc., can indicate that the suspect was in another place at the critical time” (Žarković, 2010: 139-140).

Tactical bluff is usually considered one of the tactics used during the hearing of the accused. Tacti-

cal bluff can be defined as “one of the elements of the system of tactical measures, a procedure aimed at obtaining important information or evidence, in such a way that the interrogator consciously tries to create an apparent situation, which is at least partially based on unverified circumstances, which will encourage the suspect to reveal previously undiscovered evidence” (Feješ, 2011: 113). The goal of tactical bluffing is to create such a situation that the suspect, who has no knowledge of what the interrogator knows, reveals some evidence that refutes or confirms important assumptions.

The permissibility of various tactics largely depends on the specific situation, but certain general requirements must still be upheld, as is the case with any other evidentiary method. It is crucial to emphasize that *condicio sine qua non* for using the accused's statement as evidence is that the criminalistic rules applied during its acquisition must comply with the provisions of the Criminal Procedure Code (Mikov, 2019a: 312).

A successful informative interview presupposes knowledge of the fundamentals of the psychology of testimony, methods of general and criminal psychology, general rules of conducting interviews, relevant criminalistic experience, and quality individual preparation. This preparation includes: gathering information about the person to be interviewed, studying all existing data related to the event in question, defining the circumstances that need clarification through the interview, preparing the key questions and the tactics for asking them, and selecting the location, timing, and manner in which the interview will be conducted and documented (Matijević & Marković, 2013).

Extensive preparation “for the successful conduct of an informative interview implies the collection and verification of a lot of data about the person. It is obligatory to collect data on the identification marks of the person, as well as those related to his earlier life, especially the criminal activity for which he is suspected or convicted, then data on his occupation, social status, physical and psychological characteristics, relationships and connections with other persons, especially with those who are prone to criminal behavior” (Matijević & Marković, 2013: 238-239).

Conducting of the hearing can be divided into three phases, namely the introductory interview, the phase of free presentation and the phase in which the official asks additional questions.

Conducting an informative interview requires thorough preparation, which becomes particularly important when the interview is to be conducted with a suspect. It is essential to possess reliable information obtained through prior operational efforts. By using such information, an official can lead the suspect into making a fabricated statement that results in contradictions so significant that altering their stance and giving a truthful statement becomes the only logical way out of the situation.

The preparatory activities undertaken before interviewing a suspect are “focused on reviewing existing documentation concerning prior actions taken by competent authorities regarding the specific criminal offense (records, official notes, reports, witness statements, expert findings and opinions, etc.), as well as on collecting and verifying data on all involved parties, especially the suspect” (Matijević & Marković, 2013: 249).

Particular attention must also be paid to documenting the informative interview with a suspect which “for various practical reasons, it is recommended that the entire course of the informative interview be audiovisually or audio recorded, and subsequently transcribed. This approach is tactically more favorable, among other things, because written documentation gives the conversation a distinctly formal tone, slows down its pace, causes time delays, dictation, and repeated playback for verbatim transcription, etc., which may have a discouraging effect on the person who, in an atmosphere of trust, a certain familiarity, and relaxation created by the official's skill, decides to confess to the offense and begins giving a statement rich in detail. On the other hand, written documentation provides a perpetrator giving a false statement much more time to think about how to respond to specific questions while maintaining logical consistency and avoiding contradictions with indisputably established facts” (Matijević & Marković, 2013: 256–257).

4. CONCLUSIONS

The primary objective of criminal proceedings is to ensure that no innocent person is convicted. Evidence represents a complex and diverse procedural activity carried out by the parties to the criminal proceedings and the criminal court, with the goal of establishing legally relevant and other facts within the criminal process. The Code of Criminal Procedure Code evidentiary actions, that is, the regular means of evidence as sources of proof in criminal proceedings. One of the most significant evidentiary actions is the hearing of the accused.

The hearing of the accused aims at two things: to present to the accused what they are being charged with, i.e., the criminal offense they are accused of, and to provide them with an opportunity to defend themselves. In this way, the accused becomes acquainted with the evidence that exists against

them.

The hearing of the accused is a regular evidentiary activity, and in many ways, it is specific compared to other types of regular evidentiary activities. Elucidation of all key peculiarities, and a complementary review of two very related approaches in the given analysis (referring to the criminalistic and criminal procedural perspectives), was the primary approach in the development of the subject and the realization of the objective of this paper – the analysis of criminalistic and criminal procedural aspects of the interrogation of the accused.

Namely, the Code of Criminal Procedure regulates the procedural framework and guarantees that must be fulfilled for the statement, obtained during the hearing, of the accused to be considered lawful. During the interrogation of the accused, the application of fundamental criminalistic principles is no less important, with the goal of obtaining a statement that will, to the greatest extent possible, contribute to clarifying the event that is the subject of the proceedings.

As stated in the paper, the application of criminalistic rules is inextricably linked to the legal provisions governing criminal proceedings and provides significant guidance for obtaining a higher quality statement. A successful hearing of the accused should result in a statement that is both lawful and complete — meaning it was obtained in accordance with the provisions of the Code on Criminal Procedure — and as such, is suitable for clarifying, as precisely as possible, the facts related to the commission of the criminal offense.

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DIGITAL ASSETS AND INHERITANCE LAW: LEGAL VACUUM OR NEW PARADIGM

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Abstract: The rapid advancement of digital technologies has led to the emergence of a unique category of property, digital assets, which encompasses a broad range of rights and values stored or created in electronic form. Traditional inheritance law, rooted in the concept of tangible and clearly defined property, faces increasing challenges when applied to the transfer of digital assets upon death. Despite the growing prevalence of digital property in everyday life, many legal systems, including that of Serbia, still lack clear and comprehensive regulation governing the inheritance of digital assets. This paper examines whether existing legal frameworks reflect a true normative gap or if the law is undergoing a paradigmatic shift, necessitating a redefinition of ownership and succession in the digital age. An additional complexity arises from the growing relevance of digital evidence, data that can serve as proof of ownership, access, or transactions involving digital property. Although digital evidence has become increasingly common in judicial proceedings, its admissibility and evidentiary weight in inheritance cases remain underexplored. The dematerialized and decentralized nature of many digital assets complicates both their legal classification and evidentiary verification. These issues highlight the urgent need for legislative and doctrinal responses that recognize the distinctive features of digital assets and the forms of proof associated with them. By adopting a critical and forward-looking perspective, the paper aims to emphasize the need for legal adaptation to modern technological realities and contribute to the broader academic discourse on digital inheritance.

Keywords: *digital assets, inheritance law, legal vacuum, digital legacy, digital evidence, legal paradigm.*

Field: Social Sciences

1. INTRODUCTION

In today's digital era, the rapid development of technology has given rise to a new category of property, digital assets. These include social media accounts, crypto currencies, digital wallets, emails, subscriptions to digital platforms, electronic art - such as NFTs (Kuleto 2022), and cloud-stored data. Although intangible and often decentralized, such assets carry real economic, emotional, and legal value. According to reports from international financial institutions, the market value of digital assets, particularly crypto-assets, continues to grow exponentially, while digital legacies, such as social media profiles, are increasingly becoming the subject of inheritance claims. Despite this technological evolution, legal systems, whether based on civil law or common law traditions, are still grappling with how to regulate the inheritance of digital assets. In many jurisdictions, succession laws do not explicitly recognize digital property as a distinct part of the estate, which results in legal uncertainty and practical difficulties for heirs. Additionally, access to digital accounts after a person's death is often governed by user agreements with digital service providers, placing such matters outside traditional inheritance law and into the realm of contract law and corporate policy. This emerging area raises broader philosophical and legal questions about how we define ownership, access, control, and privacy in the digital environment. It also brings into focus the challenges surrounding the legal validity and evidentiary value of digital documents in probate proceedings, particularly when tangible records are absent. Terms such as digital wills, digital estate management, and virtual executors have yet to be fully implemented into legal systems, even though current practices are beginning to reflect these concepts in informal ways.

Given these complex developments, there is a growing need to examine the legal status of digital assets within the framework of inheritance law. The aim of this paper is to analyze existing legal gaps and explore potential avenues for adapting legal norms to the realities of the digital age. It also seeks to determine whether we are facing a temporary legal vacuum, or witnessing the emergence of a new legal paradigm that will fundamentally reshape the future of succession law.

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2. THE CONCEPT AND TYPES OF DIGITAL ASSETS

Digital assets represent a modern category of property that has emerged from the growing digitization of various aspects of human activity. This form of intangible property exists exclusively in electronic format and can be owned, used, or transferred via digital technologies. From a legal perspective, digital assets still lack a universally accepted definition, which poses challenges for their regulation, especially within the framework of traditional inheritance law (Stojšić Dabetić, Mirković 2024: p. 669). A broad classification of digital assets divides them into personal and economic categories. Personal digital assets include items that may not have monetary value but hold emotional significance for the owner, such as emails, private photographs and videos, digital journals, social media posts, and personal blogs. In contrast, economic digital assets encompass those with actual or potential financial value, such as cryptocurrencies (e.g., Bitcoin, Ethereum), digital wallets, e-commerce accounts (e.g., Amazon, eBay), domain names, virtual items in online games, and monetized digital content like YouTube channels, websites, and software applications. One key characteristic of digital assets is their intangible nature, unlike traditional movable or immovable property, digital assets do not exist in physical form. Their value and usability depend on access to electronic devices, online platforms, and authentication credentials (usernames, passwords, encryption keys). Furthermore, the lines between ownership and usage rights are often blurred, since many platforms operate based on user license agreements rather than transferable ownership. The growing relevance of digital assets is further reinforced by the expanding use of the internet and information technologies in daily life. Increasingly, individuals include digital property in their estate plans, expressing wishes for specific content to be preserved, transferred, or deleted after death. This trend raises complex legal questions involving inheritance rights, privacy protection, and legal certainty.

The initial stages of digital asset development were marked by a noticeable absence of regulatory intervention. This lack of legal response could be attributed to the limited market activity and the general caution regarding premature regulatory involvement in a still-evolving field. However, the rapid expansion of the digital asset market, both in terms of user participation and economic value, has led to a growing need for legal engagement. As various forms of digital assets have begun to mirror the economic functions of traditional financial instruments, legislators in many jurisdictions have responded by applying existing legal frameworks, particularly those related to securities, electronic commerce, and payment services, to certain aspects of digital assets. While this approach offers a flexible starting point, it also reveals clear limitations. The growing complexity and diversity of digital property have highlighted the need for tailored legal solutions. Consequently, several countries have initiated reforms to expand the application of existing laws or to introduce new legislation that specifically addresses ownership, transferability, and inheritance of digital assets. This evolution signals a broader shift toward the recognition of digital assets as legitimate and distinct categories of property, deserving of coherent and comprehensive legal treatment (Babović 2023: p. 451-452). The rapid development of technology has a direct impact on legal systems, particularly in the area of property rights and digital ownership. As new technologies emerge and evolve, traditional legal frameworks face increasing challenges in addressing intangible assets that exist solely in digital form, such as software, databases, online accounts, cryptocurrency, and other types of digital resources. In response, intellectual property law has undergone important adaptations: copyright law has extended protection to computer programs and databases, while patent law has evolved to recognize innovations in biotechnology and business methods. Digital assets often go beyond the scope of intellectual property rights alone, they frequently involve licensing agreements, access credentials, and market substitutes. As such, digital assets represent a shift in how we conceptualize ownership and value, requiring new legal definitions and regulatory approaches that reflect their unique nature in the digital environment (Feliu 2024: p. 305).

3. INHERITANCE OF DIGITAL ASSETS AS A CONTEMPORARY LEGAL CHALLENGE

The inheritance of digital assets represents one of the most complex issues in modern inheritance law, as traditional legal concepts are increasingly confronted with the technological reality in which assets are no longer solely physical or tangible. Digital property, whether of personal or economic nature, demands a new legal approach to understanding ownership, access, transferability, and the preservation of rights after the death of the user. Its intangible nature and reliance on technical factors, such as passwords, user accounts, and licensing agreements, pose significant challenges for lawmakers, legal professionals, heirs, and digital service providers alike. A fundamental issue lies in the lack of a unified definition and legal classification of digital assets (Mirković 2023: p. 22). In many jurisdictions, digital property is not yet distinctly recognized within the framework of inheritance law. This legal gap complicates probate pro-

ceedings, as such assets are often neither inventoried nor valued as part of the deceased's estate. Furthermore, the absence of clear access to the deceased's data frequently leaves heirs unable to exercise their rights, particularly when they lack the necessary authentication credentials. An additional layer of complexity arises from the legal status of user accounts and digital content, which are often governed by licensing agreements rather than property rights. In many cases, the deceased may not have held actual ownership of the digital asset, but merely a limited license to use it. This severely restricts the transfer of such assets to heirs. Many platforms, such as social media sites or cloud storage providers (e.g., Google, Apple, Facebook), explicitly state in their terms of service that accounts are non-transferable, thereby denying heirs access or control. Issues of privacy and data protection are also deeply intertwined with digital inheritance. Digital assets often contain private information, personal correspondence, or sensitive media, creating potential conflict between the heirs' right to manage the estate and the privacy rights of third parties. Moreover, the deceased may not have wished for certain digital content to be disclosed after death. In the absence of legally binding directives, heirs may act at their own discretion, raising the risk of misuse or breaches of the deceased's dignity.

This area is further complicated by the territorial fragmentation of legal norms. Since most digital platforms operate globally, various legal systems may come into play, depending on where the account is registered, where the servers are located, or where the user resided (Stojšić Dabetić, Mirković 2024: p. 126). Such complexity creates legal uncertainty and hinders effective international probate procedures. Given these challenges, there is a growing call for legal reform to explicitly recognize digital assets as part of the decedent's estate. This would involve establishing clear rules for their identification, valuation, access, and distribution among heirs. Increasing attention is also being paid to digital estate planning, a proactive approach whereby individuals, while still alive, decide how their digital property should be handled after death. This may include sharing access credentials with trusted individuals, drafting a digital will, or utilizing built-in tools offered by certain platforms (such as Google's "Inactive Account Manager" or Facebook's "Legacy Contact").

Traditionally, legal theory holds that the right to privacy, along with other personal rights, ceases upon a person's death. In contemporary legal scholarship, this notion is generally accepted. However, ongoing debates concerning the posthumous protection of certain personal attributes, such as reputation, dignity, identity, or name, have prompted reconsideration of how these interests are safeguarded after death. Rather than suggesting these rights survive their original holder, many legal theorists advocate for a distinct form of protection known as the right to reverence or respect for the deceased. This right is typically granted to individuals who shared a close bond with the deceased, often family members or emotionally significant persons, though it does not necessarily coincide with the circle of legal heirs. This classical understanding of the non-transferability of personal rights is being challenged by the digital era. With the growing importance of digital assets, not only during a person's lifetime but also after their death, legal systems are now confronted with new dilemmas concerning privacy and data protection. Digital legacy often includes content that relates not only to the deceased but also to third parties, both living and deceased, who were connected to them privately or professionally. Allowing access to such content, including emails, social media accounts, or message histories, raises concerns about breaching the privacy of both the deceased and those with whom they interacted. The complexity of this issue is further deepened by the fact that access to digital accounts after death is predominantly governed by the service providers' terms and conditions. These policies vary significantly between platforms and are often not clearly communicated to users or their heirs, which creates uncertainty and hinders the consistent protection of privacy. Within this fragmented legal landscape, ensuring the post-mortem protection of digital identity and personal data calls for thoughtful regulatory measures, ones that strike a balance between the interests of heirs in managing the estate and the deceased's right to dignity and privacy. In contemporary legal literature, the concept of post-mortem privacy refers to an individual's right to retain a certain degree of control over how their personal identity, dignity, confidential information, memories, and personal integrity are treated after death. However, the prevailing view in most legal systems denies the possibility of managing one's property post mortem, as such rights are generally considered to cease upon the death of the rights holder (Čolaković 2023: p. 178-179).

In Serbia, the issue of digital inheritance remains insufficiently regulated within the current legal framework. Existing inheritance laws are primarily tailored to tangible and financial assets, with no explicit provisions recognizing digital property as part of a decedent's estate. As a result, digital assets, such as email accounts, cloud storage, social media profiles, cryptocurrencies, and digital media libraries, fall into a legal grey zone. The Serbian Law on Inheritance does not define digital assets as a separate category, nor does it provide specific rules for accessing or distributing them among heirs. However, a significant step toward the regulation of digital assets in the Republic of Serbia was made with the adoption of the

Law on Digital Assets in 2020. The enactment of this law can be viewed as part of a broader national strategy aimed at fostering the development of the digital economy and information technologies. While the law primarily addresses issues related to digital tokens, virtual currencies, and associated financial aspects, its existence reflects a growing awareness of the need to regulate digital property. In light of this trend, it is reasonable to expect that the matter of digital inheritance will become an increasingly important topic in future legislative initiatives, with the aim of ensuring legal certainty for heirs and protecting the rights of all relevant stakeholders in the digital environment (Mihajlović 2021: p. 597). In practice, this legal gap creates significant uncertainty. Heirs often encounter obstacles in identifying, valuing, and managing the digital legacy of the deceased. Moreover, service providers may refuse to grant access to user accounts, citing contractual terms, data protection regulations, or the lack of appropriate documentation. Serbian courts have yet to develop consistent jurisprudence in this area, and there are no binding administrative procedures to guide heirs or notaries in handling digital estates. Consequently, many families are left without legal remedies or clear procedures for claiming rights over digital content or online accounts.

In contrast, several jurisdictions have already taken steps toward regulating digital inheritance. For example, in the United States, the Revised Uniform Fiduciary Access to Digital Assets Act (RUFADAA) provides a legal mechanism for fiduciaries and heirs to access digital assets, subject to user consent and platform-specific settings. This act allows individuals to determine, through wills or digital planning tools, who may access their digital property after death. Also, this act gives access to online accounts even if the owner loses the ability to manage the account (Sheridan 2020: p. 369). In the European Union, the General Data Protection Regulation (GDPR) indirectly influences the management of digital legacies by protecting personal data even after death in some member states. However, approaches vary across countries (Kharitonova 2021: p. 13). Germany, for instance, has recognized in its court practice that digital accounts, like e-mail or social media profiles, can be inherited under the same rules that apply to tangible property. In 2018, the German Federal Court of Justice ruled that parents could access their deceased daughter's Facebook account, affirming that digital content is subject to inheritance. In accordance with the court's decision, the parents were prohibited from actively managing the account of their deceased child, thereby establishing a legally binding standard regarding the treatment of social media accounts after a user's death (Dominice, Haux 2020: p. 252). In France, the Law for a Digital Republic (2016) allows individuals to specify instructions regarding the management of their digital data posthumously, granting citizens greater control over their digital identities. Users may designate a person to oversee their online accounts or request the deletion or preservation of their digital information (Proust 2016).

These international examples highlight the importance of adopting legal solutions that reflect the growing role of digital assets in everyday life. Until such reforms are enacted, legal practitioners and notaries must rely on general principles of inheritance law, contractual interpretation, and the goodwill of service providers, none of which guarantees legal certainty or predictability.

4. CONCLUSION

The digital age has fundamentally transformed our understanding of property, privacy, and inheritance, creating a pressing need to redefine legal concepts in order to meet the challenges posed by the digital realm. Although digital assets are becoming an increasingly significant part of an individual's estate, most legal systems, including Serbia's, have yet to establish adequate regulations in this field. The absence of clear legal norms hampers the realization of inheritance rights and leaves numerous legal gaps that may result in the violation of both the deceased's and the heirs' rights.

Nevertheless, important developments have occurred. The adoption of the Law on Digital Assets in the Republic of Serbia marks a meaningful step toward establishing a legal foundation for the regulation of digital rights and obligations, thereby opening the possibility for digital assets to be addressed in the context of inheritance in the future. Examples from foreign jurisprudence, especially cases in which courts recognized the right of heirs to access digital accounts, illustrate the direction in which the domestic legal framework may evolve.

It is therefore essential that legal theory and practice, in cooperation with technology companies and lawmakers, work toward the creation of a comprehensive and coherent system of digital inheritance, one that respects the testator's wishes, upholds the rights of heirs, and safeguards the privacy of all parties involved. Only such an approach can ensure legal certainty and the protection of digital legacies in line with contemporary social and technological developments

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LEARNING MEANINGFULLY IN A DIGITAL WORLD: HOW DIGITAL AND MEDIA RESOURCES TRANSFORM LEARNING IN NON-FORMAL FOREIGN LANGUAGE EDUCATION

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Abstract: In the context of accelerated digitalization and the growing importance of media in everyday life, the educational process faces the challenge of adequately responding to new realities. The present article examines the role of media pedagogy as a conceptual and practical framework for the effective use of digital and media resources in non-formal foreign language education. The main goal is to explore how media pedagogy can contribute to building digital-media literacy and developing critical thinking among students educated outside the formal educational system. The study combines theoretical analysis with empirical data collected through an online survey of 42 foreign language teachers in Bulgaria working in the field of non-formal education. The results show that teachers actively use digital tools such as interactive platforms, mobile applications, and multimedia resources, have a positive attitude towards innovative methods, and strive to include them in a balanced way in the educational process. At the same time, teachers pay special attention to the possible problems that may arise from unfocused and one-sided use of digital-media resources, as well as their excessive use. At a theoretical level, the article outlines the development of media pedagogy and presents conceptual models for critical thinking and digital learning. The emphasis is on the application of project-based learning, critical analysis of media content, and the integration of digital communication in language practices – methods actively used in foreign language education in non-formal settings. The conclusions highlight that non-formal education creates a favorable environment for the development of digital-media literacy among young people. Systematic support is recommended for improving teacher qualifications, creating sustainable educational policies, and adapting teaching methods to the needs of the digital generation. This study contributes to the scientific and practical debate on meaningful learning in a digital environment by placing media pedagogy at the center of the transformation of non-formal foreign language education.

Keywords: *media pedagogy, digital literacy, non-formal education, foreign language teaching, critical thinking.*

Field: Humanities

1. INTRODUCTION

In today's world of digital transformations that constantly change our way of life, the topic of education and its adaptation to the new reality is becoming increasingly necessary and relevant. Modern children are digital natives, as defined by Prensky (Prensky, 2001), and for them, learning through digital methods and tools is absolutely natural. This inevitably requires changes in traditional pedagogical methods and practices and their transformation into dynamic and interactive models.

This process presents contemporary pedagogy with serious challenges, aiming to balance tradition and innovation in an effective educational process that fosters meaningful and critical learning, while digital resources are used responsibly and purposefully. Here comes the role of media pedagogy in achieving digital and media literacy among young people, defined by UNESCO as one of the key competencies of the 21st century:

"Media and Information Literacy (MIL) empowers people to think critically about the content they access and create, and to make informed decisions. MIL is a prerequisite for active citizenship and full participation in society and democracy. It is one of the key competencies of the 21st century." (UNESCO, 2012, p. 8).

Without digital and media literacy, the development of our modern society is unthinkable, given the dynamics of approach that applies media as an environment, means, and content for upward personal and professional development" (Danov, 2018).

Within this new context, non-formal education is gaining increasing importance - a form of learning outside traditional educational institutions, characterized by high flexibility, adaptability, and a focus on practical skills. It is widely applied in language education, where the use of new technologies and media contributes to meaningful learning and the development of critical thinking, aiming for young people to be

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active participants in public life and not vulnerable to fake news, manipulation, and fraud.

The present article aims to explore the role of media pedagogy as a methodological and practical framework for the effective application of digital resources in non-formal education, with a special focus on foreign language education.

The objectives of the study are:

- To outline the theoretical foundation of media pedagogy;
- To analyze current methods and tools used in non-formal foreign language education
- To highlight the benefits and challenges;
- To propose recommendations for future development and application.

2. MATERIALS AND METHODS

This study uses a mixed-methods approach, combining theoretical analysis of contemporary academic literature with empirical data collected through a survey.

The first stage includes a qualitative analysis of secondary sources, such as:

- Academic publications on media and digital literacy;
- Reports by international organizations (e.g., UNESCO, the European Commission);
- Conceptual models for critical thinking and digital learning in non-formal contexts.

The analysis focuses on defining key concepts and outlining current trends in the use of digital and media technologies in education.

The second stage is empirical, based on an online survey conducted via Google Forms. Participants were 42 foreign language teachers working in the field of non-formal education in Bulgaria. The sample was formed through convenience sampling, meaning participants were selected based on their accessibility and willingness to participate. The sample included diversity in age, teaching experience, and types of learning groups, but it cannot be considered representative of all foreign language teachers in Bulgaria's non-formal education sector.

The survey included both closed and open-ended questions covering the following topics:

- Use of digital resources (interactive learning materials, apps, multimedia);
- Effectiveness of digital resources in terms of motivation and progress in learning;
- Teachers' skills, confidence, and attitudes toward using new technologies and AI;
- Development of critical thinking and digital and media literacy among students;
- Teachers' attitudes regarding the optimal balance between traditional and digital teaching methods;
- Pedagogical challenges.

The data were exported and analyzed using Google Sheets and Excel, applying basic statistical methods (percentage distribution, grouping by age, experience, and technologies used). Open-ended responses were analyzed using thematic qualitative analysis to identify prevalent attitudes and opinions.

3. RESULTS

3.1 Media Pedagogy: Origins and Development

The definition of "media pedagogy" is closely related to the concept of digital and media literacy. Research interest began as early as the 1970s, initially focusing on "information literacy," prompted by the rapid development of computer technologies in Western Europe, the USA, and Japan. The topic later gained traction in Europe as well.

The term "digital and media literacy" emerged relatively late - in the first decade of the 21st century—as a result of merging two existing concepts: media literacy and digital literacy. In the period 2000–2010, the need for an integrated approach combining critical thinking about media content with technical skills for working with technology became increasingly evident. The term "digital and media literacy" was popularized by Renee Hobbs's book "Digital and Media Literacy: Connecting Culture and Classroom" (Hobbs, 2011), which presents this type of literacy as an educational framework meeting the needs of the 21st century. In 2011, UNESCO introduced the term in its concept of MIL (Media and Information Literacy), formalizing the integration of media, information, and digital literacy in the document "Media and Information Literacy Curriculum for Teachers" (UNESCO, 2012).

The term "digital and media literacy" reflects the need for combined skills - technical, critical, communicative, and ethical - necessary for navigating the modern information environment.

Media pedagogy is an interdisciplinary field that studies, analyzes, and applies technologies, media, and communication strategies in the educational process. The growing influence of mass commu-

nication on culture, socialization, and education has led to the emergence of media pedagogy as an independent discipline in the second half of the 20th century. Media pedagogy has undergone significant transformation - from analyzing traditional media to integrating new digital platforms and moving from passive to active consumption and creation of media content. Media pedagogy is interdisciplinary, combining pedagogy, communication sciences, sociology, psychology, and information technology. The inclusion of media literacy in educational programs at various levels has intensified globally, especially after UNESCO initiatives introduced the concept of MIL - Media and Information Literacy.

In Bulgaria, media pedagogy began to develop more seriously after the 1990s, as a response to increased media presence in society, the advent of private media and the Internet, and the need for critical thinking in education in the context of democratic transition. Media pedagogy is not a separate subject or mandatory module, but is present fragmentarily in various disciplines. Despite the growing number of policy documents, both internationally and nationally, Bulgaria still lacks a systematic state-level strategy. In this context, the non-formal sector actively tries to compensate for the deficit of a national strategy through the activities of numerous NGOs engaged in the topic and the implementation of projects in this field.

3.2 Non-Formal Education in the Context of Media Pedagogy Development

Non-formal education is defined as “a specific approach in and towards education, using pedagogical and social methods and learning activities that engage the learner (child or adult) in an alternative, non-traditional way, based on their direct involvement and engagement in their own learning and development” (Center for Interdisciplinary Research and Innovation in Non-formal Education, 2024). Given its nature and main characteristics, non-formal education is a natural environment for developing digital and media literacy. Foreign language education in educational centers provides a fertile ground for developing students' skills for working in a digital environment, using technology for learning, and acquiring critical thinking skills. According to UNESCO (2012), non-formal education complements formal education and plays a key role in building life skills, civic engagement, and digital literacy.

3.3 Conceptual Models for Critical Thinking and Digital Learning in a Non-Formal Context

In the process of developing digital and media literacy and critical thinking, several conceptual models offer different theoretical frameworks for understanding and applying digital learning in non-formal contexts. What unites them is the view of learning as an active, social, and reflective experience, where learners do not simply absorb information but interpret, analyze, and transform it (Kolb, 1984; Schön, 1983; Hinrichsen & Coombs, 2013; Vygotsky, 1978; Siemens, 2005; Mishra & Koehler, 2006; Postman, 1970; McLuhan, 1964).

These models treat digital learning as a process of meaningful interaction with technology, where not only technical skills but also analytical abilities, civic engagement, and conscious behavior in a networked environment are developed. In non-formal foreign language education, where media content is often used for communicative and cultural purposes, the application of these models is especially effective for developing digital and media literacy and critical thinking.

Some of the most significant conceptual models in this field include:

- The experiential learning model (Kolb, Schön), which emphasizes personal experience and critical reflection as the foundation of learning;
- The critical digital literacy model (Hinrichsen & Coombs, 2013), which outlines five dimensions of digital criticality, including content creation and analysis;
- The constructivist model of digital learning (Vygotsky, Siemens), which highlights the social and cooperative nature of learning in a digital context;
- The TPACK model (Mishra & Koehler, 2006), which integrates technological, pedagogical, and content knowledge in the educational process;
- The media ecology model (Postman, McLuhan), which examines the influence of the media environment on thinking and cultural literacy.

These models are not just theoretical constructs but practical frameworks that can help teachers in non-formal education create more engaging, critical, and meaningful learning environments.

3.4 Methods and Tools of Media Pedagogy in Non-Formal Foreign Language Education

When discussing digitalization in the educational process, especially in foreign language teaching, we are immersed in a sea of possible technological solutions and resources. The modernization and digitalization of the learning process began with the introduction of interactive learning systems, moved through the interactive whiteboard (smartboard) - one of the key innovations in transforming the traditional classroom - and reached the integration of mobile applications, cloud platforms, media simulations, and artificial intelligence. All these tools and methods have the potential not only to facilitate learning but also to foster digital, media, and language literacy among learners.

The main methods of media pedagogy in non-formal foreign language education include:

- Project-based learning - creating presentations in a foreign language, which actively engages students and develops productive language skills;
- Interactive platforms and gamified approaches - using tools like Kahoot, Quizlet, and Wordwall, which combine learning with game elements to motivate participation;
- Working with authentic media materials - videos, advertisements, news, social media, and music, which immerse students in real linguistic and cultural contexts;
- Learning through digital communication—language chats, forums, partnerships, and video meetings with native speakers via platforms such as Zoom, WhatsApp, Discord;
- Media simulations and role-playing - students take on certain roles, using language in simulated situations;
- Critical thinking through media analysis - analyzing news, propaganda, stereotypes, and influencer content, which encourages a conscious attitude toward information.

The tools that support the application of these methods are diverse and constantly evolving, offering teachers opportunities for creativity and adaptation to the needs of their students.

3.5 Survey Results

This aim of the survey was to examine the attitudes, practices, and effects of using digital tools in foreign language teaching within non-formal education, in the context of media pedagogy. The study included 42 teachers, most of whom work in language schools (86%), while the remaining 14% give private lessons. The diversity in age and professional experience among participants provides valuable insight into the intergenerational approach to digitalization in teaching.

• Participant Profile

The age distribution shows a relatively even representation of both younger and older teachers, which allows for comparative analysis between age groups. Teaching experience ranges from 7 to 39 years, highlighting significant pedagogical expertise. It is noteworthy that, despite age differences, all participants report using digital tools in their teaching.

• Frequency and Types of Digital Resources Used

Half of the respondents use digital tools in every lesson, indicating a high level of technological integration. The rest use digital resources at least once a week or less frequently, with lower frequency corresponding to higher age groups. Types of resources used include interactive learning systems (100%), educational games, videos and songs (66.6%), online platforms such as Kahoot and Wordwall (50%), and digital worksheets (66.7%).

• Devices Used

Laptops and smartphones are the leading devices (83.3% each), reflecting adaptation to the mobile and dynamic environment of modern education. The use of interactive whiteboards is surprisingly low (33.3%), which may not be due to limited access to such technology, but rather indicates a preference for more flexible tools.

• Impact of Digital Tools on Student Motivation and Achievement

Despite the widespread use of digital tools, teachers do not report a significant increase in student motivation. 89% indicate a moderate effect, and 11% believe that digital technologies are unlikely to contribute to motivation. Similar results are observed regarding student progress - digital tools are seen more as supportive rather than leading to higher achievement. According to teachers, the main effect is visualization and engagement - children enjoy digital elements, which to some extent supports their participation.

• Use of Artificial Intelligence and Chatbots in Foreign Language Teaching

It is notable that, when asked about the use of AI-based tools in teaching (such as ChatGPT, Grammarly, etc.), 30% say they use them, but not often; the same percentage say they have not tried and do

not intend to; 20% use them sometimes; and 20% use them frequently.

Regarding attitudes towards the use of chatbots and AI in language teaching, 46% of surveyed teachers are moderately supportive, 33% are skeptical, and 21% do not approve. There were no responses indicating "fully support".

Qualitative Analysis of Open-Ended Questions

• Methods Used to Develop Critical Thinking and Digital-Media Literacy Among Students

All surveyed foreign language teachers actively use multimedia resources, educational apps, and games in their lessons, apply project-based and problem-based approaches, and discuss and analyze media materials. In this way, students not only learn the language through media materials (videos, articles, podcasts, social networks), but are also encouraged, supported, and guided to think critically about content and to create their own.

• Balance Between Traditional and Innovative Methods

Teachers provide reasoned opinions regarding the balance between traditional and new teaching methods. All agree that today, teaching without digital tools is possible if the teacher is sufficiently skilled. However, such teaching is not adequate for the dynamics and demands of our time. Therefore, a balance between traditional and new methods is necessary, generally defined as 50/50, while taking into account the individual abilities and needs of students, their language proficiency, age, learning goals, etc. The ratio may vary depending on the parameters of the course; for example, digital methods and tools are indispensable for preparation for electronic exam formats and for tasks that are not available in other formats, which leads to a much higher percentage of digital tool use in such cases.

• Drawbacks of Using Digital Tools

Along with the advantages, surveyed teachers also point out the drawbacks associated with the use of digital-media resources. Above all, they emphasize the serious risk of plagiarism, use of resources without personal effort, and the risk of lazy thinking - accepting that everything can be found ready-made on the Internet. This can have serious consequences for students' attitudes and outlook on life in general.

4. DISCUSSIONS AND CONCLUSIONS

Modern foreign language teachers in non-formal education, regardless of age, actively use digital tools in their teaching and appreciate their benefits for creating a dynamic, more interesting, and effective learning environment.

Non-formal educational formats allow for experimentation with new methods and media tools, which are often absent from the traditional education system. This significantly contributes to the development of conscious, critically thinking, and responsible participants in the digital society, thus making media pedagogy a key ally in the 21st century. When discussing how digital-media resources are changing learning in non-formal foreign language education, it is necessary to outline the focal points of possible negative consequences, such as:

- Overexposure to technology: Excessive use of digital resources may lead to a loss of authentic cognitive activity, with students relying on ready-made solutions instead of developing their own thinking and creativity.

- Risk of superficial learning: Although engaging, digital tools should not be used superficially - for entertainment or visualization - without sufficient pedagogical depth.

- Insufficient development of critical thinking: Critical analysis and reflection on media content, which is a main goal of media pedagogy, are not always achieved.

- Lack of sufficient digital culture among teachers: Some teachers are reserved or skeptical about the use of AI and chatbots, indicating a need for training not only to improve general digital competence, but also for a professional and specialized approach regarding the principles and norms of AI use, both personally and professionally. The rapid introduction of AI and chatbots into everyday life is evident, and instead of skepticism or denial, it is necessary to start targeted teacher training on the benefits, challenges, and forms of working with students using AI, as well as ways for its effective and healthy use.

- Risk of plagiarism and lazy thinking: There is a risk that students will stop making an effort to create their own content and will perceive technology as a shortcut to quick but incomplete results, especially with the rise of AI.

The non-formal sector in foreign language education in Bulgaria has the necessary resources to successfully transition to an educational model required by the rapid development of new technologies and social media. In order to realize this potential, several steps are necessary, including:

- Professional development of teachers: Organizing training and seminars on the ethical use of technology, critical thinking, and media literacy.

- Creating strategic frameworks and guidelines: Developing methodological guides and best practices for the use of digital tools based on the principles of media pedagogy.
 - Meaningful integration of AI: Promoting conscious and purposeful use of artificial intelligence and chatbots in teaching as supportive tools.
 - Focus on critical media literacy: Encouraging analysis of media and social content to develop skills for recognizing fake news and manipulation.
 - Support for individualization and adaptability: Developing approaches that consider the age, level, and learning style of students through a balanced combination of traditional and digital methods.
- In contemporary education, we increasingly seek the intersection between formal and non-formal learning and media pedagogy. One of the most important meeting points is the development of digital-media literacy and critical thinking. In this respect, non-formal education— with its flexible and practical nature—not only supports but also complements formal education, as the main participants remain the same: children, teachers, and parents. This synergy is essential for preparing young people for the challenges of the digital age.

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THE BULGARIAN WRITTEN HERITAGE AS A CULTURAL RESOURCE AND A DRIVER OF SUSTAINABLE TOURISM

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Abstract: The Bulgarian written cultural heritage includes unique manuscripts, medieval literary monuments and archival funds, testifying to the spiritual and intellectual development of the Bulgarian people. This heritage not only reflects the cultural identity of the nation, but also provides a platform for the development of cultural tourism with a long-term sustainable effect. This article explores the Bulgarian written heritage not only as a national cultural treasure, but also as a strategic resource for the development of sustainable cultural tourism. Manuscript books and documents can be integrated into the tourism product through museums, libraries, archives, thematic routes and digital platforms. Good practices, the potential for cultural diplomacy and the contribution to local development are analyzed. Special attention is paid to the interrelationship between written cultural heritage and sustainable development, implemented through its preservation, educational initiatives and active community participation. The article focuses on the historical and cultural value of manuscripts and archives as factors determining the unique role of Bulgaria in European civilization. The importance of the preservation and restoration of manuscript and archival heritage is emphasized, while at the same time seeking a sustainable balance between preserving its authenticity and ensuring public access. The deficit of well-trained specialists and funding is noted, as well as the need for a transdisciplinary approach, including cultural studies, archival studies, information technologies and tourism planning. Bulgarian written heritage has enormous potential to be a bridge between the past and the future, while simultaneously contributing to cultural self-awareness and economic development through sustainable tourism. The authors call for the strategic integration of written heritage into public and private cultural policies based on long-term thinking and preservation. A long-term and coordinated vision based on inter-institutional cooperation, innovation and educational practices is needed. This publication is related to a research project: "Ecologically Sustainable Conservation Strategy for Written Heritage", contract No. KP-06-N90/6 of 10.12.2024, funded by the Scientific Research Fund of the Ministry of Education and Science of the Republic of Bulgaria, headed by Senior Assistant Professor PhD Eng. Iskra Tsvetanska.

Keywords: *written heritage, preservation, sustainable tourism.*

Field: Social sciences

1. INTRODUCTION

The Bulgarian written cultural heritage includes unique manuscripts, medieval literary monuments and archival funds, testifying to the spiritual and intellectual development of the Bulgarian people. This heritage not only reflects the cultural identity of the nation, but also provides a platform for the development of cultural tourism with a long-term sustainable effect.

This article aims to explore the potential of the Bulgarian written heritage as a resource for sustainable cultural tourism. At a time when tourism is increasingly oriented towards the preservation of cultural resources, the engagement of local communities and the creation of long-term value, the written heritage can be an asset that combines educational value, identity and economic potential. The emphasis is placed on the possibility of transforming cultural and historical sites and practices related to writing into sustainable tourism infrastructure.

The relevance of the topic is determined by the global context of seeking a balance between the preservation and use of the written cultural heritage. Organizations such as UNESCO and the European Union are increasingly focusing their attention on the sustainable management of cultural resources that are not subject to physical depletion, but are vulnerable due to lack of visibility, modernization and cultural transformations. In this sense, the Bulgarian written heritage offers opportunities for a new type of cultural experience – authentic, informative and engaging.

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2. MATERIALS AND METHODS

The methodology of the study includes an interdisciplinary approach that combines historical and cultural analysis with elements of the theory of sustainable development and cultural tourism. The main sources of information are scientific publications in the field of history, cultural heritage and tourism, documents of UNESCO and the European Union, as well as specific good practices from Bulgaria and other European countries. Data from cultural institutions, archives, educational programs and tourism initiatives related to the Bulgarian written heritage were also used.

3. RESULTS

Written heritage is an important part of cultural heritage, as it carries historical, linguistic and spiritual values, transmitted through generations. It goes beyond its purely historical significance and becomes a living cultural and educational tool, shaping cultural identity and providing a link between past and present.

Contemporary manifestations of written heritage include various institutions and initiatives: museums, monasteries with library collections, specialized libraries and archives, festivals dedicated to Old Bulgarian literature, as well as processes of digitization of old manuscripts and books. This creates opportunities for written heritage to be more accessible and interactive for a wide audience.

Digitization and restoration of old manuscripts are among the key contemporary practices for the preservation of written heritage. These processes are carried out with increasing attention to environmental aspects and sustainable methods. As Georgiev notes, ecological approaches in restoration include the use of environmentally friendly materials and techniques that minimize the harmful impact on the environment and the archives themselves (Georgiev, 2021). This practice contributes to long-term preservation and at the same time supports the concept of sustainable cultural heritage. The digitization of written memory not only facilitates access to it, but also provides opportunities for interdisciplinary research and innovation. Modern digital technologies allow the creation of interactive platforms and virtual exhibitions that enrich the research and educational environment, while stimulating broad public engagement and preservation of cultural heritage in Bulgaria (Stefanov & Stoyanov, 2022). The digitization of manuscript heritage is a key process for its preservation and accessibility. As Hristova points out, contemporary practices are developing in Bulgaria that combine traditional archival methods with modern digital technologies, ensuring not only the preservation of materials, but also their wide dissemination through online platforms. These processes expand opportunities for scientific research and educational initiatives, while supporting the sustainability of cultural heritage (Hristova, 2019).

Opportunities for education through culture are particularly significant. Educational routes, workshops and exhibitions allow participants to actively engage in the process of learning about the history and significance of Bulgarian writing. Draganov emphasizes that educational tourism represents a kind of synthesis in which the ideas of continuity and accessibility are put into practice, both in the field of education and in tourism (Draganov, 2025). This not only enriches the tourist experience, but also stimulates intercultural dialogue and promotes the sustainable preservation of cultural heritage. Ivanova also notes that the integration of cultural heritage with educational tourism creates important opportunities for raising awareness and involving younger generations in the preservation of national identity (Ivanova, 2022). There are many good analyses based on large-scale international studies on the topic, which allows for a large European comparative perspective (Boyadjieva & Ilieva-Trichkova, 2021).

Sustainable tourism is defined as tourism that meets the economic, social and environmental needs of both present and future generations. It aims for balanced development that supports the local economy, preserves the cultural and natural environment and includes local communities. Written heritage contributes to the affirmation of local identity and traditions, and the inclusion of local communities. In addition, it provides a platform for socio-economic development through tourism that engages local residents as bearers of culture and active participants in the processes of preservation and promotion. As Stoyanova points out, cultural heritage is a driver of sustainable development, creating opportunities for the local community not only to preserve its identity, but also to stimulate social and economic activity. Written heritage, with its unique spiritual and historical value, can be the center of sustainable tourism initiatives that support educational, cultural and economic processes in the regions (Stoyanova, 2020).

Cultural routes and monasteries that preserve both architectural and written heritage play a particularly important role in sustainable tourism. Sharlanova notes that Orthodox churches preserve the collective memory of the community, functioning as "places of memory" laden with deep emotional meaning, which contribute to the construction and consolidation of national identity (Sharlanova, 2021). Kirilova

also emphasizes the potential of these sites to attract tourists interested in spiritual and cultural history, while supporting the development of local communities and promoting the preservation of cultural values through sustainable forms of tourism (Kirilova, 2021).

4. DISCUSSIONS

The Bulgarian written heritage is not only a fundamental element of the national cultural identity, but also a valuable resource with potential for sustainable development of cultural tourism. In modern conditions, written memory can be activated as a cultural resource through various forms – museums, digital archives, festivals, educational routes, workshops and cultural events. Sustainable tourism, which focuses on social responsibility, cultural diversity and the participation of local communities, provides an opportunity for this heritage to be not only preserved, but also experienced and passed on to future generations.

Cultural tourism based on written heritage encourages empathy for the spiritual roots of the community and the preservation of the local cultural fabric (Ilieva & Maroudas, 2017). Successful examples from Bulgaria and abroad show that the combination of written cultural memory and tourist experience can create a model for local development, in which communities not only receive economic benefits, but also establish themselves as guardians of spiritual and historical values. In order for this potential to be realized in the long term, targeted efforts are needed in several directions: development of policies for the preservation and promotion of written heritage, educational initiatives for young people, public-private partnerships and innovations through digitization. Organizing exhibitions that present Bulgarian manuscripts and books abroad promotes the exchange of cultural information, the rapprochement of different cultures and understanding at a global level. Participation in international conferences and symposia on topics related to written heritage allows Bulgarian scholars and researchers to share their discoveries and learn from the experience of their colleagues from other countries, as well as recommendations for the development of policies, educational initiatives and sustainable models aimed at activating written cultural heritage as a driver of sustainable tourism.

5. CONCLUSIONS

Bulgarian written cultural heritage, created with the mission to enlighten and unite, can today serve as a bridge between the past and the future, and has the potential to become a sustainable cultural resource that not only preserves the connection with the past, but also contributes to future development through cultural tourism. A strategic vision based on inter-institutional cooperation, innovation and educational practices is needed.

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EVALUATING THE USERS' PERCEPTIONS OF SERVICE QUALITY OFFERED BY BANKS VIA MOBILE APPLICATIONS

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Abstract: The use of modern technology has significantly altered how all economic entities operate as well as how customers and clients behave and expect to be treated. The financial sector has experienced substantial changes as a result of the digitalization process in the last decade. These modifications pertain to the client service delivery system, information exchange inside and between financial institutions, service quality, and the degree of security of digital channels used to deliver services to customers. As the most significant type of financial institution in the world and in the Republic of Serbia, banks have mostly digitized their customer communications and business processes. The high degree of service quality is of particular significance for customers. This article specifically aims to assess customer satisfaction with financial services delivered via banking application. For the purposes of this research study, 200 users of banking applications in the Niš region, representing a broad range of age groups, were surveyed. The SERVQUAL model was used to assess user satisfaction, and the data was processed in the SPSS software program with appropriate tests. Since the level of service quality from the perspective of users in Niš is not at a satisfactory level, we concluded from the analysis that banks must keep working on enhancing their apps and security.

Keywords: *banks, services, banking applications, SERVQUAL.*

Field: Finance and Marketing

1. INTRODUCTION

Nowadays, practically every bank in the world allows its customers to do transactions using mobile apps. In particular, users can pay their bills, move funds to other people's accounts, discover which loans the bank offers, and apply for a loan—which is frequently tailored based on the user's income and other transactions. Additionally, banks give customers the ability to check the amount of money in their account at any given moment, track their savings, deposits, and interest, as well as loans, keep an eye on currency rates, move money between accounts, and more. Users that have access to the Internet can use all of these services from any location. (Oliveira et al., 2014; Boor et al., 2014; Jahan & Shahria, 2022)

Users can complete transactions more easily when they use applications. They can easily do nearly all transactions using their mobile phones instead of having to wait in line at bank counters. (Souiden et al., 2021; Karn, 2023). Banks continually enhance their mobile banking applications to ensure the highest quality customer experience. The population's level of digital literacy, together with their reluctance to accept and trust modern technologies, is one of the challenges that the Republic of Serbia has when it comes to banking applications. (Stojanović & Đorđević, 2016) However, these issues are resolved year after year as a result of banks' ongoing efforts to improve the security of digital communication channels and transaction completion, as well as the state's increasing ambitions to raise the general public's understanding of digital literacy. (Petrović & Novović, 2019; Orehovački et al., 2022)

The satisfaction of customers with the caliber of services offered by mobile banking applications is another crucial factor. (Bharti, 2016; Bhatt & Bhatt, 2016; Giovanis et al., 2019; Malc et al., 2023) In other words, consumers' satisfaction will not reach an acceptable level if the application is difficult to use, features poor navigation, lacks sufficient trustworthiness and effective graphical design, and frequently crashes. In order to ascertain the state of user satisfaction in Nis, a review of the literature was conducted and researchers involved in the analysis of the quality of services provided by mobile banking applications developed a model, which was subsequently implemented and evaluated.

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2. LITERATURE REVIEW

Numerous studies have been carried out on the topic of user satisfaction with banking services, as well as the services offered by banks via their mobile applications. Aghadaie & Faghani (2012) conducted research, which aimed to apply the SERVQUAL model with the aim of analysing the relationship between mobile banking and customer satisfaction levels. This study, which examined user satisfaction with mobile banking, was the first to be conducted concurrently. Reliability, tangibility, responsiveness, security, and empathy are the five aspects of service quality that the researchers utilized as independent variables, and the degree of customer satisfaction (perceived value) as the dependent variable. Their findings demonstrated that while security does not have a statistically significant correlation with user satisfaction, or their perceived value, tangibility, reliability, responsiveness—that is, responsiveness and empathy—and user satisfaction do. When they implemented their survey, they found that respondents reported significantly high satisfaction with the usage of mobile banking applications and, consequently, banking services overall, according to the results of the ANOVA test.

Similar conclusions were drawn by Shaikh and Karjaluo (2016) in their study. Specifically, by examining the degree of satisfaction derived from using mobile banking applications, they aimed to demonstrate that customers are more loyal to the bank due to the convenience with which they can perform essential banking tasks. They came to the conclusion that there is a strong correlation between user satisfaction and the quality of services provided by mobile banking applications. This finding supports the idea that there is a stronger bond between customers and banks that offer fast and high-quality applications for conducting transactions.

Al Zadjali et al. (2015) examined the SERVQUAL model's implementation in order to survey consumers and ascertain their degree of satisfaction with banking mobile applications. They concluded that while responsiveness and security also have a significant correlation, albeit to a somewhat lesser extent, tangibility and reliability have the strongest relationship with user satisfaction. However, when it comes to empathy as a service quality dimension, no correlation was established.

Following the same techniques as the aforementioned authors, Puriwat & Tripopsakul (2017) concluded that there is a positive correlation between all of the aforementioned aspects of service quality and the degree of user satisfaction (i.e., perceived value) of mobile banking applications. For this reason, they noted that if banks wish to attract devoted customers, they should endeavour to enhance every aspect of the calibre of mobile banking services.

The SERVQUAL-adapted model was also used by Zhao et al. (2019), who noted that mobile banking is the way of the future for the banking industry and the services it provides. The analysis included 244 respondents who used mobile banking services and revealed that customer satisfaction and bank loyalty are significantly impacted by the calibre of mobile banking applications and services.

3. METHODS OF RESEARCH

This study employed the survey research method as a primary means of collecting and organizing participants' opinions. The sort of information required to achieve the goals of the research was taken into consideration when choosing the data gathering strategy. The size of the study team also had an impact on the manner of data collecting that was chosen. (Field, 2017) Data were collected from the surveyed sample based on several established criteria. In particular, the survey included respondents who had not yet used bank mobile applications at the time of the initial survey but had made the decision to do so. To compare what the clients expected and received from the banking application itself, the second survey was carried out a month after the first one.

The first survey was carried out between February 1st, 2025, and March 1st, 2025. Regarding the second survey, which was conducted between April 1st, 2025, and May 1st, 2025, the respondents were contacted after the one-month period had passed. This "face-to-face" contact was done to get their answers regarding how satisfied they were with using bank applications. It was determined that the gender structure of the sample should be equal, meaning that men and women should be included equally. Additionally, data were collected regarding the geographic area. In order to facilitate face-to-face data collection and make it easier to gather responses to two surveys in a month, it was decided to limit data collection to the city of Nis's territory (more efficient collection and lower financial expenditures). This method of sample definition is justified since, despite the fact that the research is being conducted in a single city, it is a city with a sizable population. Field (2017)

The authors modified the questionnaires used in this study by drawing on those of reputable authors (Micuda & Cruceru, 2010; Safakli, 2007; Zhau et al., 2019; Al Zadjali, 2019) who studied bank

customers to determine their expectations and the degree to which they are fulfilled. The 20-question questionnaire, which clients fill out prior to downloading the application (expectations), is broken down into two sections: general client information, demographic data (such as gender, age, and education), and modified SERVQUAL scale questions. Table 1 presents all 20 questions that were posed to clients prior to their downloading of the mobile banking application.

Within a month of using the application, clients answered the second questionnaire, which consists of 24 questions about perception. Four additional questions concerning the perceived value that customers felt when utilizing the banking application to complete their transactions were added to the ones concerning the attained (perceived) quality of banking services. Respondents used a Likert scale to indicate their opinions in both the first and second questionnaires.

Additional four questions, which are included in the second survey and represent the basis of the dependent variable (perceived value) are the following: 1. The cost of mobile banking services is reasonable; 2. The quality of mobile banking services exceeds the price paid for this service. 3. The quality of mobile banking services surpasses my expectations. and 4. I will keep using the bank's services because I feel that I received good value for my money.

The data collection can be regarded as relevant and reliable for the study as respondents showed interest in the questionnaire's content and completed all questions. Following data collection, the SPSS software program and the AMOS v22 software program were both used to enter the data. The Kaiser-Meyer-Olkin test, Bartlett's test, exploratory and confirmatory factor analysis, and the PTH diagram of the dependence model were all used in SPSS in addition to descriptive statistics. The theoretical model was validated using the AMOS v22 software suite.

Table 1. Dimensions and characteristics of dimensions for interviewing respondents

Attitude No.	Attitude	Dimension (factor) and its characteristics
1	I want the applications' services to be provided correctly the first time.	Reliability The quality and dependability of banking services offered via mobile applications are excellent.
2	When the order is given or promised, I anticipate that in-app services will be available.	
3	I look forward to successful troubleshooting of service delivery issues in mobile banking applications.	
4	I expect to receive notifications within the application regarding the completion of services or transactions.	
5	I anticipate that the application will inspire confidence among its users.	Trust It implies the security of clients in banking transactions and trust in the application and the bank itself.
6	I expect security in my in-app transactions.	
7	I expect that the application can meet all my requirements as a customer.	
8	I anticipate that the application will give me all the information I need about the services it offers.	
9	I expect banks to have visually attractive applications.	Tangible features They include visual materials related to the banking service, attractiveness of the application, etc.
10	I expect the app to have good navigation.	
11	I expect the materials that I can read and download from the app to be well designed.	
12	I expect all information within the application to be displayed to me without errors.	
13	I expect a personalized service delivery system in banking applications.	Relationship with bank clients It implies individual attention, respect for special needs and work in the interests of clients.
14	I expect to receive quick answers to questions submitted via banking application.	
15	I expect that the applications are created in alignment with the interests of the clients.	
16	I anticipate that the services I require will evolve along with my transactions.	
17	I expect bank employees to react quickly if there is a problem with the application.	Willingness to provide banking services It indicates that bank staff members are willing to assist and deliver high-quality service when needed, as asked by the application.
18	I expect bank employees to respond quickly and without delay to the needs and complaints of clients sent through the application.	
19	I expect that bank employees always have time to answer all the questions of clients asked through the application.	
20	I expect to receive all necessary services and answers to questions via the application.	

Source: Authors

The implementation of all the aforementioned tests enables the achievement of the stated objective and, consequently, provides banks with valuable insights into customer satisfaction with the services they receive via mobile applications.

4. RESULTS AND DISCUSSION

Before presenting and analysing the results of the updated SERVQUAL model, we will first outline the demographic characteristics of the sample used in the analysis. As previously mentioned in the methodology, the sample comprises 200 respondents, with half of the sample being female and the other half being male. Regarding the respondents' age distribution, 5% of clients are under the age of 18, and the same percentage of respondents are between the ages of 18 and 35. The highest percentage of respondents (43.5%) were between the ages of 36 and 55. According to the respondents' educational backgrounds, the majority of them are well educated, meaning that 52% of them have earned a bachelor's, master's, or doctoral degree. 6.5% of respondents, the smallest percentage, only completed primary school.

In order to examine the suitability of the data for application in factor analysis, it is necessary to show that there is a significant correlation among the manifest variables. This fact is tested by Bartlett's test of sphericity. The results of this test are shown in Table 2.

Table 2. Calculated values of KMO indicators and Bartlett's test of sphericity

Kaiser-Mayer-Olkin indicator of sample adequacy		,851
Bartlett's test of sphericity	Chi-square	3515,091
	Degrees of Freedom	276
	Sig.	,000

Source: Authors

Therefore, we ascertain whether the value of the Bartler test of sphericity indicator is significant (i.e., whether the value of sig. 0.05 or less) and whether the value of the KMO indicator (Kaiser - Mayer - Olkin, this indicator) is equal to or greater than 0.6 in order to determine whether the data set is appropriate for factor analysis.

The manifest variables are associated with one another and can be utilized in component analysis, according to the findings of Bartlett's test of sphericity (sig = 0.000).

Confirmatory factor analysis, or CFA, was performed on a measurement model that was described in the publication to guarantee the validity and reliability of the research model. In order to determine all potential correlations between the six groups of latent components in the measurement model, CFA was carried out on each of them. It is evident from factor saturations in both exploratory and confirmatory factor analysis that there is typically a strong link between manifest and latent variables.

The consistency of the variables defined within the latent classes, in the research model, was measured by the size of the Cronbach alpha coefficient (Cronbach, 1951). Cronbach alpha values greater than or equal to 0.7 are considered very acceptable (Ninnally, 1978), while values up to 0.55 can be considered acceptable (Van de Ven & Ferry, 1979). Each group of questions (subdimension) is characterized by high reliability (above 0.700), except in the case of the second group of questions (0.59).

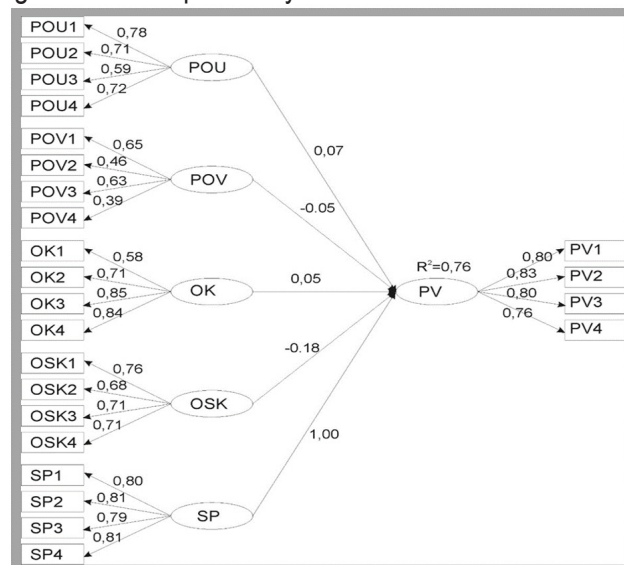
Table 3. Results of exploratory and confirmatory factor analysis

Group of Questions	Observed Variable	Exploratory Factor Analysis (EFA)		Confirmatory Factor Analysis (CFA)		
		PCA		Reliability	Convergent validity	
		Factor Loading	% of Explained Variance	Crombach's Alpha	Factor Loading	sig.
POU	POU1	,833	61,63	0,782	0,78	<0,001
	POU2	,768			0,708	<0,001
	POU3	,724			0,585	<0,001
	POU4	,810			0,72	<0,001
POV	POV1	,805	46,1	0,59	0,652	<0,001
	POV2	,706			0,461	<0,001
	POV3	,732			0,634	<0,001
	POV4	,402			0,386	<0,001
OK	OK1	,812	69,61	0,853	0,578	<0,001
	OK2	,896			0,711	<0,001
	OK3	,826			0,845	<0,001
	OK4	,800			0,84	<0,001
OKS	OSK1	,756	63,66	0,809	0,757	<0,001
	OSK2	,752			0,678	<0,001
	OSK3	,873			0,705	<0,001
	OSK4	,805			0,71	<0,001
SP	SP1	,877	73,23	0,875	0,798	<0,001
	SP2	,867			0,809	<0,001
	SP3	,860			0,786	<0,001
	SP4	,817			0,81	<0,001
PV	PV1	,861	72,66	0,872	0,8	<0,001
	PV2	,866			0,829	<0,001
	PV3	,860			0,802	<0,001
	PV4	,823			0,757	<0,001

Source: Authors

The dependence model is depicted in figure 1 below. The figure's standardized regression coefficients indicate that POU (reliability) and OK (tangible features) have a weakly positive impact on PV (perceived value), whereas trust has a weakly negative impact. Additionally, SP (willingness to give services) has a substantial positive impact on PV (also the strongest impact), whereas OSK (client relationship) has a considerable negative impact on PV (perceived value). 76% ($R^2=0.76$) of the variance of the dependent variable PV can be explained by the five factors that have been observed.

Figure 1. PTH diagram of the dependency model



Source: Authors

This resulted in considerably different outcomes than the authors' findings, which were examined in the literature review. In particular, it was found that security, as a component of mobile banking service quality, has no bearing on users' perceptions of the value and degree of pleasure of mobile banking applications (Aghadaie & Faghani, 2012).

These results are opposite to the results obtained in analysis by Al Zadjali et al. (2015), Puriwat & Tripopsakul (2017), Zhan et al. (2019).

Unlike the aforementioned authors, the analysis conducted in the territory of the city of Nis showed that the readiness to provide services as a dimension is the strongest factor in the perceived value of the quality of mobile banking services, and as we have already stated, it refers to the willingness of banks to respond to the requests and questions of clients through mobile banking applications at any time.

Validation of the theoretical model was carried out using the AMOS v22 software package. Additionally, the analysis determined the fit of the measurement model and the values of individual parameters are shown in Table 6. The relative value of the chi-square (1197.36 for d.f. 237) for the measurement model is 5.05, which is slightly above the recommended threshold value of 3, which indicates a certain deviation between the measurement model and the data in the sample.

Apart from the aforementioned, the remaining measurement model fit indices (GFI, AGFI, CFI, IFI, NFI, NNFI, and RFI) are either extremely close to or exceed the recommended threshold value, indicating that the measurement model demonstrates an adequately fit although with some minor discrepancies.

Table 4. Model Fit Indicator Values

Fit Indicators	Recommended Values	Obtained Values in the Structural Model
Chi-Square (χ^2)	-	1197,36
Degree of freedom (d.f.)	-	237
Relative Chi-Square ($\chi^2/d.f.$)	< 3.0	5,05
Root Mean Square Error of Approximation (RMSEA)	0.08 – 1.0	0,143
Goodness-of-Fit Index (GFI)	> 0.8	0,682
Adjusted Goodness-of-Fit Index (AGFI)	> 0.9	0,598
Comparative Fit Index (CFI)	> 0.9	0,718
Incremental Fit Index (IFI)	> 0.9	0,721
Normed Fit Index (NFI)	> 0.9	0,674
Non-Normed Fit Index (NNFI)	> 0.9	
Relative Fit Index (RFI)	> 0.9	0,621

Source: Authors

The difference between perceived and expected service quality is negative for all quality determinants, which is shown in Table 4. Mostly the bank clients who were surveyed have very high expectations regarding the quality of services. Considering the significant difference between the arithmetic means of expected and observed service ratings, we can conclude that there is a lot of space for service improvement.

Table 5. Expected and Achieved Determinants of Mobile Banking Service Quality

Achieved	Mean Value	Expected	Mean Value	Gap	sig.
POU1	2,79	POU1	4,56	-1,77	0,000
POU2	2,81	POU2	4,56	-1,76	0,000
POU3	2,64	POU3	4,51	-1,88	0,000
POU4	2,92	POU4	4,51	-1,59	0,000
POV1	2,77	POV1	4,64	-1,87	0,000
POV2	2,76	POV2	4,42	-1,67	0,000
POV3	2,66	POV3	4,58	-1,92	0,000
POV4	2,90	POV4	4,45	-1,55	0,000
OK1	2,86	OK1	4,35	-1,49	0,000
OK2	2,95	OK2	4,43	-1,48	0,000
OK3	3,10	OK3	4,38	-1,28	0,000
OK4	2,93	OK4	4,49	-1,56	0,000
OSK1	2,79	OSK1	4,40	-1,61	0,000
OSK2	2,98	OSK2	4,44	-1,46	0,000
OSK3	2,94	OSK3	4,39	-1,46	0,000
OSK4	2,92	OSK4	4,36	-1,45	0,000
SP1	2,87	SP1	4,45	-1,58	0,000
SP2	2,57	SP2	4,40	-1,83	0,000
SP3	2,75	SP3	4,42	-1,67	0,000
SP4	2,79	SP4	4,51	-1,73	0,000
Total	2,83		4,46	-1,63	

Source: Authors

The SERVQUAL gap as a whole is negative, measuring -1.63. Based on surveyed customers in Nis, this demonstrates unequivocally the necessity for banks in the Republic of Serbia to take action to close the gap between what customers expect from the application and what it offers in order to guarantee a greater degree of customer satisfaction and loyalty.

5. CONCLUSIONS

Mobile applications are becoming more and more important in all commercial domains. One of the most vital sectors of the economy is the banking industry, which is particularly susceptible to the impacts of the digitalization process. As a result, mobile banking apps are now an essential component of the services that banks provide to their customers. Mobile banking applications require further enhancement, according to the research conducted in the city of Nis with the goal of analysing the expected and achieved level of quality of mobile banking services. This is due to a significant gap between the expected and actual levels of service quality. In order to help banks enhance their applications for dissatisfied customers and to determine the reasons behind the discrepancy between the expected and actual quality of mobile banking services, further research on this topic can focus on analyses related to specific age groups and educational levels.

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NEW OPPORTUNITIES AND PERSPECTIVES OF BLOCKCHAIN TECHNOLOGY

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Abstract: In this research paper, based on a review of relevant recent literature and research conducted in practice, the emergence, development, areas of application and the implementation process of blockchain technology in business will be presented, as well as possible trends and perspectives for future development and how the application of this technology will affect social economic development, environmental protection and sustainable development, which has become one of the main drivers of the modern business world. Blockchain technology is a type of distributed ledger technology. Despite the fact that blockchain technology is gaining increasing importance, because it has enormous application possibilities in many areas of business, there is still a lack of research in this extremely current area in the literature. In this context, the paper represents a contribution and a new comprehensive review of the possibilities of applying Blockchain technology in a modern business environment. The paper, among other things, elaborates on the advantages and disadvantages of this new sophisticated technology, and also points out the safety and security problems that may arise when applying blockchain technology. At the end of the paper, a comparative analysis of new potential opportunities and application trends in various business areas is presented, as well as possible directions for future research.

Keywords: *Blockchain technology, artificial intelligence, industry 4.0.*

Field: Social Sciences (Business and Finance)

1. INTRODUCTION

It can be said that we live in a time when innovative sophisticated technologies and new original approaches to work are changing and upgrading day by day. In this sense, one of the relatively new technologies and increasingly used is the technology of Industry 4.0. so-called Blockchain technology. The literature states that blockchain technology is causing a change in the world in other areas of our lives, not only in finance, and is becoming increasingly interesting for entrepreneurial practice (Shrier, 2020). In essence, blockchain is an innovative protocol for exchanging and storing information. According to the creator of this technology, Satoshi Nakamoto, Blockchain is "a distributed, time-stamped set of records, into which only new data can be entered and which is cryptographically protected from unauthorized access and revision". In the literature, October 31, 2008, is taken as the date of the emergence of this technology, when Satoshi Nakamoto sent an email to several email addresses to people involved in cryptography. In it, he wrote that he was working on a new peer-to-peer electronic cash system and attached a so-called white paper called Bitcoin: A Peer-to-peer Electronic System (MCSweeney, 2021). The term "blockchain" is used to describe distributed ledger technology, where it does not denote a specific solution, but a concept (Denić N, 2025). After that, on January 3, 2009, Satoshi Nakamoto created the first Bitcoin block, and with this action, the first 50 Bitcoins were created (Phillips, 2021).

2. THEORETICAL BACKGROUND OF THE EMERGENCE AND DEVELOPMENT OF BLOCKCHAIN TECHNOLOGY

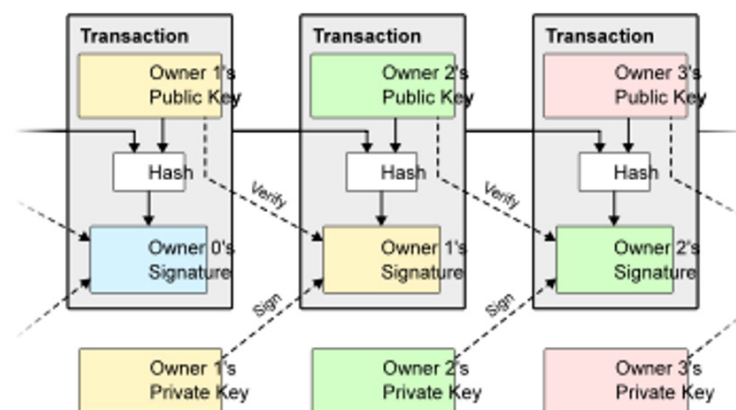
Research shows that Blockchain technology is a relatively new technology, which was developed and is primarily used in payment systems (Bitcoin). In this context, it can be said that Blockchain technology enables secure and transparent inclusion in the environment of known business participants and the execution of transactions between different business entities, which in today's business environment did not have the opportunity for IT and business connections. The Industry 4.0 period, whose main carriers are the Internet of Things, artificial intelligence, big data, cloud computing and blockchain technology, requires great intensity from the individual in terms of education, professional development and training,

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both in private and professional life (Denić N, 2025). This opinion is supported by authors who state that Blockchain technology promises to change the world in other areas of our lives, not only in finance, and is becoming increasingly interesting for entrepreneurial practice (Shrier, 2020). In this regard, some authors point to caution and that insufficient understanding can lead to wrong business decisions and poor assessment of the potential or usefulness of blockchain technology (Hawlitshchek et al., 2020). In general, it can be said that Blockchain serves as an immutable ledger. This ledger allows transactions to take place in a decentralized environment. Blockchain technology enables the maintenance of so-called digital transaction logs, which can be programmed not only to record financial transactions, but also for almost anything that has some value (Shchehliuk, S. D. 2019). Many companies are researching and analyzing the possibilities of applying this technology, and its versatility is confirmed by the fact that it is already used in various industrial sectors (Beck, R., Müller-Bloch, C., & King, J. L. 2018). So it can be said that Blockchain, as a young technology, is gaining momentum in various areas, both in the product manufacturing sector and in the service domain, and they are serviced by modern software solutions (Denić N, 2025). Blockchain has even transformed the traditional financial industry, as about 15% of banks began using it in 2017. It is interesting to note that although there are many promising positive examples of use, research is still in its early stages. On the other hand, some authors state that there is a significant lack of theoretical knowledge, which is why companies, despite implementing this technology, are still not achieving the expected results (Weking et al., 2020). Blockchain is a new, emerging technology that significantly changes the way data is stored and transactions are recorded. In some aspects, it is similar to database technology, but with a key difference - it allows work without the presence of intermediaries (Locher & Pignolet, 2017). Research into this technology is currently most prevalent in four areas: financial services, supply chains, the concept of two-sided business, and the benefits of the technology in the field of social protection (Weking et al., 2020). Blockchain brings greater data transparency in various industries (Koksal, 2019). One of the more significant features of this technology is that due to its distributed architecture, the network is highly resistant to cyber attacks (Vermaak, 2021). Just as the expansion of the Internet and the new business opportunities it made possible, as well as, for example, open-source technology with the most recognizable representative Linux, changed the business of companies and the users themselves, we can predict a bright future for blockchain technology in digital business and the new business models that it predicts. Regarding the structure of blockchain technology itself, the literature states that the basic concept of blockchain technology is based on the feature of a distributed database, which solves the issues of transparency, security and efficiency (Bellini et al., 2016). A blockchain system is a distributed transaction database composed of a series of equal nodes, each of which stores a copy of the transaction ledger. In this regard, it can be said that this revolutionary technology significantly changes the business models of both companies and users, but at the same time it brings certain challenges that, despite all the technological advantages, have not yet been able to be raised to the level of widespread application (Denić N, 2024). Figure 1 clearly shows how and in what way a blockchain is formed, when a system of public and private keys is used

Fig. 1.View of the Blockchains transaction execution scheme (Original scheme published by Satoshi Nakamoto in 2008)



Source: Nakamoto, S. (2008) Bitcoin: A Peer-to-Peer Electronic Cash System. <https://bitcoin.org/bitcoin.pdf>

Blockchain technology therefore works on the basis of a distributed ledger. The literature states that distributed ledger technology (DLT), such as blockchain, offers solutions to many existing problems, but in this context, it also presents new challenges for organizations (Demestichas et al., 2020, p. 2). A distributed ledger is actually an entire chain of blocks, from the first to the last currently known block, which is publicly available to everyone. The essence of the distributed ledger is that there is not just one copy of the blockchain, but many copies (Denić N, 2024). Each individual who downloads the blockchain to their computer is actually just copying the blockchain from existing nodes in the network. Its copy of the blockchain is identical to the blockchain held by other nodes. With this action, the individual joins the network and also becomes a node. Thus, there are as many copies of the blockchain as there are nodes in the network (Feign, 2022).

3. RESEARCH METHODOLOGY

In order to achieve the goals of the research, a methodological research framework was proposed that combines different research methods, which includes quantitative and qualitative research methods. At the beginning of the research, we first briefly defined the basic problem that we are researching or dealing with in the research. In this direction, we defined the blockchain technology and the goals we want to achieve within the research work and predicted the results of the work. We also briefly described the used methods, work techniques and tools. In the theoretical discussion, an overview or presentation of the content of blockchain technologies researched by well-known authors in the country and abroad is given. The research instruments used in the research process and procedure are: different types of questionnaires (intended for observation, content analysis, testing, scaling, sociometric measurement and measurement of business and organizational performance); there are tables, reviews, checks of individual and team abilities and knowledge; numerical chart and scale; special and Internet search questionnaires, etc.

4. RESULTS

Research results show that Blockchain technology, as one of the key elements of today, has attracted the attention of the general public primarily because of the cryptocurrencies based on it (Denić N, 2025). Research shows that the following countries stand out in the implementation of blockchain technology: Japan, China, Lebanon, Switzerland, South Africa, the United Kingdom, Singapore, the Bahamas, the United States and Estonia. In addition, it is estimated that global spending on blockchain technology solutions has increased from \$4.5 billion in 2020 to \$19 billion in 2024. What should be emphasized and what research shows is that new technologies and innovations do not necessarily lead to business success and acceptance in society, but rather the method of implementation and acceptance by key users is very important in this process (Denić N, 2025). According to data from Deloitte (2020), more than 50% of executives in different countries stated that they ranked blockchain technology among the top five priorities in the companies they work for. In this regard, the authors Kandaswamy and Furlonger (2019) predict that investments in blockchain technology will reach \$3.1 billion by 2030. The research results show that between 2015 and 2019, the US was the first in terms of financing blockchain companies, with 51% of the total financing worldwide, while China ranked second with 18% of the financing. According to research by Technology Ireland ICT Skillnet (2021), the wide availability and growing acceptance of blockchain technology and distributed ledgers offer potential solutions to many business activities and problems such as international payments, data management and protection, supply chain management and the like. Blockchain is a relatively new technology, companies in Serbia are increasingly applying it in their work (Denić N, 2024). This is supported by the data that in 2018 there were only 130 blockchain programmers in Serbia, while in 2019 there were already between 700 and 800. The advantage of this technology is also the open nature of the decentralized ledger that can record the transactional activities of two parties without a central intermediary, giving this technology wide application possibilities.

5. DISCUSSION

It is important to note that blockchain technology began to develop in 2008 as a response to the global financial crisis, and it gained the greatest recognition in 2017, primarily due to the high financial gains of cryptocurrencies (e.g. Bitcoin, Ethereum and others). According to an international study, out of 10,000 developers working on blockchain in the world, approximately 400 of them are in Serbia. Research shows that the traditional financial system works well enough for most transactions, but it has an inherent flaw in that every transaction can be reversible and that experts were asked to find a solution to

this phenomenon (Denić N, 2025). It is known that blockchain technology became synonymous with the cryptocurrency bitcoin in the first years of its existence, and it is difficult to avoid mentioning bitcoin when talking about the history and development of this technology, because we can say that blockchain is to bitcoin what the internet is to email. In this sense, it can be said that the most famous role of Blockchain is certainly the creation and transfer of cryptocurrency. Regarding the possibilities of application, if we take into account the complexity of this type of database system, as well as its security in application, Blockchain technology is applied in those activities in which it is desirable to have immutable, clear, and transparent records of certain databases (Denić N, 2025). In relation to the number of inhabitants, Serbia is one of the leading countries in terms of the number of companies, teams, and individuals developing new products based on blockchain technology. Research by well-known authors indicates that today large investments are directed towards the development and application of blockchain technology in various industries such as healthcare, insurance, smart contracts, supply chains, and the automotive industry (Marr, 2018). Automation, flow improvement, exchange, optimization, and information protection – are just some of the areas in which blockchain technology finds its application in Serbia (Denić N, 2025). . The results show that blockchain technology has expanded from the field of cryptocurrencies to many other areas of application. However, there are views that despite investments in blockchain technology, there are not many examples in which companies have expressed a desire to use this technology (Toufaily, E., Zalan, T., & Soumaya, B. (2021).). According to a review of the literature on possible applications of blockchain technology, the most frequently mentioned areas are as follows.

Table 1: Areas of application of Blockchain technology

	Application area	Example
1.	Public administration (Zibin Zheng and Shaoan Xie, (2018)	Issuance of documents, (driver's licenses, ID cards, passports, voter registrations) Voting, Notary services, Real estate ownership, Identity management
2.	Public records	Land and property, vehicle registrations, business licenses, marriage certificates, death certificates, It allows you to maintain a database of land and real estate ownership, as well as manage apartment sales without the time and expense of an intermediary.
4.	Electoral system (Reif, 2023).	The electoral system is convenient to use with the help of blockchain technology, because due to a single transaction book shared by many nodes, it is impossible to change the voting results.
3.	General affairs	Contracts, Arbitration, Multi-signature Transactions,
4.	Ownership confirmation	Intellectual Property, Insurance, Anti-Counterfeiting
5.	Transport and Logistics (Reif, 2023).	Blockchain technology can ensure transparency in the agreement between the buyer and the seller, transparency between concluded contracts, as well as shipment and payment data.
5.	Finances (Yang, L. 2019).	Blockchain technology can reduce the costs and complexity of financial institutions' business processes, shorten transaction execution times, provide a higher level of security, reduce intermediary costs, and enable user identification.
6.	Health (Homoliak, I., Venugopalan, S., Hum, Q., PSzalachowski, P.) Morkunas, V., Paschen, J., & Boon, E. (2019).	Health insurance, Monitoring of patient health, Drug consumption, Medical documentation. Blockchain technology will ensure almost continuous functioning of the system, as doctors will have accurate data about patients, as the data will not be able to be changed or falsified.
	Energy (Reif, 2023).	Blockchain technology could solve the problems of organizing the monitoring, management, recording or distribution of energy in a decentralized network. Thus, it could establish an efficient and secure way of identifying the ownership of the source of consumed or delivered energy.
7.	Education (Grech, A. and Camilleri, A. F. (2017)	Registration of certificates - diplomas Registration of student achievements
8.	Business (Rejeb, A., Keogh, J. G., Treiblmaier, H. (2020).	Smart contracts, Supply chain monitoring, HR management, marketing.
	Insurance companies (Reif, 2023).	Blockchain technology helps insurance companies verify the data provided by the consumer and thus ensure that the data received is accurate.
9.	Private records	Loans, contracts, bets, signatures, wills,
10.	Industry (Kahn, M.T.E. (2021).	Design etc.
11.	Data Management (Ethereum Whitepaper, (2023),	Smart multisignature escrow data entry and distribution tracking (guarantees)
12.	<i>Internet of things</i> (T. M. Fernández-Caramés, T.M., Fraga-Lamas, P. (2018)	Network data monitoring, Device management in a distributed network
13.	Security and privacy (Risius, M., Spohrer, K. (2017),	Improving security, Data ownership. Access control, Privacy protection
14.	E-commerce (Ethereum Whitepaper, (2023)	Social networking, Crowdsourcing, Games of chance - online gambling
	Tourism	Blockchain technology could serve as the basis for a rewards program that yields tokens that can be spent in the store of a merchant or participating company. Loyalty programs are a great application for private token issuance.
15.	Physical asset keys	Apartments, Hotel rooms, rental cars, car access

Source: Authors research

6. CONCLUSIONS

Research clearly shows that Blockchain technology appeared in 2008. Since its appearance, the application of this technology in various areas of life has rapidly developed. In this context, the results of this research can lead to a better understanding of blockchain technology and its business aspects, as well as provide a source of current information on the state of the research subject. In this sense, in order to better understand the situation and circumstances of why and how blockchain technology emerged, we must understand the socio-economic context of that time. It is common knowledge that the white paper was published in late 2008 at a time when the global economic crisis caused an economic shock of global proportions. It was then that anger began to spread in one part of society against bankers, against traditional financial institutions, whose individuals identify themselves as the 99%, while expressing dissatisfaction with the remaining 1%, who, according to them, write the rules of an unfair global economy that threatens and denies the future to citizens around the world. Just then, with the advent of blockchain technology, which does not require a third party to work, it represents a novelty that a part of society wants at that moment. Contemporaries at the time said that blockchain technology gives us the freedom to dispose of our assets completely freely for the first time in the history of mankind. Based on all of the above, it can be concluded that the emergence of blockchain technology is essentially a consequence of the global economic crisis in 2008. In our environment, a significant date in the history of blockchain development is June 30, 2021, when the implementation of the Law on Digital Assets began. This is the first law in Serbia that regulates trading in digital assets, such as cryptocurrency trading that uses blockchain technology. The Law on Digital Assets allows the use of smart contracts in the secondary trading of digital assets and obliges providers of services related to digital assets to obtain the consent of users of digital assets for the use of smart contracts. The results of the research conducted by the organization Startup Genome (Startup Genome) place Serbia in the top five world ecosystems in terms of the number of promising blockchain developers. Blockchain has the freedom to innovate without being held back by regulation which is in some ways a great advantage, however the resulting regulatory inconsistency can often complicate the use of digital assets by end users. Considering that Blockchain technology is based on trust, but in a different way than the traditional financial system, research on the topic of business models in the field of blockchain technology, as well as research on appropriate ways of mapping those models with custom components, are extremely appreciated. Research points to caution because the finality and irreversibility of crypto transactions can be a great thing, but inexperienced users and those who are a little less technically savvy, this feature can often be expensive.

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INTEGRITY PLAN IN PUBLIC ADMINISTRATION - ANTI-CORRUPTION MEASURE IN THE REPUBLIC OF SERBIA AND ITS IMPLEMENTATION

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Abstract: The article deals with the development, implementation and results of the implementation of the integrity plan in the public administration of the Republic of Serbia as a preventive anti-corruption measure. By interpreting the results of the characteristic three cycles through which the implementation of this measure has passed, from the decision of the legislator for its introduction to the present day, the essential importance of preventive action in general can be seen, not only directly in the area it is aimed at, but also indirectly, in the development of the awareness of the entire society about the necessity of building one's own value system, strengthening personal and professional integrity and behavior in accordance with desirable ethical and moral values. In order to achieve such a goal, we will note, a clear position of the state expressed through precise and unambiguous legal norms regulating the very procedure of drafting and implementing the integrity plan, determining the authority responsible for supervising its implementation as well as prescribing penalties if acting contrary to the law is necessary. In addition, a great deal of effort has been put into creating model integrity plans that are adapted to each institution to facilitate their production. It went a step further, so for each area that makes up the content of the integrity plan, answers were offered that the institution could decide on, or ignore them and define the answer itself. However, it seems that such modernization and improvement of the integrity plan preparation methodology brought more harm than good, since the institutions and their employees are still not objective in assessing the risk of corruption nor creative in proposing measures to solve the perceived problems. The correction of these irregularities should be given more attention in the coming period, and if the results are absent, an option may be to prescribe misdemeanor liability for cases of non-objective self-assessment without adapted argumentation. It is also desirable to have greater participation of citizens, as users of public administration services, in the mapping of risks for the emergence of corruption, so it should be considered to extend this mandatory measure to the private sector as well.

Keywords: *corruption, integrity, integrity plan, public administration, Republic of Serbia.*

Field: Social Sciences

1. INTRODUCTION

Corruption represents a negative social phenomenon and a global phenomenon that causes poverty, increases social differences in society, affects the lowering of citizens' trust in the institutions of the system and legal uncertainty in general. (Vuković, 2004) Since it is a phenomenon that must be viewed from different aspects: economic, legal, sociological, criminological, security, it requires the involvement of researchers from different scientific fields for its explanation. Therefore, the problem of corruption should be approached multidisciplinary, especially for the reason that with the development of society and the state and the creation of new social relations, corruption also develops and adapts by taking on new forms and risk factors, which certainly creates new consequences. Therefore, it is about such a social phenomenon that should be constantly monitored, researched and ways to prevent it be found.

The basic characteristic and nature of corruption is its adaptability to all social and political changes and systems, which significantly complicates both its unique definition and finding unique measures to prevent it. Primarily, it was thought that corruption exists only in the public sector, until the development of capitalism saw it in the private sector as well (Obućinski, D., Brkić, I. & Mitrić, V., 2022). Also, relying exclusively on repressive action and punishing the perpetrator of such illegal behavior has proven to be insufficient and ineffective, especially as it concerns criminal acts where both the victim and the perpetrator have an interest in not reporting and proving it. Noticing all these omissions in the previous theoretical and practical observation and solving of the corruption problem led to a change in the angle of observation of the corruption problem by placing emphasis on prevention (Šikman, M., Tanjga, R., 2010).

The strategy of the fight against corruption has changed at the global level, instead of prosecuting individuals, it has moved to institutions, that is, anti-corruption action is aimed at broad conditions that lead to corruption, and not at corruption in itself (Lanyi, A., Azfar, O., 2005). The conclusion was reached that it is necessary to build an integrity system within the institution, as a prevention that eliminates the

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causes, conditions and circumstances of corruption (Simonović, B., 2010). One of the most effective anti-corruption preventive measures is the preparation of an integrity plan by each institution separately, with the control of a separate state body and monitoring of the achieved results.

Integrity implies the possibility of understanding and accepting certain standards and the individual choice of each person to behave and live in accordance with those principles, and those principles include fairness, honesty, sincerity, goodness and morality (Čorić, 2023). Integrity represents, therefore, the opposite of corruption, and activities aimed at building integrity and preventing corrupt and any other behavior that violates integrity represent integrity management. There are two approaches to integrity management: an approach based on controlling behavior through regulations ("rules based" approach), and an approach based on a system of values ("values based" approach), which was established by the OECD in 2009 (Maesschalck, J., Bertok, J., 2009). The best effects are achieved precisely by combining these approaches (Heywood, Marquette, Peiffer & Zúñiga, 2025).

Integrity plans combine these two approaches, are based on self-assessment, are drawn up and checked periodically and continuously, which is why they represent an excellent anti-corruption measure. In essence, all employees in the public administration, individually or through a person designated for that purpose in an institution, participate in recognizing illegal actions and proposing measures to prevent them (Rabrenović, 2014). Through the implementation of integrity plans and the application of ethical codes, the increase in knowledge of all employees about illegal behavior and the creation of a value system for each individual is influenced, along with their training, organizing seminars and surveys. This certainly affects the building of the integrity of each individual employed in that institution, which ultimately results in strengthening the integrity of the institution itself. When one takes into account the function of public administration in society, i.e. the fact that it is a state body whose actions decide on the largest number of citizens' rights guaranteed by the Constitution and laws (Torbica, 2021), every effort made to increase the degree of its integrity and the integrity of employed officials is necessary and useful. The integrity plan is set for the long term, the information obtained in one cycle of its implementation can serve as prevention for all future cases. On the basis of the acquired experiences, constants are formed, which are later only upgraded with new experiences and new ideas in ways of fighting corruption. The advantage of integrity plans is precisely that they are adaptable to every society and every system, and by studying them, cases are recognized that are characteristic both for individual institutions of a state system and for individual societies, and this represents an excellent basis for further forecasting of integrity management measures and adaption of anti-corruption plans, as well as the development of the entire anti-corruption system of a specific society.

2. MATERIALS AND METHODS

The article presents a comprehensive review of the implementation of integrity plans in the public administration of the Republic of Serbia, including its definition, the procedure of development and implementation by the institution itself, as well as control by the body provided for it. The research used a theoretical analysis of available but rare scientific and professional works in this area, together with an analysis of the content of relevant legal and by-laws in the Serbian legislation. The primary source of data for this work was the Agency for the Prevention of Corruption (A-CA), which is in charge of monitoring the adoption and implementation of integrity plans of all public authorities, has the role of a supervisory authority and keeps records of the implementation of this anti-corruption measure.

The research study is guided by research questions concerning the reasons for the comprehensive application of this anti-corruption measure only in the last ten years, although it was foreseen by the Serbian legislation in the National Strategy for the fight against corruption as early as 2005 (hereinafter: NSFAC "Official Gazette of the RS", no. 109/2005), and no significant progress was made even with the establishment of the Agency for the fight against corruption in 2010. Also, the data of public authority institutions determined by self-assessment and the measures foreseen within the integrity plan for the prevention of corruption, as well as areas recognized as sensitive for corrupt activities in certain institutions, were also processed. The author's intention is to show through this article that through good organization and the involvement of all employees of an institution in the development of an integrity plan, in a continuous process with a constant emphasis on the objectivity of self-assessment, with an adequate role of the Agency for the Prevention of Corruption, enviable results can be achieved in the fight against corruption and all other illegal behaviors.

3. INTEGRITY PLAN IN THE PUBLIC ADMINISTRATION OF THE REPUBLIC OF SERBIA – DEFINITION, PROCEDURE FOR DEVELOPMENT AND IMPLEMENTATION AND SUPERVISION OVER ITS IMPLEMENTATION

The application of integrity plans, its legislative norming and systemic relationship to this measure, is directly related to the state's determination of what kind of anti-corruption strategy it will implement. In the period when the Republic of Serbia was determined to fight corruption primarily with repressive measures, the Law on the Agency for the Fight against Corruption from 2008 (hereinafter: LACC, "Official Gazette of the RS" No. 97/2008, 53/2010, 66/2011 - US, 67/2013 - US, 112/2013 - Authentic interpretation, 8/2015 - US, 88/2019) only a few legal provisions are dedicated to the integrity plan, and not even a by-law, the Guidelines for the development and implementation of integrity plans (hereinafter: Guidelines from 2010 "Official Gazette of RS" No. 80/2010) did not pay more attention to this measure. By moving to the use of prevention in the prevention of corruption, building and strengthening the integrity of both institutions and individuals in society, integrity plans gain importance as a very important anti-corruption and preventive measure. Until the adoption of the currently valid Law on the Prevention of Corruption (hereinafter LPC, "Official Gazette of the RS" no. 35/2019, 88/2019, 11/2021 - Authentic Interpretation, 94/2021 and 14/2022), all important issues concerning integrity plans were resolved by the sub-legal act Guidelines for the preparation and implementation of integrity plans ("Official Gazette of the RS" no. 95/2016 and 56/2017). In that period, integrity plans were prepared in the manner provided by the by-law and the Integrity Plan Preparation Manual.

LPC (Art. 93-100, "Official Gazette of the RS" no. 35/2019, 88/2019, 11/2021 - Authentic Interpretation, 94/2021 and 14/2022) pays much more attention to integrity plans, and unlike the previous period, the terms of integrity and the purpose and content of the integrity plan are defined by law. Integrity is defined as a set of values and actions of public authorities, other organizations and legal entities that enable officials, employees and workers to respect laws, codes of conduct and act ethically with the aim of avoiding corruption and improving work. The integrity plan is defined as a document that represents the result of a self-assessment of the institution's integrity, and its goal is to improve integrity, transparency and professional ethics in relation to the assessed state. Therefore, with the integrity plan, the institution determines the starting point and determines the current situation in the field of its own integrity, and determines the measures and ways in which it could positively influence both its employees, the work process itself and in general raising the level of professionalism in work in further strengthening integrity.

The integrity plan necessarily contains areas and processes that are particularly risky for the emergence of corruption and assessment of the degree of corruption risk, preventive measures to eliminate the risks of corruption and deadlines for their implementation, as well as information on the persons responsible for implementing the measures from the integrity plan. The report on the implementation of the integrity plan contains data on whether the planned measures were implemented, the reasons why they were not, and a decision on the adoption of the report must be attached to it.

The circle of public authorities that are obliged to draw up integrity plans has been expanded, in addition to the previously foreseen state authorities, territorial autonomy and local self-government bodies, and all other legal entities whose founder or member is the Republic of Serbia, an autonomous province, a local self-government unit or a city municipality that has more than 30 employees, as well as public services and public enterprises. The responsibility of the manager responsible for the adoption of the integrity plan is foreseen for its adoption, implementation and reporting on the implementation, and acting contrary to the legal provisions carries a misdemeanor responsibility for which a fine is threatened. The legal provisions were elaborated and adapted to practical application through the adoption of the Instructions for the preparation and implementation of the integrity plan in 2022 (APC 2024. "Official Gazette of the RS" number: 119/2022 - refined text, 87/2024), as well as the comprehensive and substantive Manual for the preparation and implementation of the integrity plan (Agency for the Prevention of Corruption, 2021). It is foreseen that the procedure concerning an integrity plan will last three years and that after the expiration of that term and the preparation of the report, the next cycle of preparation of the integrity plan will begin.

The Agency for the Fight against Corruption, later, with the adoption of a new law, renamed the Agency for the Prevention of Corruption has a significant role in the field of corruption prevention and the implementation of measures of integrity plans. Primarily, its role, and legal obligation, is to organize and conduct trainings for all persons responsible for the development and implementation of integrity plans, to monitor the implementation and supervise the implementation of the proposed measures, to help by adopting by-laws, guidelines and instructions in better understanding of the way of preparation and self-assessment by those obliged to prepare the integrity plan (Art. 6 LPC). In addition, the Agency, in cooperation with the National Academy for Public Administration, as the central institution of the professional

development system in the public administration of the Republic of Serbia and a publicly recognized organizer of informal adult education activities, creates trainings for all employees in the public administration in the field of familiarization with all illegal behaviors, recognition of corruption, and ways to avoid it (Torbica, 2023).

4. REPORTS ON THE CREATION AND IMPLEMENTATION OF INTEGRITY PLANS IN THE PUBLIC ADMINISTRATION OF THE REPUBLIC OF SERBIA

Integrity plans were developed and implemented in the public authorities of the Republic of Serbia in three cycles. The first cycle represented the period from the adoption of the LACC and the Guidelines from 2010, the second cycle represents the period from the adoption of the Guidelines from 2016 and the third cycle represents the period after the adoption of the LPC and the Instructions for the development and implementation of the integrity plan from 2021. For each cycle, the Agency prepared a report analyzing the obtained data collected on the basis of direct control of the implementation of measures from prepared integrity plans of the sampled institutions on the territory of the entire country.

The results of the first cycle of development and implementation of the integrity plan were published in the Report of the Anti-corruption Agency of the Republic of Serbia on the implementation of integrity plans for the first cycle of their development (A-CA, 2016), and integrity plans were developed by less than half of the taxpayers, more precisely 47%. It was observed that the institutions are mostly faced with the problem of establishing adequate and efficient control of certain work processes. This can be concluded on the basis of the measures foreseen by the institutions themselves, which concern the need to establish effective control of a certain work process (adequate and timely reporting to the superior, limitation of discretionary powers, sanctioning of persons who do not fulfill their obligations), then the need for greater transparency in the performance of certain processes and their regulation by internal acts of the institution. The next problem was observed in the willingness of public authorities to introduce and develop practices and standards that are not prescribed by law as mandatory, from which the conclusion arises that most institutions do not have enough capacity and awareness of the need for internal self-regulation, which would fill certain gaps and vagueness that exist in the legislative framework or that areas that are not regulated regulate themselves with the mechanisms that are allowed and at their disposal. And finally, a significant problem was observed in the field of personnel management and human resources, which was reflected in the insufficient training of the personnel themselves, as well as the attitude towards those persons who are not permanently employed in the public authority. (Gligorić, S., Škorić, S., 2021) On average, the institutions did not implement even 50% of the planned measures, which is due to a lack of knowledge about what certain measures entail, which is due to the presentation that measures that have not been implemented are presented as if they were.

The results of the second cycle did not show a significant progress in the performance of the institution's self-assessment as well as in the prediction of measures to strengthen integrity, except that they provided information on the increase in the number of prepared integrity plans by taxpayers by 17%.

The results of the third cycle were published in the Report of the Agency for the Prevention of Corruption on the supervision of the development of the integrity plan in the third cycle 2021-2024 (APC, 2024) and showed progress in relation to the process of developing the integrity plan. The integrity plan was prepared by 100% of the institutions. In 81% of the institutions, the integrity plan was drawn up by persons who know the work of the institution well, in 75% of cases these were persons employed in key areas (legal sector, finance, information technology, etc.), and 56% of the institutions informed all their employees of the possibility that they could participate in the drafting of the integrity plan by anonymously completing the questionnaire. However, in only four institutions, more than 30% of employees answered the questionnaire, but it was observed that those answers were not taken into account in most cases by the persons who prepared the integrity plan. A greater number of institutions have regulated the area of ethics and personal integrity and developed Codes of Ethics, but it was observed that there is a smaller number of institutions where neither managers nor employees attended training in this area. Half of the institutions objectively assessed that they had not established a system of financial management and control, and a weaker assessment quality was also observed in the area of personnel management. Also, a deficiency was noticed in the correct assessment of the intensity of the risk of corruption in the work process, the formulation of measures, the good planning of their implementation and the determination of the persons responsible for their implementation.

5. DISCUSSION

In the first cycle of implementation, the shortcomings of the entire public administration were observed primarily in the inability to perform self-assessment, which is a consequence of insufficient knowledge, training and therefore the ability to recognize illegal actions and corrupt behavior. This was certainly contributed to by insufficiently precise legal terms and definitions of both integrity and the integrity plan itself, the lack of a comprehensive regulation of the ethics system through codes of conduct for employees of the entire public administration, the lack of norms related to whistleblowing, as well as insufficiently regulated procedures in the field of public procurement and public finances. Also, shortcomings were observed regarding the area of human resources, employment, systematization of employees, criteria for their deployment and promotion.

The second cycle represented a transitional phase, which can be clearly concluded from the complete turnaround in relation to the integrity plan through the by-law, in which a systematic preparation was made for the adoption of a new law that will regulate this area differently and more clearly. In this period, the Agency for the fight against corruption played a major role, as a legal entity that has significant powers in the field of fighting and preventing the occurrence of corruption. The agency made a great effort to train all persons who have certain roles in the process of developing an integrity plan, to prepare models of integrity plans for all specific areas of public administration, to recognize the necessity of familiarizing and training all employees in public administration about behaviors that are undesirable and how to avoid them, how to react to them, in order to finally form a professional, transparent and public administration that is at the service of citizens. In that period, laws were passed that regulated the area of whistle-blowing, public finances, public procurement, and various regulations and internal acts, the lack of which was noticed during the self-assessment of institutions.

The third cycle represented the final phase and actually marks the beginning of the implementation of the integrity plan in its full purpose and meaning that it should produce. With the adoption of the new law, the change of course, from repressive to preventive action against corruption, became obvious, starting with the change of the name of the law and the Agency in charge of that area, that is, from the Anti-Corruption Agency to the current name of the Agency for the Prevention of Corruption. Also, a significant advance was made by prescribing a penalty for failing to fulfill the legal obligations of developing and implementing an integrity plan for the head of the institution, which influenced all institutions to participate in the development and implementation of this anti-corruption measure. With the participation of the National Academy for Public Administration, trainings were conducted for the majority of public administration employees on the subject of corruption, not only for certain persons who were in charge of those tasks and whose training was carried out by the Agency. The preparation and supervision of the implementation of integrity plans was facilitated through the improvement of the methodology of its preparation, the method of participation of all employees in that procedure was affirmed, and the areas that need to be improved in the future were identified. Also, since they were prepared by all taxpayers and made available via the Internet, the meaning and function of the transparency of the work of the public administration gained full meaning.

6. CONCLUSION

Integrity plans have certain characteristics that make them currently the best solution in the prevention of corruption: they are flexible and have the potential to adapt to all new ways of manifesting corruption, they are multidisciplinary, which means that they include the principles of security, economic, organizational, psychological, sociological and legal sciences, they have the ability of continuous development, continuous qualitative improvement, their creation and implementation directly affects the increase in the level of integrity, responsibility and professionalism of each individual employed in the institution, and ultimately of each member society. In addition, by studying the results of integrity plans, one can clearly see the existence of problems in the functioning of certain areas or processes that need to be solved systematically either through the adoption of new or by amending existing laws that would better or completely solve that area.

However, objectivity in assessing the risk of corruption in institutions in the public sector is still debatable. Therefore, in addition to the conducted trainings on this topic, facilitating the development of plans through already created models and already offered answers, which certainly accelerated this process, the institutions are still not ready to notice and map the points in their work that are risky for corruption, and consequently to foresee measures to overcome this in the future. In the coming period, attention should certainly be paid to overcoming these omissions, first by publicly pointing out the shortcomings of

each institution individually, and if such behavior continues to be repeated, consider prescribing misdemeanor liability for non-objective self-assessment without appropriate argumentation.

Since integrity plans are drawn up by all taxpayers and are available to the public via the Internet, it is to be expected that citizens, who are the largest users of public administration services, get involved in corruption risk mapping in accordance with their experience. The transparency of these documents enabled the insight of other institutions, especially those dealing with internal financial control, as a broader framework of integrity management. This is one more reason for the affirmation of institutions that they perform self-assessment objectively.

The development of artificial intelligence and its application in public administration in the not-so-distant future will certainly affect the increase in the efficiency of public services and the simplification of certain administrative processes, which will certainly reduce corruption and increase citizens' trust in institutions. Accordingly, institutions should devote the next period to designing in which processes in their work the use of artificial intelligence would be most effective, and to start preparing basic data that will be used and analyzed by artificial intelligence in the future. In this way, the moment of the start of using artificial intelligence in public administration will be ready, and a prepared set of quality data would reduce to a minimum the abuse of artificial intelligence in corrupt activities.

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CLIMATE CHANGE AS BIOPOLITICAL RUPTURE: SURVEILLANCE, SECURITY AND THE UNEQUAL GOVERNANCE OF LIFE

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Abstract: This paper analyzes climate change through the theoretical lens of biopolitics, emphasizing that the global climate crisis is not only an ecological phenomenon but also a political event that restructures how life is governed, protected, and exposed to risk. Drawing on the work of foundational thinkers such as Foucault, Agamben, Mbembe, Esposito, and others, the paper explores how climate governance operates as a biopolitical apparatus, monitoring, regulating, and stratifying populations based on their perceived value and vulnerability. Using a critical, interpretive methodology grounded in political philosophy and supported by illustrative case studies, the study examines how biopolitical theory enables a deeper understanding of adaptation and resilience strategies, highlighting how such measures often reinforce global inequalities rather than resolve them. Climate-related interventions frequently channel political decision-making into technical solutions, sidelining democratic participation and ethical responsibility. The paper critiques key trends such as necropolitics, eco-fascism, and green colonialism, which reveal how biopolitical climate governance can marginalize and displace vulnerable communities under the guise of sustainability. It also addresses the ethical dilemma of resilience, arguing that adaptive strategies too often place responsibility on individuals while neglecting systemic causes of vulnerability. Finally, the study calls for an emancipatory form of biopolitics, one grounded in solidarity, ecological justice, and care, rather than control. By foregrounding ethical and philosophical critique, the paper argues that confronting the climate crisis requires rethinking how life itself is valued and protected in the Anthropocene.

Keywords: *biopolitics, climate change, ecological security, ecological justice, necropolitics.*

Field: Social Sciences

1. INTRODUCTION

Although biopolitics is often understood as a conceptual framework that places sovereign power at the center of political life (Coleman & Grove, 2009), the term has since been widely adapted to address diverse research contexts. The versatility of the concept grants it significant ontological weight across multiple disciplines. Originally rooted in political philosophy, biopolitics has evolved into a valuable interdisciplinary analytical tool that, despite its broad applications, has retained a coherent core meaning. The term itself, derived from *bios* (life) and *politics*, denotes the intersection of biological existence with political and legal systems, thus integrating dimensions of life with structures of governance and sovereignty. It challenges conventional distinctions between “nature” and “culture,” echoing the classical Greek dichotomy between *physis* (nature) and *nomos* (law) (Losoncz & Takács, 2015).

Contemporary discourse on biopolitics is largely shaped by the work of Michel Foucault (1926–1984), who incorporated the concept into his historical and theoretical analysis of power, not as coercion or legal authority, but as a process of normalization, subjectification, and rationalization of power relations within social life. In doing so, Foucault displaced traditional political frameworks by locating influence and control within the broader matrix of social relations. Central to his analysis is the concept of biopower, which he defined as a set of mechanisms directed at the biological characteristics of human beings, characteristics that, through historical processes, became the focus of political and social strategies (Foucault, 2007).

Foucault identified three principal axes through which biopower operates. The first, the “anatomopolitics of the human body,” refers to the disciplining and regulation of individual bodies. The second, “the politics of the population,” addresses the management of collective life - focusing on population growth, health, life expectancy, and the social body. In this form, biopolitics does not operate solely on the individual but also targets populations as species groups, enabling the implementation of regulatory strategies across modern societies. The third axis involves knowledge production, which serves as a critical support

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system for biopower. Foucault emphasized the role of disciplines such as demography, political economy, statistics, and medicine in enabling the state to govern populations more effectively (Takács, 2017). These knowledge systems form the infrastructure of biopolitical governance, offering protection against threats to societal well-being, including environmental dangers that could undermine ecological systems vital to prosperity (Cavanagh, 2014).

Together, these pillars constitute a comprehensive biopolitical framework for societal development and targeted social intervention, aiming at the protection and optimization of both individual and collective life. Today, Foucault's historical and conceptual analysis of biopower serves as a foundational approach in diverse fields across the humanities and social sciences. His theories remain relevant to contemporary global governance, particularly in areas concerning human security, public health, and risk management. Increasingly, biopolitical theory also provides critical insight into pressing geopolitical issues such as ecopolitics and climate change (Imanaka, 2023).

The climate crisis represents not only a scientific and ecological challenge but also a profound political and philosophical problem. In recent years, both scholars and policymakers have drawn upon biopolitical frameworks to interrogate the governance strategies used to address climate change. As ecological threats become more severe, states, corporations, and international organizations increasingly frame climate change as a matter of survival, expanding the reach of biopolitical interventions into ecological domains.

The biopolitical dimensions of climate change are firmly grounded in Michel Foucault's theoretical concept of biopolitics, which is intrinsically linked to questions of human and population survival. Biopolitics, according to Foucault, operates through what he terms biopower, a dual logic involving both the discipline of individual bodies (anatomy-politics) and the regulation of populations (biopolitics proper). Through these mechanisms, modern states are able to produce "healthy" and "productive" citizens while managing collective threats such as disease, poverty, and environmental degradation.

Expanding on Foucault's framework, Giorgio Agamben (1942–) introduces the concept of bare life (Homo Sacer), denoting a life stripped of political and legal recognition, subject to exclusion and sovereign violence (Agamben, 1998). Agamben reorients the concept of biopower toward sovereignty, arguing that sovereignty is inherently biopolitical. He contends that modern political orders are characterized by the existence of lives that can be killed without legal or moral consequence (Yang, 2018). Bare life, for Agamben, is not a biological given but a product of the sovereign's foundational act of exclusion (Losoncz & Takács, 2015). Within this logic, climate change produces new forms of bare life, notably, climate refugees, whose displacement and vulnerability fall outside the protections of statehood and citizenship.

More recently, Achille Mbembe (1957–) has extended the biopolitical framework through his theory of necropolitics, which explores how power determines who may live and who must die. In the context of climate change, necropolitics is expressed through unequal exposure to environmental risks based on race, class, and geography. Rising sea levels, drought, and toxic pollution disproportionately impact communities with the least political and economic power, exposing the necropolitical dynamics of climate governance (Lucatello & Carrill, 2023).

Italian philosophers Michael Hardt (1960–) and Antonio Negri (1933–2023) also build on Foucault's concept of biopolitics, yet direct it toward new ontological and political possibilities. They emphasize the role of biopolitics not only as a tool of social control but also as a site of potential resistance. For Hardt and Negri, biopolitics intersects with economic production and the management of life through labor, positioning exploitation and liberation as central dynamics of individual and collective life. They contrast biopower, exercised by the sovereign or "Empire", with biopotence, the creative and transformative force of the multitude (Hardt & Negri, 2000).

Roberto Esposito (1950–) offers yet another distinct trajectory within biopolitical thought, focusing on the philosophical roots of community (*communitas*) and immunity (*immunitas*). While community implies openness and shared life, immunity denotes protection from obligations or danger. Esposito argues that modern politics increasingly functions through an immunitary logic, defending the social body by drawing boundaries and implementing exclusionary mechanisms. Unlike Foucault's focus on productive power or Agamben's emphasis on sovereign exception, Esposito highlights the paradox of immunization: the need to preserve life by introducing controlled exposure to risk, which can ultimately lead to isolation or self-destruction (Esposito & Hanafi, 2013). In the context of climate change, Esposito's concept of immunization provides a compelling framework for analyzing environmental governance. Contemporary climate policies often reflect an immunological rationale, in which certain populations and territories are fortified against ecological disruption, frequently at the expense of more vulnerable groups. These interventions do not merely seek to neutralize external threats, they often introduce controlled exposure to danger through selective adaptation measures, the securitization of borders against climate migrants,

or technological fixes such as geoengineering. Though framed as protective, these strategies risk exacerbating global inequalities and reinforcing the very systems of exclusion they claim to resolve. In this sense, climate governance mirrors the biopolitical tension Esposito identifies, between the preservation of life and the enactment of mechanisms that undermine the conditions for a shared, sustainable existence (Esposito, 2011).

Other theorists have further expanded the biopolitical paradigm beyond the human subject. Elizabeth Povinelli (1962–) and Bruno Latour (1947–2022) argue that climate governance now operates at the level of planetary politics (Latour) and geontopower (Povinelli). These frameworks challenge anthropocentric assumptions and emphasize the governance of non-human life, geophysical systems, and ecological processes (Povinelli et al., 2017; Latour, 2017). From this perspective, climate change involves not only the regulation of human populations but also the management of ecosystems, atmospheric processes, and planetary boundaries.

Together, these theoretical approaches provide a robust foundation for analyzing climate change as a profoundly biopolitical issue, one in which the governance of life is inseparable from systems of exclusion, control, and ecological survival.

2. MATERIALS AND METHODS

This paper adopts a theoretical and critical methodology, grounded in political philosophy and qualitative discourse analysis. The aim is to interpret climate governance not merely as a set of policy mechanisms, but as a form of power that organizes and regulates life, risk, and survival. In addition to conceptual analysis, selected illustrative case studies are included to demonstrate how abstract biopolitical frameworks materialize in real-world climate interventions. These cases are drawn from secondary sources and serve to ground the theoretical argument in concrete socio-political dynamics. Ultimately, the methodology is interpretive rather than empirical, and its contribution lies in conceptual clarification, critical synthesis, and normative reflection on the ethics and politics of life in the age of climate breakdown.

3. RESULTS AND DISCUSSIONS

Climate change is both an ecological and scientific phenomenon and a deeply political process that intensifies the unequal distribution of life, risk, and vulnerability across the globe. From a biopolitical perspective, climate change functions as an event that compels states and institutions to reconfigure how life is managed, secured, and exposed to harm. As Foucault (2003) argued, such an event is not a discrete occurrence, but rather a transformation in the conditions of governance and the rationalities through which populations are regulated. Climate change is thus framed as a domain where states can demonstrate their capacity to sustain life, though this framing often intersects with securitization discourses and risk management logics. As Oels (2013) notes, this shift marks the “climatization” of security, an emergent biopolitical logic that mobilizes populations to adapt to extreme contingencies.

Key concepts from biopolitical theory, such as visibility, securitization, individual risk, and population control, have become increasingly entwined with environmental governance. Biopolitics is now frequently linked to the management of ecological uncertainty and crisis. It provides a framework for critically analyzing adaptation and resilience techniques, not from a purely technical standpoint, but through their implications for empowering vulnerable populations and enhancing community adaptive capacity. Rather than offering concrete solutions, the biopolitical lens problematizes the ethical and political conditions under which such measures operate. It situates adaptation as an ethical-aesthetic and political issue, rather than a purely technocratic one. Yet, even as biopolitical discourse challenges narrow technical framings, it may still contribute to channeling climate adaptation toward instrumental, security-oriented responses.

Grove (2014) categorizes biopolitical approaches to adaptation into three primary forms. The first, “ordered life,” reflects traditional understandings of adaptation, viewing the socio-ecological system as inherently vulnerable and seeking to restore a prior state of equilibrium. The second, “logistical life,” interprets vulnerability as a precondition and advocates for reconfiguring the flows of people, goods, and information to manage and reduce risk. The third, “resilient life,” focuses on cultivating the ability to endure unknown threats by maintaining the core functions of socio-ecological systems. In this final mode, adaptation does not bridge present and future conditions through long-term planning but instead creates specific forms of life that are flexible, reactive, and optimized for uncertainty. These interventions seek to construct the “resilient subject”- an individual or community capable of adapting to systemic change, often without questioning or altering the broader systems that produce vulnerability in the first place.

Governments and international institutions have responded to the climate crisis with a proliferation

of surveillance, regulatory, and emergency management strategies, many of which operate through biopolitical logics. Predictive climate modeling, health surveillance in disaster zones, and the demographic monitoring of vulnerable populations reflect efforts to measure, anticipate, and govern life at a planetary scale. These technologies are frequently accompanied by securitization narratives that frame climate change as a national or global threat, thereby justifying exceptional governance practices such as militarized borders or restrictions on mobility (Hartmann, 2010).

The governance of climate change is also shaped by profound geographic and racial inequalities. Wealthy countries, equipped with advanced technology and infrastructure, implement protective measures such as seawalls, heat resilience strategies, or climate insurance schemes. Meanwhile, communities in the Global South face increasing exposure to climate-induced disasters with limited institutional support. This disparity reflects a necropolitical logic (Mbembe, 2003; Nixon, 2011), wherein certain populations are deliberately or passively exposed to environmental degradation, slow violence, and premature death.

One of the most visible manifestations of climate change as a biopolitical event is the emergence of climate refugees, individuals displaced by ecological factors who often fall outside the protection of international law. These individuals occupy a liminal zone, wherein their vulnerability is acknowledged but not institutionally addressed (Baldwin, 2012). This condition closely parallels Agamben's (1998) concept of bare life, existence recognized only through its exposure and disposability, lacking political representation or legal protection.

In this light, climate change emerges not only as a scientific or ecological crisis, but as a biopolitical rupture that reorganizes how life is valued, governed, and excluded. It foregrounds the mechanisms by which some lives are safeguarded and enhanced, while others are rendered expendable. The unequal governance of climate change thus reinforces entrenched hierarchies of race, class, and geography, transforming the planet into a stratified field of risk and protection.

Despite the growing theoretical interest in biopolitics and climate change, empirical work remains limited. One relevant domain is the governance of climate-induced migration. As Turhan et al. (2015) illustrate through the case of seasonal workers in Turkey, discourses of adaptation may obscure biopolitical interventions. Although framed in terms of resilience, these policies often aim to ensure the uninterrupted circulation of goods and labor rather than to address the root causes of vulnerability.

3.1 Governance, surveillance and ecological security

In the era of climate change, the governance of life increasingly operates through mechanisms of surveillance and securitization. Climate governance has moved beyond the realm of international treaties and environmental policy frameworks to encompass a complex network of institutions, technologies, and discourses that frame the climate crisis as a matter of national, regional, and even planetary security. This transformation marks a shift from environmental management toward ecological security, a biopolitical strategy that merges environmental risk with the logic of control, reshaping how power is exercised over populations and territories.

Surveillance technologies play a central role in this transition. With the proliferation of satellite imagery, predictive climate models, environmental sensors, and artificial intelligence-driven monitoring systems, states and corporations now possess unprecedented capabilities to quantify, model, and manage environmental variables. While these tools are often promoted as necessary for sustainability and resilience, they also function as biopolitical instruments of control. They identify which populations are considered "at risk," which resources are most valuable, and which regions warrant intervention - or abandonment (Evans & Reid, 2014). The use of big data in environmental monitoring often abstracts vulnerability from its social and political roots, reducing complex realities to manageable risk categories.

A vivid example of this is found in California, where wildfire surveillance systems like ALERTCalifornia, developed by the University of California, San Diego, deploy over 1,150 AI-equipped cameras to monitor fire-prone regions. These systems have detected over 1,200 fires, frequently identifying them faster than human observers and allowing quicker emergency responses (Carlton, 2025). While ostensibly aimed at protecting lives and property, such systems also redefine how rural and forested landscapes are governed. Populations residing in high-risk zones often face exclusionary zoning laws, higher insurance premiums, and displacement, transforming these territories into laboratories for anticipatory governance and spatial immunization.

The language of climate security increasingly legitimizes exceptional governance measures, including military deployments, border militarization, and the policing of resource conflicts. As climate change is framed as a "threat multiplier" in defense and geopolitical strategies, it becomes the basis for anticipatory governance, actions taken based not on immediate crises but on modeled futures (Dalby, 2009). This

reflects Foucault's insight that modern power operates by managing life under conditions of uncertainty.

For example, the U.S. Department of Defense has formally recognized climate change as a national security threat, incorporating climate projections into its long-term strategic planning. This includes climate-proofing military infrastructure, modeling scenarios for geopolitical instability, and assessing transboundary threats such as migration and resource scarcity (Bucknam, 2023). Such policies extend the reach of military power into environmental and humanitarian domains, effectively rendering entire regions and populations governable under the rubric of defense.

However, these ecological security strategies are applied unevenly and often reinforce global hierarchies of power, race, and capital. Climate adaptation funds, for instance, are disproportionately directed toward wealthier nations and private-sector projects. In contrast, communities in the Global South are frequently subjected to top-down interventions, such as forced relocation or land-use restrictions, with little opportunity for democratic participation (Bettini, 2013). These dynamics are evident in the case of planned relocations in Fiji, where rising sea levels have displaced coastal communities. Although presented by the Fijian government and international donors as proactive climate adaptation, the affected populations often experience disempowerment, losing ancestral lands and having minimal involvement in relocation decisions (McMichael & Powell, 2021). This reveals an ethical tension in resilience policies, where survival is achieved through displacement, rather than structural justice.

Similarly, ecological security regimes frequently blur the boundaries between environmental protection and economic extraction. Large-scale green infrastructure, renewable energy projects, and conservation programs—often justified in terms of sustainability, can displace Indigenous communities or privatize ecological commons. Scholars describe this as green extractivism: a biopolitical logic in which the environment becomes both a site of governance and a resource to be exploited (Fairhead, Leach, & Scoones, 2012).

Thus, governance in the age of climate change is deeply biopolitical: it surveils, predicts, secures, and disciplines both life and territory. Rather than addressing the structural causes of ecological degradation, these strategies often re-inscribe existing inequalities under the guise of environmental protection and resilience.

3.2 Critiques and ethical considerations

As climate governance increasingly adopts biopolitical logics, characterized by surveillance, security, and the management of life, it has come under growing ethical and political scrutiny. While these strategies often claim to protect life and ensure resilience, they frequently do so by reinforcing existing inequalities, sacrificing certain lives, or rendering others less valuable. This section explores several major critiques of biopolitical climate governance, drawing on frameworks such as necropolitics, eco-fascism, and green colonialism, and reflects on the possibility of alternative, emancipatory approaches.

Table 1. Major Biopolitical Critiques of Climate Governance

Framework	Core Concept	Mechanism of Power	of Implication for Climate Governance	Illustrative Example
Necropolitics	Power over life and death	Sovereign exclusion	Abandonment of vulnerable populations	of Desertification in the Sahel; urban heat deaths
Eco-fascism	Ecological purity as exclusion	Ethno-national securitization	Militarized borders; anti-migrant climate narratives	US/Mexico and EU border securitization
Green colonialism	Environmentalism as neocolonial control	Neoliberal appropriation	Displacement through conservation or carbon offset schemes	REDD+ land grabs; Indigenous displacement
Resilience critique	Individualized burden of adaptation	Depoliticization of structural risk	Adaptation without reform; burden placed on communities	Fiji village relocations; informal settlement upgrades

Source: Synthesized from Mbembe (2003), Yusoff (2018), Evans & Reid (2014), Conversi (2024), McMichael & Powell (2021).

Necropolitics and the Unequal Valuation of Life – Achille Mbembe's theory of necropolitics offers a compelling extension of the biopolitical critique by highlighting how power determines "who may live and who must die" (Mbembe, 2003). In the context of climate change, this logic becomes visible in the abandonment of vulnerable populations, the prioritization of economic assets over human lives, and the

differential exposure to environmental hazards. From heat-related deaths in urban slums to the slow violence of drought and desertification in regions like the Sahel, large groups of people are left to perish, not as a failure of governance, but as a function of it. Climate abandonment thus becomes a feature of power in the Anthropocene.

Eco-Fascism and Exclusive Climate Politics – A second danger arises in the form of eco-fascist ideologies, which equate ecological preservation with ethnic or national purity. These ideologies frame environmental degradation as the result of overpopulation or migration, offering authoritarian solutions such as militarized borders, forced sterilization, or the expropriation of land. Under the guise of ecological protection, eco-fascism promotes regressive policies that reinforce racial and ethnic hierarchies, treating some lives as expendable for the sake of a supposedly “balanced” ecosystem (Conversi, 2024). This trend underscores the risks of climate governance that lacks a firm ethical commitment to justice, inclusion, and the protection of all life.

Green Colonialism and Global Inequality – Climate interventions have also been widely critiqued for reproducing colonial structures of appropriation and control, now reframed in the language of sustainability. This phenomenon, known as green colonialism, involves the appropriation of land for conservation zones, renewable energy projects, or carbon offset schemes, often displacing Indigenous peoples and local communities (Yusoff, 2018). In this context, the Global South is simultaneously blamed for environmental degradation and positioned as a testing ground for solutions to problems largely created by industrialized nations. The result is a paradoxical relationship of dependency, extraction, and exclusion under the banner of climate action.

The Ethical Dilemma of Resilience – Resilience, a central concept in contemporary climate discourse, also warrants critical examination. While often presented as an empowering ideal, resilience can shift the burden of adaptation onto individuals and communities, leaving underlying structural causes of vulnerability unaddressed. Critics argue that this framing naturalizes inequality by emphasizing flexibility and self-reliance over systemic change or the guarantee of rights (Evans & Reid, 2014). As a biopolitical strategy, resilience frequently justifies minimal intervention, accepts harm as inevitable, and displaces responsibility from institutions onto those who are already most at risk.

Emancipatory Biopolitics – Despite these critiques, scholars have also called for more emancipatory forms of biopolitics, frameworks that acknowledge the interdependence of human and non-human life, and that aim for the equitable distribution of care, protection, and environmental responsibility. These approaches are grounded in principles of ecological justice, solidarity, and participatory governance. Rather than reproducing logics of exclusion and control, they seek to reimagine climate governance in ways that affirm the plurality of life and foster a shared sense of planetary belonging.

4. CONCLUSION

Viewing the climate crisis through the lens of biopolitics reveals that it is not merely an ecological emergency, but a fundamental transformation in how life is governed, valued, and rendered vulnerable. This paper has shown that climate governance is increasingly shaped by biopolitical mechanisms - surveillance, securitization, displacement, and population management - that determine which lives are protected, which are abandoned, and which are exposed to systemic harm. The emergence of categories such as “climate refugees,” the militarization of borders, and the privatization of ecological resources illustrate how deeply embedded biopolitical logics have become in environmental policy.

While often presented as technocratic or neutral solutions, biopolitical interventions in climate governance frequently reinforce existing hierarchies of power, race, and capital. The critiques explored, from necropolitics to eco-fascism and green colonialism, make clear that these are not marginal anomalies, but structural features of a climate politics that has failed to center justice and planetary care.

Nevertheless, this trajectory is not inevitable. Recognizing the biopolitical nature of climate governance allows us to pose more transformative questions: Who benefits from current climate strategies? Who is excluded? What forms of life do we seek to protect, and at what cost? Answering these questions requires a shift from resilience as mere survival to a vision of climate justice rooted in solidarity, equity, and shared responsibility. Ultimately, the challenge of climate change is not only technical or ecological, it is profoundly philosophical and political. It calls for rethinking the very principles by which life is governed in the Anthropocene.

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MACROECONOMIC MOVEMENTS IN SERBIA WITH REFERENCE TO RURAL TOURISM IN 2025

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Abstract: The development of rural tourism in the Republic of Serbia aims to diversify the rural economy by reducing poverty, improving living standards, preserving the national cultural heritage, protecting the environment and promoting more balanced regional development. In accordance with its enormous potential, the development of rural tourism in the Republic of Serbia aims to contribute to the general development of tourism in the country. This paper aims to analyze macroeconomic developments in the Republic of Serbia during 2025, with special emphasis on key indicators of economic stability, such as gross domestic product (GDP) growth, inflation, unemployment, trade and investments. The analysis uses the latest data from the Statistical Office of the Republic of Serbia, the National Bank of Serbia, as well as relevant international sources such as the International Monetary Fund (IMF) and the European Commission. The goal of the analysis is to present a realistic picture of economic flows in Serbia during the observed year and to assess the conditions for sustainable development in the following period. Special emphasis was placed on the emergence and development of rural tourism as an activity of great importance for the economic revival of rural areas, the reduction of regional inequalities and the encouragement of local self-employment. The paper indicates that, despite global challenges and the influence of external trends, the Serbian economy showed a certain level of resilience in 2025. Moderate GDP growth was recorded, inflation was significantly reduced compared to previous years, while unemployment is decreasing, especially in the service and tourism sectors. At the same time, foreign direct investors are showing interest in new and sustainable branches of the economy, among which rural tourism is gaining an increasing role. The growth in the number of households that are actively involved in tourist activities in rural areas is particularly noticeable, which, together with the increase in the number of overnight stays and larger budget allocations, indicates a positive development trend. The analysis of rural tourism includes its economic effects on local communities, including increasing household income, creating new jobs, improving local infrastructure and reviving traditional crafts and agriculture. The analysis of rural tourism includes its economic effects on local communities, including increasing household income, creating new jobs, improving local infrastructure and reviving traditional crafts and agriculture. The analysis of rural tourism includes its economic effects on local communities, including increasing household income, creating new jobs, improving local infrastructure and reviving traditional crafts and agriculture. The paper also discusses institutional and financial mechanisms to support the development of rural tourism, including subsidy programs, grants, incentives for youth and women, as well as the opportunities offered by the IPARD funds of the European Union. The necessity of strengthening administrative capacities, better territorial coordination and digitization is indicated as a prerequisite for further progress. The conclusions of the work point to the need to improve a strategic approach to economic policy, which would include rural tourism as a priority area within regional development. The potential of this activity is not only in the tourist offer, but also in its ability to generate positive socio-economic effects through long-term sustainability, preservation of cultural heritage and improvement of the quality of life in rural areas. The paper ends with a set of recommendations for the improvement of existing policies and measures, as well as a call for greater intersectoral cooperation between the state, local self-governments, the private sector and civil society.

Keywords: *macroeconomics, rural tourism, unemployment, regional development, economic policy.*

Field: Economy sciences

1. INTRODUCTION

In the modern conditions of global economic changes, accompanied by crises, regional inequalities and accelerated technological development, the preservation of macroeconomic stability and the discovery of new development potentials become the priorities of the economic policy of each state. In 2025, the Republic of Serbia faces the need to respond to challenges such as occasional inflationary pressures, stagnation of productivity in traditional sectors, but also population migration from smaller areas to urban centers and abroad. In this context, developing sectors that enable balanced regional development and increasing employment is one of the most important tasks of the state strategy. (Kostic & Stanasic, 2022)

One such sector that has been increasingly in the focus of public policies in the last few years is

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rural tourism - a form of tourism that takes place in rural areas and that includes the stay of tourists in villages, visits to natural sites, traditional gastronomy, activities in nature and familiarization with cultural heritage. (Borovic, Stojanovic, & Cvijanovic, 2022) In the era after the COVID-19 pandemic, there was an interest in isolated, authentic and sustainable forms of tourism, which further emphasized the importance of rural tourism in the strategic planning of the development of Serbia (Luković et al., 2022).

Although the early forms of rural tourism in Serbia existed decades ago, it has only been institutionalized and marketed in the last ten years (Tasić, 2018). This was contributed by the growing awareness of the importance of rural preservation, the availability of funds from EU funds (especially through IPARD programs), digitalization of business and promotions, as well as global trends in sustainable tourism. It is becoming especially important that rural tourism is increasingly associated with economic measures aimed at strengthening the local economy, reducing unemployment, as well as the return and stay of young people in smaller communities. At the same time, the development of rural tourism cannot be viewed in isolation - it is closely related to macroeconomic indicators and the overall economic environment. (MPSV, 2023) Stable GDP growth, low inflation, favorable conditions for investments and infrastructure development are the basic prerequisites for creating an environment in which tourism in general, and especially its rural component, can successfully develop. (OCED, 2020)

The aim of this paper is to present the current macroeconomic trends in Serbia in 2025, to connect them with the development of the rural tourism sector and to analyze the economic and institutional preconditions for its further progress. The work deals with the analysis of key indicators (GDP, inflation, unemployment, investments, exports) and in parallel monitors indicators related to rural tourism (number of overnight stays, number of households, budget allocations). The basic research thesis is that in conditions of moderate macroeconomic stability, precisely rural tourism can have multiple positive effects on local and regional development, if it is systematically supported through strategic policies and financial incentives.

2. MATERIALS AND METHODS

This research relies on a quantitative approach to the analysis of secondary data sources, with the aim of assessing the state and dynamics of the macroeconomic indicators of the Republic of Serbia in 2025, as well as establishing the role of rural tourism within the wider economic context. The methodological framework of the work includes the collection, systematization and analysis of relevant statistical and institutional sources, which enables descriptive and comparative data processing. Primary data sources include official publications of the Statistical Office of the Republic of Serbia (RSS), such as monthly bulletins, announcements and yearbooks; then the reports of the National Bank of Serbia (NBS), especially in the part related to inflation, the reference interest rate and the labor market; as well as available analyzes and forecasts of international organizations, primarily the International Monetary Fund (IMF), the World Bank, and the European Commission.

In the part related to rural tourism, data from the Ministry of Tourism and Youth of the Republic of Serbia, annual reports on the implementation of the IPARD II program, and local strategic documents from municipalities with developed rural tourism (eg Čajetina, Knjaževac, Topola) were used. Overview data on the number of overnight stays, the number of active households, the amount of budget allocations and the number of supported users of public funds in rural areas were also collected.

The analysis was conducted through:

- descriptive statistics, in order to show the basic trends (growth or decline) of key macroeconomic indicators in the period 2021-2025;
- comparative analysis, in order to compare changes in the rural tourism sector over a five-year time frame;
- tabular and graphical presentation of data, which allows for a clearer interpretation of trends and relationships between variables;
- correlative assessments, through observing the interdependence between macroeconomic conditions and local tourism development.

In order to present the data as accurately as possible, all numerical displays have been updated by the end of April 2025, and the values are expressed in millions of dinars or euros, in accordance with the source convention. The tables and graphs were created by the author based on publicly available data, with the note that this is a processing of secondary sources, without conducting primary field research. Limitations of the methods used relate to the partial availability of data from individual municipalities, possible delays in the publication of official statistics, as well as the fact that the impact of some economic measures (e.g. investments in tourism) can only be assessed in the medium or long term.

3. RESULTS

The analysis of macroeconomic trends and the development of rural tourism in Serbia in the period 2021–2025 provides insight into the trends that shaped the economic environment on the eve of and during 2025. The focus is on three main aspects: macroeconomic indicators (GDP, inflation, unemployment), the dynamics of rural tourism development (number of overnight stays and number of households), and budget incentives for the improvement of tourism in rural areas. Below are tables summarizing key data for the specified time period, with explanations that further contextualize them.

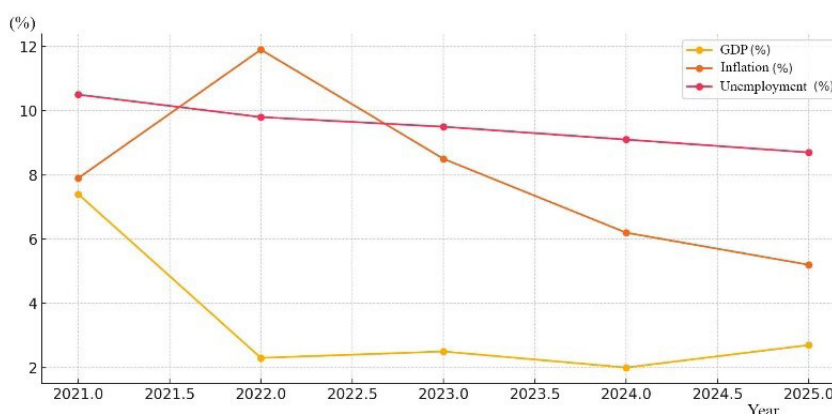
Table 1. Macroeconomic indicators of Serbia (2021–2025)

Year	GDP (%)	Inflation (%)	Unemployment (%)
2021	7.4	7.9	10.5
2022	2.3	11.9	9.8
2023	2.5	8.5	9.5
2024	2.0	6.2	9.1
2025	2.7	5.2	8.7

Source: NBS, Available at: <https://nbs.rs/en/drugi-nivo-navigacije/statistika/>

Table 1 shows the stabilization of macroeconomic indicators during the observed period. After a sharp slowdown in GDP growth after the pandemic in 2021, a gradual recovery of economic activity is observed, with moderate growth of 2.7% in 2025.

Graph 1. Macroeconomic indicators of Serbia (2021-2025)



Source: Source: Authors, based on data from the table

Inflation reached double-digit levels (11.9%) in 2022, but thanks to restrictive monetary policy measures, it is expected to decline to 5.2% by 2025. The unemployment rate is steadily declining, suggesting a recovery in the labor market and possible shifts in sectors with greater employment capacity, such as services and tourism.

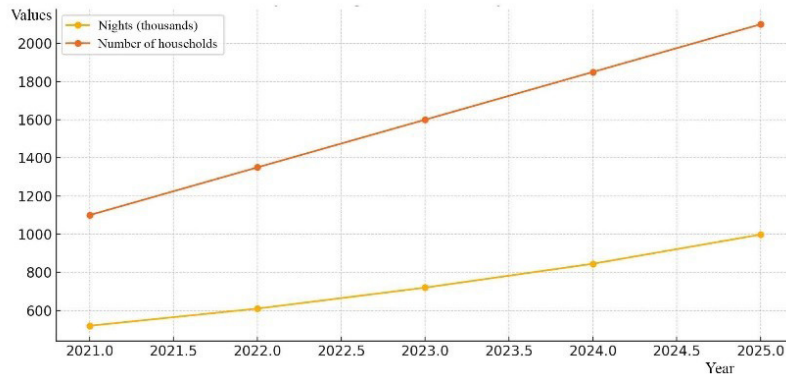
Table 2. Development of rural tourism in Serbia (2021–2025)

Year	Nights (thousands)	Number of households
2021	520	1,100
2022	610	1,350
2023	720	1,600
2024	845	1,850
2025	998	2,100

Source: RSZ, 2023

The number of overnight stays in rural areas of Serbia is constantly increasing, which indicates the growing popularity of this form of tourism. From 520 thousand overnight stays in 2021, it will reach almost a million in 2025. In parallel, the number of households offering tourist services is also growing, which confirms the trend of diversifying sources of income in rural areas.

Graph 2. Development of rural tourism in Serbia (2021-2025)



Source: Authors, based on data from the table

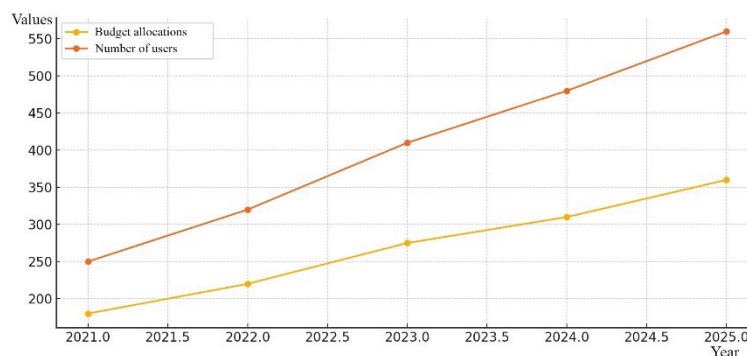
This growth can be linked to changes in tourist consumption behavior, institutional support, and better infrastructure.

Table 3. Public incentives for rural tourism (2021–2025)

Year	Budget (million RSD)	Number of households supported
2021	180	250
2022	220	320
2023	275	410
2024	310	480
2025	360	560

Source: MPSV, 2023

Graph 3. Public incentives in rural tourism (2021-2025)



Source: Authors, based on data from the table

The growth in budget allocations for rural tourism indicates the growing importance of this sector in the eyes of policymakers. From 180 million RSD in 2021, the funds have increased to 360 million in 2025, almost doubling. At the same time, the number of households receiving support is growing from 250 to 560, which implies an expansion of the availability of public funds and a more efficient implementation of development measures.

4. DISCUSSIONS

The results presented in the previous chapter shed light on key aspects of Serbia's macroeconomic development in 2025, as well as the growing importance of rural tourism as a factor of regional development and a source of income diversification in less developed areas. The discussion aims to interpret the observed trends, connect them to the broader economic framework, and point out possible implications for future policies.

First, it is evident that Serbia is seeing signs of stabilization in its macroeconomic environment. GDP growth of 2.7% in 2025, although modest, shows a positive shift compared to previous years, when external shocks (the war in Ukraine, the energy crisis, inflationary pressures) significantly burdened the economy. Inflation, which peaked in 2022, is expected to decline to 5.2% by 2025, indicating the effectiveness of the restrictive monetary policy measures implemented by the National Bank of Serbia. This creates conditions for sustainable growth and greater predictability for investors and consumers.

In terms of the labor market, the unemployment rate is declining, from 10.5% in 2021 to 8.7% in 2025. This indicates a slight but steady trend of employment recovery. The contribution of the service sector and tourism to this recovery is particularly significant, further enhanced by public support programs for rural areas.

Another important aspect of the discussion concerns the development of rural tourism, which is being affirmed in Serbia as a sustainable and inclusive branch of the economy. The growth in the number of overnight stays (from 520,000 to almost a million), as well as the increase in the number of households involved in the tourism offer, indicate a two-way dynamic: on the one hand, the demand for authentic and sustainable tourism experiences is growing, while on the other hand, more and more households recognize tourism as an additional or primary source of income.

In addition to economic benefits, rural tourism also has broader social effects. It encourages the revitalization of villages, the preservation of local traditions, crafts, and cultural identity. (Dimitrijevic, Ristic, & Boskovic, 2022) It also contributes to the improvement of infrastructure – roads, water supply, internet – which positively affects the quality of life of the local population. Empowering women, youth and marginalized groups through subsidy and support programs further contributes to social cohesion and a more equitable distribution of development benefits. An important finding is that public incentives have played a key role in dynamizing the sector. Budget allocations for rural tourism have doubled over five years, and the number of beneficiaries has increased significantly. However, challenges remain, such as uneven territorial distribution of funds, administrative barriers to competition, and a lack of professional training for service providers.

Finally, it should be noted that although certain progress has been made, the long-term development of rural tourism requires better strategic planning, cross-sectoral coordination (tourism, agriculture, infrastructure, education) and greater reliance on digital tools (eTourism, digital promotion, online reservations).

5. CONCLUSION

Rural tourism in Serbia in 2025 shows significant development potential that exceeds its current economic performance. Based on the analysis of macroeconomic trends and data on the growth of rural tourism, it can be concluded that this activity has the capacity to become one of the key axes of sustainable and inclusive development of the Serbian economy, especially in the context of regional balancing and revitalization of demographically deserted areas.

The stabilization of basic macroeconomic indicators in 2025 – such as moderate GDP growth, reduced inflation and falling unemployment – opens up space for more active implementation of development policies that do not focus exclusively on large industrial centers, but equally encompass rural areas. In this sense, rural tourism stands out as a sector that combines economic, social and environmental dimensions of development.

Positive trends – an increase in the number of overnight stays, an increase in the number of active tourist households, an increase in budget allocations, and the interest of foreign and domestic investors – clearly indicate that rural tourism is no longer a marginal activity, but an area with serious development potential. Its importance is multiple: in addition to directly contributing to GDP and employment, it indirectly affects the improvement of local infrastructure, the empowerment of local communities, the preservation of cultural heritage, and the encouragement of environmentally responsible behavior. However, the further development of rural tourism requires a clear and coordinated strategy at the national level. Stronger institutional support is needed, not only through subsidies and grants, but also through the de-

velopment of educational programs, modern digital promotion platforms, and tools for managing the tourism offer. Special attention should be paid to improving the accessibility of infrastructure (roads, internet, signage), standardizing services, and connecting rural households to the wider tourism network. It is also recommended to establish a national digital platform for the promotion of rural destinations, which would provide better visibility of the offer and facilitate market access for smaller service providers. In addition, it is crucial to improve the administrative capacity of local governments so that they can more effectively implement development policies and respond to the needs of the population. In conclusion, given macroeconomic stability in 2025, there is a real basis for the systemic integration of rural tourism into broader national development strategies. Its recognition as a priority sector can contribute to economic diversification, reducing regional inequalities and creating a long-term sustainable growth model that focuses on people, communities and local resources.

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THE IMPACT OF INNOVATIONS AND PUBLIC RELATIONS ON THE BUSINESS OF MICRO, SMALL AND MEDIUM ENTERPRISES

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Abstract: The paper refers to the complex impact of basic business innovation types (technological, financial, and managerial) and the innovative model in integrated public relations in micro, small and medium enterprises on a selected sample. The impact of innovation on achieving competitive advantage is analyzed in particular. The research was conducted at the local level to consider the impact from the aspect of their position in the market and the level of competitiveness achieved by accepting versatile innovations. Innovation in the public relations approach aims to raise the internal culture of those companies, to bring internal stakeholders closer to the company's strategic goals and to identify them with the company's goals. Incorporating innovations and innovative work is very risky, not only from the financial aspect. Risk reduction and control also depend on knowledge of specific technological solutions, knowledge of research, development and improvement project realization methodologies and knowledge of risk management methodologies. The results based on empirical research of micro, small and medium enterprises indicate a certain degree of dependence between innovative strategy, cooperative competencies and achieving business success. Research has shown that the connection of resources in different parts of the organization and their use in different investment projects increases their flexibility.

Keywords: *innovation, public relations, MSME, technology, local level.*

Field: Economy sciences

1. INTRODUCTION

For a long time, micro, small and a large number of medium-sized companies tried to build their competitive position on the market, especially in post-crisis periods, in several ways: by focusing on a certain market segment, by fragmenting the branch (while increasing market share) or by controlling (reducing) costs. It should also be taken into account that the management of technological innovations is limited, considering their capacities, stimulating measures (even from the local level) and adequate macroeconomic policy measures, strategic and operational, are necessary. From the perspective of support institutions, the regulatory (legislative) framework specifically defines individual support institutions (eg the Law on Innovation Activities, Regional Development, etc.). In general, the regulatory (legislative) framework includes three aspects (Molnar & Jolović, 2012, p. 59) establishment and operations, financing and institution of support. The goals and organization of the application of scientific (and professional) knowledge, technical and technological knowledge and inventions (patents) are regulated by law in the function of improving products, processes and services ("Zakon o inovacionoj delatnosti," 2021, p. 2). The changes in this sector, which started in 2012, from the national to the regional to the local level, were reflected in several aspects, and the treatment of innovation is very important. It is considered that the most relevant lower regulatory act is Strategy for the Development of Small and Medium-sized Enterprises for the period 2023 to 2027 (Ministarstvo privrede Republike Srbije, 2023, pp. 1–34). This document is aligned with the Competitiveness and Innovation Framework Programme in that period. Innovations lead to "smart" development and represent the successful exploitation of new ideas, and their conversion leads to commercial success on the market. In Serbia, until 2014, only every fourth company from this sector carried out its own innovations, and every eighth had established long-term cooperation with scientific research institutions (Ivanović-Đukić & Lazić, 2014, p. 58). The work aims to point out to the owners and managers of the observed companies the exceptional importance of innovation because the degree of innovation affects the acquisition of a competitive advantage and its increase.

Also, the work aims to suggest to the creators of macroeconomic policy the necessity of further implementation of structural reforms in the direction of comprehensive stimulation of innovation of micro, small and medium-sized enterprises. The initial hypothesis on which the work is based is that the successful management of innovations can increase the competitiveness of these companies (market share) not only at the local level but also at the national and even global level.

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2. MATERIALS AND METHODS

The research presented in this paper included a convenient sample of 224 respondents, various profiles (by educational or managerial task) of representatives of the observed companies in the period June-December 2024, and related to three Belgrade municipalities, i.e. it was carried out at the local level (Voždovac, Čukarica and Palilula). Integral research was conducted according to the survey model and using the personal interview technique (telephone, e-mail, Viber group, direct contacts). All questions for owners, directors, managers and other representatives of these companies are designed to reflect the state and trends of innovation. Then, the innovation in the approach to public relations in the activity of these companies at the observed local level was investigated.

The created questionnaire was of a closed type and was designed to contain 18 rubrics with questions related to the conceptually planned research. It started from the assumption that innovative options are still insufficiently considered and ineffectively and ineffectively applied and this especially refers to innovative models of public relations that are insufficiently developed. Mainly, in terms of the research methodology, an attempt was made, based on theoretical sources and previous experiences, to look at the set research subject and the goal of the work and to prove the assumption from which the planned research started. It should be borne in mind that the innovative capacities of these companies can be very limited, especially when it comes to technological innovations. Also, the questionnaire was created in such a way that the respondents could not answer in the form of an open answer to all questions but answered according to the principle of a closed type, where all the offered answers, in large numbers, were defined in advance. All answers are treated as highly confidential research materials and will not indicate the answers received from individual business entities without their specific mention.

3. SUBJECT AND PURPOSE OF THE RESEARCH

The results of the research needed to demonstrate the justification of approaching this issue, to design an organizational model of financing innovation and public relations that could have effects in practical application in many local areas. Also, it should be borne in mind that the value of micro, small and medium enterprises is not assessed only based on the profit that these enterprises realize, but also based on the strength of relations with those on whom their successful business depends. By definition, the size of the company is small compared to the main competitors in a certain activity (according to the volume of sales, number of employees, value of the company's assets, etc.). The research aims, among other things, to indicate the possibility of creating new models of business behaviour that are aimed at greater integration of all business functions in the observed companies, and that ensure greater flexibility, adaptability, responsiveness, and therefore, innovativeness of the company, aligned with new tendencies at the national and global level. In addition to a simple organizational structure, the success of innovation implementation is influenced by many factors: ownership structure, low degree of formalization, speed of decision-making and the ability to connect resources in different parts of the organization. These advantages enable the successful introduction of innovations aimed at satisfying consumer needs, new organizational models, and new marketing and management concepts, as well as a high level of adaptability.

In general, innovations mean the introduction of novelties into business, i.e. changing something existing. One of the aspects of the research refers to several measures implemented by the "National Agency for Regional Development" which supports raising the level of competitiveness of these companies. It achieves this by participating in the financing (reimbursement) of service costs in the consultation process. At the same time, it was necessary to see whether the specific goals foreseen by the National Agency of Serbia are being realized, namely increasing investments in technological and managerial (social) innovations, improving the cooperation of these companies with institutes, laboratories and technological parks. In general, it was necessary to investigate the number of micro, small and medium enterprises implementing innovative projects and programs:

- introduction of completely new products, innovation of existing products and/or services and
- introducing new possibilities for production or providing innovative or new range of services.

In the end, the subject of the research is also an overview of the achieved effects in all aspects, from the realized profit to the increase in market share of introduced and valorized innovations, on the domestic and foreign markets in the domain of micro, small and medium enterprises.

4. DISCUSSION AND RESULTS

In Serbia, of all the companies, most micro companies (with up to 10 employees) operate, so in 2023 there were 94,078 of them, which is 85.3%, and the total number of companies then was 110,287, while small companies with up to 50 employees were 12,613 (11.4%) and medium-sized companies were 2,953 (2.7%) in that year (Redakcija Biznis.rs, 2024). The number of employees in Serbia at that time was 1,315,320, and micro enterprises employed 13.2%, while small enterprises employed 19.5% and medium enterprises 23.1%. Large companies (over 500 employees) had 44.2% of the total number of employees. At the beginning of the research, we took into account five basic features of entrepreneurship and innovation, and they can be (Ivanović-Đukić & Lazić, 2014, pp. 49–62):

- (1) Facilitated search and finding of favourable opportunities from the company's environment
- (2) From the aspect of the appearance of negative phenomena, it is the elimination, amortization or transformation of negative phenomena, emergence and recurrence from the environment;
- (3) Facilitating recognition and achieving a competitive advantage in the environment;
- (4) The ability to continuously find and implement innovations;
- (5) Continuous development of the managed system and the possibility of its improvement;

In order to obtain important information (created in the state and other institutions) that has great importance and influence on the business of SMEs, the majority of those surveyed stated that a large number of such information: passing and amending laws, mandatory application of certain technological solutions and devices in business, the amount of approved subsidies, etc. They obtain in different ways, namely:

- through various printed and electronic media (59%),
- from fellow entrepreneurs, of different profiles (15%) and
- institution, at different levels from local to national (8%) in direct communication.

The survey suggests that as many as 29% of respondents, who filled out the questionnaire, have a rather weak or completely undeveloped understanding of the value of quality and timely information. On the specific question of whether successful management of innovations can increase the competitiveness of micro, small and medium enterprises, the following results were obtained (a sample of 224 respondents).

Table 1. Overview of respondents' ratings on the management of innovations potential to increase competitiveness

Answers	Percent	Rating
I completely agree.	38%	5
I agree to a large extent.	42%	4
I somewhat agree.	12%	3 (indifference)
Partially disagree.	6%	2
I completely disagree.	2%	1

Source: Authors research

The survey showed that respondents now give priority to the ability to innovate, which should take place continuously, that is, over a longer period, with permanent training and the acquisition of new theoretical and practical knowledge.

Table 2. Factors affecting the competitiveness of micro, small and medium enterprises

Factor	Number of answers
By focusing on specific market niches	30
Fragmented branches	51
Cost leadership	63
Application of innovations and innovativeness	96

Source: Survey on a sample of 224 respondents (two answers were possible)

Modern business conditions are conditioned by various factors, especially frequent occurrences of financial and economic crises, namely:

- variability of situations on local and regional markets,
- accelerating globalization processes,
- market deregulation and high level of competition,
- non-economic factors (pandemics, floods, earthquakes, wars);

Therefore, an increasingly important factor in the competitive position of treated companies is the ability to apply innovations and create innovative products and services. Doing business in an efficient way of introducing technological innovations to micro, small and medium-sized enterprises can be beneficial in several ways: by creating completely new products, new use of existing products, and developing new technical-production processes and operations. In essence, innovations and their application enable these companies to create and market new (innovated) products.

Improving the technical-technological processes increases the efficiency and effectiveness of the company and this leads to lower costs, which lead to an increase in the price competitiveness of the company. All of these are modalities that lead to a very good business result and a higher level of competitiveness. Concretely, the results of empirical research indicate that around 60% of economic growth is related to technological innovation. Also, the company's position in the international market is primarily determined by the level and intensity of technological innovations, and only secondarily by differences in price, product quality and other aspects of business (Ivanović-Đukić & Lazić, 2014, p. 52). However, in real situations, small and medium-sized enterprises face a lack of knowledge and experience, and these deficiencies can be overcome (Ivanović-Đukić & Lazić, 2014, p. 54):

- timely establishment of science and technology parks,
- by creating appropriate clusters,
- by forming business-technology incubators and the like.

All of these are ways to increase the innovative capacity of these companies in the real circumstances that are happening in the environment. Answers indicating the extent to which the respondents are determined to join clusters that they believe will have certain benefits, that is, on the basis of which business will be facilitated.

Table 3. The advantages of connecting SMEs into clusters and increasing innovation – acceptability

Type of innovation and type of activity	Completely	Partially	Does not accept
Realization of larger investment ventures (pooling of funds and easier attraction of external investors)	52%	38%	20%
Reducing costs in the creation and placement of new products (by joint engagement of cluster members)	65%	18%	17%
More effective access to information about technological projects and incentives at the local and national level (linking with government and public institutions)	72%	13%	15%
Easier access to funds and loans for financing (local level - lower interest on borrowed funds)	81%	11%	8%

Source: Author's survey and interviews in 2024 (sample of 224 respondents).

Intensification of the cluster connection of these companies can enable the following advantages:

- More timely and faster assessment of consumer needs,
- Directing and concentrating innovations in the direction of real realization,
- Faster response to consumer requests and wishes,
- Obtaining a sufficient amount of resources in order to implement innovations more quickly;

In the current conditions, a very important role in promoting innovation should be played by high-tech (technological) incubators, which represent a way and form of cooperation between educational institutions, scientific institutions and companies, with the aim of generating innovative products and services. The survey and interviews conducted on the sample showed that the largest number of companies from this domain increased the range of products and services, which means that the most significant effects of innovation are the replacement of outdated products and processes. On the other hand, the reasons given that innovations are difficult or even rarely accepted are significant, namely: lack of financial resources, high costs of innovation processes, lack of trained and professional personnel, uncertain demand and risk of inadequate market valorization of innovative products, insufficient information about market opportunities, lack of training on innovative activities and difficulties in finding partners for cooperation.

4.1. Encouraging innovation

Contemporary business conditions point to the necessity of introducing innovations, which is reflected in the fact that the potential of owners and employees is released, creating a climate in which they are focused on consumers. Innovative companies invest in people through training and good communication. A customer-oriented company with special requirements is ready to learn from others, which is the basis for innovation. Businesses are highly innovative with new products and services that exceed consumer expectations. At the same time, by improving the quality of existing products and services, creating and marketing innovations, and developing new technologies, these companies stimulate economic development and contribute to raising the level of national competitiveness. However, from the aspect of technological innovation, the capacities (ability to successfully incorporate innovations) of these companies are small, and stimulating measures are necessary at the national and local level. Because they have a flatter management structure, small businesses can quickly respond to changing customer demands and wishes. This is due to the faster arrival of information and the faster response of the owner and/or management. On the other hand, local investors and financial institutions to those companies that are connected to the cluster (bearing in mind that they are familiar with the work of the cluster) can more easily approve the necessary funds, and they can also approve lower interest rates on borrowed funds.

Table 4. The way the state and institutions can encourage innovation - do you agree?

Type of incentive	Completely	Partially	Does not accept
Cooperation with large companies	38%	42%	20%
Finding strategic partners	41%	32%	27%
Giving benefits (taxes and contributions)	73%	24%	3%
Assistance in acquiring new technology and equipment	61%	21%	18%
Attractive credit lines for financial resources	56%	34%	10%

Source: Author's survey and interviews in 2024 (sample of 224 respondents).

By combining numerous measures and programs, they can have an impact on alleviating the restrictions that these companies have, on the contrary, stimulating measures can accelerate the implementation of innovations and increase individual competitiveness, the competitiveness of those companies that are connected in clusters and thus the economy not only at the local level but also at the national level. A good example of this is the Program of a standardized set of services for micro, small and medium enterprises and entrepreneurs in 2022, which is implemented through accredited regional development agencies (ARPA) in Serbia (Razvojna Agencija Srbije, n.d.). There are four groups of standardized services in circulation, namely: training, advisory services, mentoring and a package of services for young and female entrepreneurs.

In the modern conditions in which micro, small and medium-sized enterprises operate, especially at the local level, it is primarily necessary to carry out the planning process effectively, but also to determine very clear and precise goals of the planning tasks, in order to make them more realistic and achievable (Vujučić et al., 2021, p. 80). To the question of what is most important in planning possible innovations, respondents gave as many as six different answers. However, it should be borne in mind that the specific process of innovation planning presupposes thinking and organizing numerous activities that are necessary to achieve the required innovative goals in a given period. The planning of innovations is aligned with their goal, which is the creation of the future business environment and the overall future of the company. At the same time, success in business does not happen spontaneously, but it is necessary to carry out an innovation process that begins with realistic planning.

4.2. Encouraging innovation in public relations

For a long time, the area of public relations was considered an area of additional activities aimed at increasing the possibilities for the company's survival. There are a lot of uncontrolled segments in this area, and it is susceptible to the creation of rumors and half-truths. However, the survey showed that a significant number of entrepreneurs and owners of micro and small businesses still do not use computers as a means of obtaining and exchanging information (about 30%). Possession and effective use in micro, small and medium-sized enterprises is necessary, according to the majority of respondents.

A large number of respondents concluded that receiving information promptly, from the appropriate institutions, would be very important for improving the business of micro, small and medium enterprises.

The application of innovations can realize the added value of these companies. A prerequisite for this is the improvement of corporate culture, raising the level of awareness of entrepreneurs (owners and managers), which means establishing two-way communication with the internal and external public, respecting the loyalty of previous "friends" of the company and gaining new ones, which leads to the improvement of the business.

In practice, the model of open innovation is being implemented more and more intensively, although there are several obstacles to its implementation in wider application. The concept of open innovation contributes to the intensification of the process of exchanging knowledge and information, resources and technology between business entities. This contributes to the improvement of the innovativeness of the sector of these companies as the most important driver of the level of competitiveness and application of the knowledge economy (Janković & Golubović, 2019, p. 89). Linking these companies into clusters can increase the pace and scope of their activities. Namely, the necessary input, skills, means, and human resources are generally more available in a specific location. This enables their easier connection and more efficient use of innovative ventures.

From the aspect of rapid expansion, special attention at the local level (considered three Belgrade municipalities) was attracted by the digital sector, i.e. (Nikolić & Filipović, 2022, p. 9): production of computer, electronic and optical products, telecommunications, computer programming, consulting and related activities, and service and information activities. On the example of these researches, it can be stated that the increase of competitiveness from the local to the national level as well as appropriate business performance and adequate productivity can be achieved (Bakator et al., 2022, pp. 3–19): by innovatively raising the quality of products and services, by introducing modern production equipment and modern tools, and by adequate application and introduction of effective management techniques and tools.

All these factors lead to raising the level of innovation, that is, improving their products and services. In addition, an adequate pricing strategy should be applied, which is accompanied by the application of modern methods and techniques of human resource management. Digital transformation is changing the way competition is treated, but it is also changing the mechanisms by which innovations are introduced in business strategies.

5. CONCLUSIONS

The paper raised some important issues related to the treatment and introduction of innovations in the largest group of economic entities, with a limitation to the local level. Investment in innovation depends on several factors, including company size, industry sector and access to finance. On the other hand, micro, small and medium enterprises often face challenges with aspects of financing innovation, as well as concerning access to knowledge and technologies. However, there are a number of examples of micro and small companies that invest in innovation, especially in sectors such as IT, where this sector has permanent growth. Increasing investment in innovation requires a systemic approach, including facilitating access to financing, strengthening support for R&D and developing a culture of innovation and small businesses.

It is very important to constantly analyze the investment risk, so that there are no disruptions in cash flows and over-indebtedness. Innovative capacities are conditioned by the ability to find new ideas and the conditions for their realization. Small businesses are quicker to notice the specific needs of consumers, which can be a source of ideas for innovation, and can realize them faster. In the current conditions, the increase in the success of innovation implementation is influenced by: simple organizational structure, dominant ownership structure, low level of formalization, efficiency and timeliness of decision-making and effective connection of all resources in certain segments of the organization. Raising the level of marketing of innovative products and services, which strengthens the competitive position of these companies, they base their business on innovative knowledge and modern technology, as strategic resources and innovation application processes, as a specific business philosophy, enabling faster production growth, increasing exports and raising the level of productivity. This includes improving their position at the local level as well as the position of the national economy on a global scale.

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THEORY OF UPBRINGING AND THE APPLICATION OF PEDAGOGICAL PRINCIPLES FOR WORKING WITH BILINGUAL PRIMARY SCHOOL STUDENTS THROUGH INTEGRATED PERFORMATIVE-PEDAGOGICAL PRACTICES

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Abstract: The integration of students from diverse linguistic and cultural backgrounds into the primary school environment requires pedagogical approaches that move beyond conventional instructional and upbringing models. The framework developed in this study combines performative pedagogical methodologies with value oriented education to support simultaneous language acquisition, social inclusion and moral development. It comprises three interconnected phases, namely collaborative creation of original narratives with explicitly formulated moral messages, enactment of these narratives through puppet theatre within a safe creative environment, and a moderated discussion aimed at eliciting and reflecting on value based principles derived from the shared experience. The study was conducted with balanced experimental and control groups, each comprising bilingual and monolingual students in grades three and four. Initial observations indicated low levels of oral participation and limited cross cultural interaction. Following the application of the framework, the experimental group displayed greater verbal engagement, a readiness to assume creative roles and increased mutual support, accompanied by deeper engagement with values oriented reflection. The study was carried out in the children's section of a public library which functioned as a non-formal educational environment, and the results reported here refer to this library based context. These findings confirm the potential of performative pedagogical practices to sustain a balance between language learning and educational upbringing while fostering intercultural sensitivity and collaborative community building.

Keywords: *Theory of Upbringing, Pedagogical Principles, Bilingual Education, Performative Pedagogy, Integrated Teaching Strategies, Social Inclusion in Education, Value-Oriented Learning*

Field: Pedagogy

1. INTRODUCTION

In recent decades, Bulgarian primary education has faced new challenges arising from the cultural and linguistic diversity of its students. The presence of bilingual students in the classroom requires teachers to reconsider traditional methods and to integrate pedagogical approaches that combine language instruction with purposeful educational influence. In this context, the concept of performative-pedagogical practices acquires particular significance as a means of fostering sustainable communication and social connectedness among students with different backgrounds. Performative interaction, realised through puppet theatre, dramatisation, and creative story construction, offers a unique opportunity to build a trust-based environment in which students can express thoughts and emotions without fear of criticism. This form of work integrates the element of play with both instructional and educational functions, activating not only cognitive but also emotional and value-based resources of the individual. The introduction of moral reflection after each performative activity transforms the shared experience into a source of meaningful values and behavioural models. The present study proposes an authorial framework comprising three interconnected phases: collective plot development, performative enactment, and moderated values-based discussion. The framework has been designed for the primary school age group and implemented both in the school setting and in the children's section of a library, where the environment enables more informal and creative interaction. The main objective is to create a methodological structure that supports bilingual students in actively acquiring the Bulgarian language, while simultaneously fostering empathy, cooperation skills, and moral sensitivity in all participants. This study seeks to demonstrate that integrating performative-pedagogical practices into the educational process constitutes a necessary step towards the creation of an inclusive school environment in which every student has the opportunity to participate actively, be heard, and be respected.

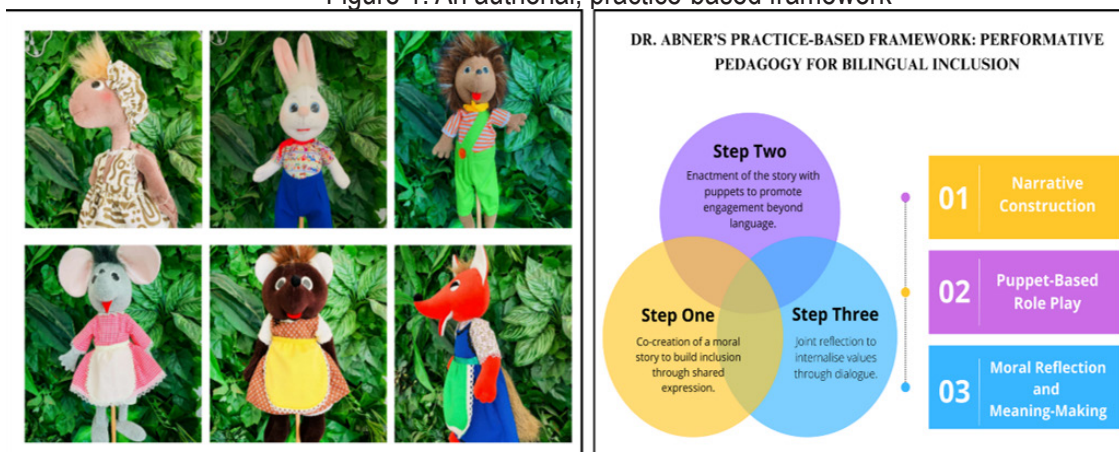
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2. METHODS

Pedagogical work with bilingual students in the early years of primary education requires the careful integration of educational principles that simultaneously provide linguistic support and foster cultural inclusion. Contemporary theory of upbringing conceptualizes the educational process as a dialogical exchange taking place within an authentic social environment (Biesta, 2021). This need becomes most apparent when working with students for whom school represents the first setting of systematic engagement with a foreign language and a different cultural order, a space in which they encounter significant communicative challenges. Integrated performative-pedagogical practices, based on puppet theatre and the collective creation of stories, establish a unique non-formal environment in which students interact on equal terms. Within this environment, the focus is not on linguistic deficits but on the opportunities for creative expression, the sharing of cultural narratives, and the development of intrinsic motivation for learning (Cummins, 2021). The performative experience activates both the cognitive and affective dimensions of upbringing, enabling the cultivation of empathy among students from different ethnic backgrounds. Dr. Abner's framework, developed as a result of experimental work with students from different schools, is based on three interrelated pedagogical phases: story, role, and moral lesson. The first phase involves the collaborative creation of a story by the students, drawing on culturally recognizable archetypes. The second introduces role-play through puppet theatre, in which bilingual students and their Bulgarian peers allocate roles and practise dialogue in two languages. The third phase focuses on formulating a moral lesson, whereby participants internalise the educational idea by interpreting it through their own lived experience. In this way, the framework functions both as a tool for language learning and as an instrument for moral influence and value-based socialisation. The approach aligns with the principles of Vygotsky's socio-cultural theory, yet is reinterpreted through the lens of contemporary understandings of play-based pedagogy (Wood, 2022). Play does not serve as a "distraction from learning" but rather constitutes the very core of the educational experience, within which a sense of belonging is nurtured. In a non-formal setting, removed from the hierarchical structure of the classroom, students participate not out of obligation but out of inspiration – a key factor in fostering intrinsic motivation and building trust (Robinson, 2016). From a pedagogical perspective, the application of educational principles such as respect, cultural appropriateness, empathy, and mutual assistance within the framework of performative activities exerts a significant formative influence on the entire group. Bulgarian students, placed in the role of hosts, learn how to welcome, support, and include peers from other cultures and nationalities. This process develops their social intelligence, cultivates ethical leadership, and fosters a sense of responsibility. At the same time, bilingual students engage in role-based interactions in which the new language is acquired as a living expression of experiences, emotions, and ideas (Mateus, 2014). Of particular significance is the use of books available in both Bulgarian and English, which facilitates linguistic comprehension and creates a bilingual cultural platform. This aligns with the ideas of Jerome Bruner, who argued that storytelling plays a pivotal role in education, as it enables the child to organise experiences, understand the actions of others, and make sense of their own place in the world (Bruner, 1997). Dr. Abner's authorial framework has been successfully implemented both within the school environment in the form of integrated pedagogical activities and in non-formal educational spaces such as libraries, summer learning programmes and cultural initiatives. At its core lies the concept of inclusion through the collaborative creation of stories, role play and moral reflection, which fosters sensitivity towards others, the development of sustainable social skills and cultural orientation among students in the early years of primary education.

Figure 1. An authorial, practice-based framework



Source: Framework designed by Dr. Avi Abner. All rights reserved.

Step One: Story Creation - The framework aims to establish the foundation for inclusion through collaborative creativity. In mixed groups, Bulgarian students and bilingual students work together to create an original story containing a moral lesson, inspired by themes related to friendship, mutual assistance and understanding between people of different backgrounds. The process takes place in a non-formal setting such as a library, where an atmosphere of trust, equality and freedom of expression is fostered. The teacher supports the groups through the use of linguistic scaffolds, visual stimuli and pre-selected themes. Each student contributes their own ideas, while bilingual students receive additional support through bilingual vocabulary cards, translation and clarification from their peers. The objective is to create an educational experience in which a sense of belonging is developed. By the end of Step One, each group has produced a short story text that reflects the collective voice of its members and will serve as the script for Step Two.

Step Two: Puppet Role Play - This stage represents the performative realisation of the collaboratively created story through role play with puppets. Its primary aim is to activate a mechanism of inclusion through participation, in which language practice takes place within a safe, play-based environment. Each student selects a role corresponding to a character from the story and performs that character's lines before the group. Bilingual students are given the opportunity to contribute in Bulgarian, in their mother tongue, or in translation, with the emphasis placed not on linguistic accuracy but on active participation. The puppet theatre serves as a pedagogical stage in which language barriers are overcome through image and movement, and social roles are enacted with humour, empathy and mutual support. The teacher guides the process without dominating it, providing assistance when translation, clarification or emotional regulation is required. In this way, the step fulfils an educational function: it creates conditions for mutual understanding, builds trust and develops cooperation skills among students from different cultural backgrounds.

Step Three: Moral Lesson and Reflection - The purpose of this step is to transform the content of the play-based activity into a consciously recognised educational value. Following the performative presentation, students engage in a guided pedagogical discussion in which they collaboratively formulate the moral lesson of the story they have created. In this process, bilingual students are encouraged to share their perspectives, being positioned as equal participants in the moral interpretation. The teacher employs facilitation techniques by posing open-ended questions, prompting reflection on the actions of the characters and encouraging connections with the participants' own life experiences. The objective is to achieve the internalisation of the core values – empathy, tolerance and solidarity – through the students' own verbal formulations rather than by providing an externally imposed definition. The step concludes with a brief group summary, which may be recorded or illustrated as a final thought. In this way, the framework extends beyond the scope of language learning and is affirmed as a form of moral education through lived experience.

Figure 2. Operational Process

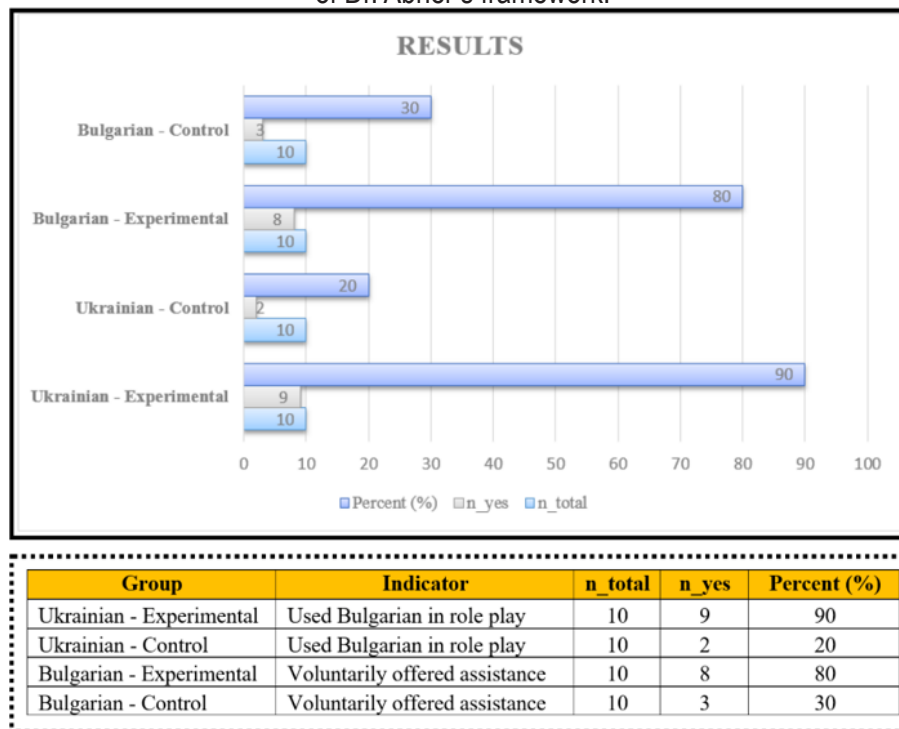


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3. RESULTS

The study was conducted over three consecutive weeks in a non-formal educational setting in the children's section of a Regional Library. A total of forty (40) students in grades three and four participated, equally divided into an experimental group with twenty (20) students and a control group with twenty (20) students. Each group comprised ten (10) Ukrainian bilingual students and ten (10) Bulgarian monolingual students, ensuring identical ethno-cultural distribution. The control group took part in standard extracurricular activities without the application of Dr. Abner's framework. The experimental group completed all three steps of the framework: story creation, puppet role play, and moral reflection. Baseline diagnostics showed that among Ukrainian students across both groups, sixteen (16) of twenty (20) avoided speaking Bulgarian, which corresponds to 80%, and twelve (12) of twenty (20) experienced difficulties in understanding basic instructions, which corresponds to 60%. Following implementation of the framework in the experimental group, the language activity of Ukrainian students increased: nine (9) of ten (10) used Bulgarian during role play (90%), and seven (7) of ten (10) participated in the moral discussion using full sentences in Bulgarian (70%). In the control group, the post-test observations remained at baseline levels, with eight (8) of ten (10) avoiding Bulgarian and six (6) of ten (10) showing difficulties with instructions. Only two (2) of ten (10) Ukrainian students in the control group used Bulgarian during role play (20%), and three (3) of ten (10) participated in the moral discussion using full sentences in Bulgarian (30%). Percentages are calculated on the relevant subgroup denominators. At baseline, voluntary assistance among Bulgarian students was observed in four (4) of ten (10) in the experimental group (40%) and three (3) of ten (10) in the control group (30%). Following the implementation of the framework, Bulgarian students in the experimental group demonstrated greater empathy and readiness for cooperation. Eight (8) of ten (10) voluntarily offered assistance with translation or with the formulation of responses (80%), compared with three (3) of ten (10) in the control group (30%). These findings indicate that the framework exerts a meaningful educational and linguistic effect on bilingual students while also developing intercultural sensitivity among their Bulgarian peers within a non-formal environment supported by play-based pedagogical tools.

Figure 3. Comparative results for control and experimental groups before and after the application of Dr. Abner's framework.



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4. DISCUSSION

Following the application of the framework, a comprehensive educational effect is achieved at three levels, namely linguistic inclusion, moral awareness and social connectedness among students from different cultural and linguistic backgrounds. In linguistic terms, bilingual students begin to use Bulgarian not only as an academic object of study but as a living medium for communication, collaboration and meaningful participation. They move from passive comprehension to active speaking without coercion through play based and emotionally engaging situations. Language is acquired through lived experience rather than through formal grammar instruction (Fisher, D., Frey, N., Gonzalez, V, 2025). As Teodora Valeva notes, reading culture must be cultivated from the earliest childhood and its formation requires sustained effort and consistency on the part of both the family and the teachers of young students (Valeva, 2023). Building on this line of argument, Gergana Avramova shows that the early cultivation of emotional awareness is foundational for social and ethical self-regulation and she highlights the need for valid instruments that trace the dynamics of socioemotional development in school contexts. The reflection phase of the present framework answers this requirement by transforming the shared performance into structured dialogue that names feelings with precision, invites reasoned justification of choices and consolidates prosocial norms within the peer group (Avramova, 2017). Consistent with this argument, Viktoriya Hristova maintains that education for sustainable development in the early grades should be organised as reflective learning that integrates ecological, social and economic knowledge in real contexts and fosters anticipatory responsibility. The reflection phase of the present framework addresses this by guiding pupils to link feelings and reasons to likely outcomes and to rehearse responsible action (Hristova, 2024). From a moral educational perspective, each group develops its own value framework, expressed through the moral of the collaboratively created story. In the interplay of creation, enactment and reflection, students form an internalised understanding of concepts such as goodness, justice and respect for others, not as externally imposed definitions but as lived experiences. At this point the framework overcomes pedagogy as mere technique and is affirmed as education through lived experience. The framework developed by Dr. Abner achieves educational transformation. Bilingual students feel accepted, equal and significant. They cease to be the children who do not understand and become storytellers, participants and authors of new narratives. Bulgarian students, rather than remaining passive observers of difference, become active bearers of empathy and cultural mediation. Moreover, the integration of performative pedagogical practices within bilingual education resonates with contemporary research that advocates

experiential, identity affirming approaches which facilitate both linguistic competence and critical cultural engagement. Sergio Sanchez emphasises that drama pedagogy with multilingual learners supports language development by enabling embodied and collaborative learning (Sanchez, 2022). Similarly, in foreign language teaching, a number of scholars including Shujie Luo have shown through empirical evidence that process drama enhances speaking and communicative motivation, which aligns with the model's aim to situate language learning as a dynamic and participatory experience (Luo, 2024); (Hu, Y., Shu, J, 2025); (Arias, 2025). These complementary findings strengthen the theoretical foundations of Dr. Abner's framework and affirm its coherence with the Theory of Upbringing. By embedding moral reflection within shared performative narrative creation, the model addresses bilingual language acquisition while at the same time nurturing the learner's ethical, social and cultural dimensions, fully consistent with the pedagogical principles stated in the study's title.

5. CONCLUSION

The framework developed by Dr. Avi Abner represents an original and empirically validated pedagogical innovation, designed for multilingual and monolingual primary school contexts in Bulgaria. It consists of three integrated steps: collaborative story creation, performative enactment through puppet theatre, and values-based reflection. The study has demonstrated that this structure is effective in promoting linguistic inclusion, social cooperation and moral awareness. The results indicate that bilingual students improve their active use of the Bulgarian language, while monolingual peers develop intercultural empathy, collaborative skills and ethical orientation. Although existing scholarship highlights the potential of drama-based learning to enhance language acquisition and community building the specific sequencing, methodology and cultural contextualisation of Dr. Abner's framework are unique and constitute a new contribution to the field (Winston, J., Stinson, M, 2013); (Aliano, K., Chang, D , 2024). By transforming the learning process into a shared cultural and moral experience, the framework conceptualises language learning as a lived practice and value formation as an outcome of authentic interaction. This approach aligns with inclusive pedagogical principles described in recent literature while extending them through a context-specific, empirically tested design. The use of accessible spaces such as libraries or flexible classroom areas ensures scalability without the need for significant resources (Cummins, 2021); (Dahl-Tallgren, 2023). Given its adaptability to diverse thematic domains and its proven ability to overcome barriers typical of formal instruction, the framework has the potential to become a sustainable practice within Bulgarian primary education. Its implementation supports linguistic adaptation while also fostering a culture of respect, trust and inclusion that underpins meaningful participation in both educational and wider social contexts.

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YOUNG ADULTS AND VIEWING HABITS OF VIDEO CONTENT

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Abstract: Ever since its transformation into a modern media system, traditional television has had a huge challenge ahead to provide the content capable of keeping and attracting digital natives on the Internet. A prerequisite for the strategy development is familiarity with this population's viewing habits and, in particular, their needs based on the condition that the content should be available at any place at any given time. The aim of this research was to use basic descriptive statistics and quantitative analysis regarding the population of young adults in Serbia, to recognise current trends and affinities related to relevant content, devices and platforms used for following, along with the duration length of their contact with the content, binge-watching and especially – if at all and where they follow it live and delayed. For this research, two surveys were conducted among current and former students of two Belgrade Faculties, which indicated the trend of increasing presence on digital video streaming platforms, particularly on YouTube platform for sharing and video streaming, where they followed classic formats, foreign series and movies, but also UGC (user-generated content), while on social networks they were mostly drawn to short video forms, especially on Instagram. On the Serbian media public service OTT RTS Planeta, domestic action series and comedies are followed. However, while following feature serial programmes, the majority of survey respondents did not watch only one episode, but more of them continuously. Bearing in mind the growing presence on video streaming platforms and social networks, and the necessity for short formats and delayed content viewing, modern media systems should reinforce their presence where young adult population tends to be - by motivating them to follow live content and by bringing them to their platforms where live TV channel streaming is available.

Keywords: *young adults, viewing habits, video content, video streaming platforms, short video.*

Field: Social sciences

1. INTRODUCTION

Although they address the most private aspects of our lives, mass communication media today connect us with the global Internet network. The local has become globally available, therefore the trends of content consumption on the Internet platforms can be linked through a local analysis with the world movements. The majority of media perceive the newly created media scene, which has become by far more dynamic and complex due to the emergence of the new media, as more competitive and thus, content placement selection became more critical. In the battle for acquiring more viewers and modern programme content consumers, the media are facing the challenge of discerning which content should be offered to the public and how it ought to be presented. The first requirement is to know the audience well. One thing goes for all age groups, apart from the youngest: “Researchers have discovered that people adjust the use of mass media to fit their own needs. Generally speaking, we could say that people use the media in four ways, such as: enjoyment, socialising, following and interpreting.” (Tjurou, 2012, p. 2)

According to the research, the trend of transitioning to video streaming platforms since 2015 has spread through all age groups and areas in media industry, and it specifically reflected on the areas of entertainment, education, marketing and journalism. By 2017, videos made for over 70% of total Internet traffic. “Globally, IP video traffic will make 82% of the entire IP traffic (both business and consumer-oriented) by 2022, in comparison to 75% in 2017. Global IP video traffic will increase four times from 2017 to 2022, with the complex annual increase rate of 29%. The Internet video traffic will grow four times from 2017 to 2022, with the complex annual increase rate of 33%. Live Internet videos will make 17% of all Internet video traffic by 2022. Live video will grow 15 times from 2017 to 2022.” (Cisco, 2019)

The target group of this paper belongs to the category of digital natives. Those are the persons born and raised in the era of digital technologies, since their early age exposed to computers, smart phones, the Internet and social networks. They instinctively use digital devices that are the integral part of their everyday lives, if not the most important one. The phrase digital natives was coined in the early 21st century, referring to our target group, aged 18 to 30, also known as young adults, the population of the young whose world is teeming with technology, while that may easily be the only world they know of. Their parents presented them with cell phones at quite the young age, primarily for the sake of establishing urgent communication. Even then, they used their first “connected” smart phones to view video content. They were the first to grow up both online and offline. “From listening to recorded music and messages in the

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mother's womb, then watching TV and videos to playing games on iPad, the Internet and mass and digital media serve as the early agents of socialisation." (Čejko, 2019, p. 147) Nowadays, this population spends most of their Internet time on social networks watching video contents via YouTube, while according to the latest global survey, they spend daily on average up to 3 hours and 20 minutes on TV. In all distribution formats, the Internet users worldwide on average spend 3 hours and 13 minutes on watching TV every day, which includes the time spent on linear, streaming platforms and TV shows saved on their recording devices." (Kemp, 2025) While the most watched clips on YouTube are those with up to 15 billion views, there is Netflix as the largest video streaming platform globally with over 300 million registered users at the end of 2024. The report on the last quarter of 2024 showed that the users on average watched seven movies a month. "Carry-On", the popular movie starring Jason Bateman and Taron Egerton, was offered to the users worldwide in that period and by the year end it had already gained 160,1 views. (Netflix, 2025)

Predictions concerning content consumption on the Internet and digital platforms go in favour of video contents. "It has been estimated that in 2025 video will make 82% of the entire Internet consumer traffic. (Cisco) Every day people watch over a billion hours of videos only on YouTube. In 2025, an average person will spend 100 minutes a day watching video recordings, in comparison to only 67 minutes in 2018. (Zenith)." (Austin, 2024) These are the trends that instigated the research that was carried out in Serbia on the viewing habits of the population aged 18 to 30.

2. MATERIALS AND METHODS

In this research, young adults were defined as the persons aged 18 to 30. Two survey questionnaires were created for the purpose of this research. The first survey had the topic "Young and Video Content" and the second "RTS Planeta – Affinities and Habits of the Young Viewer Audience".

174 respondents formed the sample for the first survey, recruited via an online questionnaire distributed via Google Forms app, mainly to the students of undergraduate, master and doctoral studies from two Faculties from Belgrade (The Faculty of Sport and The Faculty of Social Sciences), as well as to the former students. The respondents received the questionnaire from their mentors, Student Parliament viber groups, and by the student forwarding. Among the respondents, there is an equal number of male and female examinees, who were categorised into four groups based on their age: aged 18-21 (31,2%), aged 22-23 (28,3%), aged 24-25 (13,9%) and aged (26,6%). The vast majority of respondents were the students of undergraduate academic level (75,7%). The questionnaire contains three demographic questions (gender, age and education) and 17 questions related to the research topic.

The second survey was borne out within a smaller sample group of 105 respondents, who were dominantly current and former students of one Faculty, with the aim to roughly observe the 18-30 target group interests concerning their viewing affinities and habits in regard to OTT platform (Over-The-Top service of distributing video, audio or other media contents over the Internet) of the media public service in Serbia. Out of total number of respondents, there were mainly the students of: undergraduate academic studies – 81%, master studies – 6,7%, doctoral studies – 2,8% and graduates who did not continue with their postgraduate education – 9,5%. The survey questionnaire consists of three demographic questions (gender, age and years of studying) and 20 questions related to the research topic. Both surveys were conducted in July 2025..

Since the respondents of both surveys were of different gender, education and age within the same target group, while the majority of them were students, this sample enables the basic descriptive statistics and quantitative analysis owing to the acquired data regarding young adult population in Serbia.

3. RESULTS

As previously stated, the aim of this research was to gain insight of the affinities and viewing habits of those digital natives born between 1995 and 2007, to map their interests in diverse video formats, where, how much, when they follow them and finally to recognise their interests primarily regarding the contents of domestic production and use of the domestic digital platform related to global video streaming platforms. Judging by the research results, Serbian viewers dominantly spent time following live content at the moment of broadcasting – totally 43,4% respondents (i.e. live on TV 34,7%, live streaming 8,7%), more than delayed where TV again took the lead because 18,5% respondents, in case of having missed some content, saw that with delay on TV, and only 9,2% saw that on stream. It is a worrying fact that up to 28,9% respondents stated that they did not follow live programme. This result was in line with the worldwide trend of reducing the number of hours that target groups spent on linear following TV programme, which was also evident from the responses to the questions regarding digital platforms and

following videos on demand, i.e. the interest in non-linear video services. Namely, the research on the youth affinities has shown that this digital service is mostly used via YouTube (57,2%), Netflix (24,9%), followed by HBO Max (9,3%), RTS Planeta (5,2%), Amazon Prime (0,6%) and others. At the moment of conducting the survey, up to 70,5% respondents had some subscription on video streaming platforms, out of which 36,4% had their own, while the others were using shared family or someone else's subscription (for example – a friend's). Almost one third of the respondents had no subscription (29,5%). Recently, on video streaming platforms they have mainly followed drama series (26,6%), feature movies (22,5%), YouTube videos (20,8%), educational contents (13,9%), TikTok clips 10,4% and other. Domestic drama series were mainly followed by only 15% of respondents, while 42,8% followed foreign drama series regardless of the language and 42,2% followed primarily foreign drama series in English.

Figure 1. Affinities based on drama series programme

Origin/language	Mainly followed by
Domestic series	15%
Foreign series in English	42,2%
Foreign series regardless of language	42,8%

Source: Author's research

It is typical that digital natives, who have grown up with smart devices, mostly followed video streaming platform content (series, movies) on their cell phones (52,6%), using laptops or computers (26,6%) and via smart TV apps such as YouTube, Netflix, HBO Max, RTS Planeta, Amazon Prime Video (19,1%). Almost half of the respondents watched 1 to 2 episodes of a drama series in continuity, while 37,6% were binge-watched 3 to 4 episodes, 6,9% watched connected 5 to 6 episodes and 8,7% of the respondents watched more than 6 episodes in a row. They prefer dramas (67,4%), comedies (51,4%) and a bit less they prefer animated feature content (12,7%).

Almost two thirds (61,3%) stated that on YouTube they spent 3 to 5 hours a week, 23,1% claimed spending 5 to 10 hours, 12,1% from 10 to 20 hours, and 3,5 % claimed over 20 hours weekly, with half of them having the custom to see the whole show, i.e. initial video, and 36,4% only the parts of the shows they were interested in. Merely 9,2% respondents followed short video formats on YouTube, but for this content format they mostly used Instagram (staggering 45,7%), TikTok (43,9%) and only 1,2% named Facebook as the primary social network for following short video contents.

Figure 2. Binge-watching series

Number of episodes	Followed in continuity
1-2 episodes	46,8%
3-4 episodes	37,6%
5-6 episodes	6,9%
6+ episodes	8,7%

Source: Author's research

Because artificial intelligence and algorithms on social networks recognise the shifts in viewing habits during video content scrolling, they are measured in seconds, even in the tenth parts of a second. With that in mind, it is distinctly peculiar that young adults have the patience to spend longer periods of time on such video contents as podcasts. Exactly that was the reason for asking them how much that format attracted them and what theme they found the most gripping. In fact, the podcasts were at least once a week followed by 54,9% respondents, and 34,1% followed them even less frequently. As many as 28,9% respondents emphasised sports topics (which should come as no surprise since some respondents studied at the Faculty of Sport), 16,8% pointed out human and life stories, 12,1% accentuated interviews with public persons (actors and singers), 9,2% selected various topics relevant to the young. Additionally, they expressed their interest in the podcasts related to physical activity and fitness (6,9%), current political themes (5,2%) etc. One of the questions concerned whether they followed the social network accounts of the RTS Planeta OTT platform with short videos, most commonly the inserts from domestic drama series. The answer was negative by 77,5% respondents, which was in alignment with their interest in domestic serial programme.

The second research concretely referred to RTS Planeta OTT platform and in a more precise way it pointed at the viewing affinities of the respondents aged 18 to 30. RTS Planeta has available streams of 12 TV and 9 radio channels of Radio-Television of Serbia (live and delayed), as well as the base of approximately 30,000 video and audio contents on demand (VoD and AoD). Beside the catalogue

of foreign movies (about 100 titles) and foreign drama series (about 10 titles), all other contents are of domestic production. Although this digital platform has existed for seven years, since March 2018, only 20% used it regularly, whereas 57,1% heard of it, yet seldom visited it, but 22,9% neither heard of nor used RTS Planeta. The platform was accessed daily by 5,7% respondents, a few times a week by 9,5%, and a quarter of the respondents several times a month came to the digital platform of the media public service of Serbia. Out of those RTS Planeta visitors, the majority only took a look at the content that they purposefully wanted to see, while the others were curious about finding out the other available contents. The affinities of young adults visiting RTS Planeta to watch mostly domestic drama series differed depending on the selection of the offered foreign series, which was indicated within the results of the previous survey. Among domestic series, they were mostly interested in comedies (55,2%), dramas (49,5%) and thrillers (46,7%), more than action and romantic contents, which had the equal level of interest, each of 43,8%. The best ranked series were: Južni Vetar, U Klinču, Radio Mileva, Ubice Mog Oca (season 1), Sablja, Vojna Akademija etc. The least interest was shown regarding animated series and musicals. For example, the Sablja series was watched by 53,3% respondents, out of which only 1% in live broadcast.

As far as documentary movies are concerned, the greatest interest was in history (42,3%), faraway countries (40,4%), relevant global topics (30,8%), animals (27,9%) and sports (26,9%). Considering RTS Planeta, foreign movies were more appealing than domestic ones, but affinities were similar when it came to movie production year, thus implying that content was of primary significance. When asked how they chose the movies to watch, as many as 70,5% respondents claimed that friend and family recommendations mattered most, then there were the Internet search and reviews (55,2%), then the recommendations from social networks and forums (44,8%). The potential of RTS Planeta to attract this target group is obvious if we keep in mind that 46,7% of respondents would watch the content on that platform even if they had previously been informed it existed on Netflix or HBO Max (SVoD subscription platforms).

Figure 3. Content watching on RTS Planeta if the same exists on other platforms

RTS Planeta vs. Netflix, HBO Max etc.	Platform choice
Yes, I would definitely use RTS Planeta instead of other platforms	37,1%
Maybe, depending on the movie and available contents	46,7%
No, I would rather use other platforms	3,8%
No opinion	12,4%

Source: Author's research

The responses that refer to following RTS Planeta music contents have shown that young adults had different habits, i.e. music was listened via audio platforms, whilst music content on this video platform was followed by only 17,3% respondents. Those accustomed to listening and watching music programmes said they missed punk, San Remo and Eurosong. Furthermore, the questions on following live sport events via live stream received more negative answers from this population. That proved that sports were more followed on TV than on cell phones, which goes in favour of the further development of sport TV channels.

4. DISCUSSIONS

For two and a half decades, since the widespread use of the Internet and development of new multimedia services, there has been a noticeable increasing trend of dividing user attention between traditional and new media, and consequently between watching TV and following video contents on digital platforms. Two large consumer groups can be discerned there, as recognised by Mark Prenski in 2001, when he made the distinction between digital natives and digital immigrants. While the older population, who grew up in the analogue world, more slowly adopt innovations and novelties imposed by the new media, digital natives have grown up with the Internet and digital devices, which has made them capable of quickly receiving the information and being ready to do multiple activities simultaneously. (Prenski, 2001, p.4). According to Prenski, digital natives love to process and do more tasks parallelly and simultaneously, they prefer graphics to text, they adore exploring and surfing the Internet. They function best within a network. The recognition of characteristics typical of digital natives from the early 21st century turned out to be a good indicator of the upcoming phenomena. It was they, as early adopters, who became the

leaders of all the ensuing multimedia innovations, the use of all video formats included, which started to develop rapidly and took hold of the dominance on the Internet. Video streaming services responded to the user need for the content to be available at every moment everywhere. Nevertheless, they influenced the further creation of viewing habits, decreased interest in traditional linear following of TV programmes, the emergence of binge-watching and so on. "One of the most important influences of streaming services concerned the habits of young adults watching TV. With the enlargement of contents easily available at hand, young adults have acquired greater autonomy and control over what, when and how they watch." (Sahoo, 2024, p.704) Researches have revealed the trend noted with the respondents in Serbia is in proportion with spending time on live programme. While in Serbia 43,7% follow live programme, in Great Britain, for instance, according to Ofcom reports, from 76% in 2018 the time spent on linear programme watching fell to 48% in 2023. (Perspective, 2025). In the USA as many as 41% of young adult population do not follow live programme on weekly basis. (Advanced television, 2025). The growing trend of following videos on demand on video streaming platforms was recorded even in the USA, where 28% of the population do not watch TV at all, and 72% of video consumers aged 18 to 30 first and foremost follow Netflix, and then Amazon Prime Video (67%). (Park, McClain, 2025) The examination of viewer habits of the same population in Serbia exhibits the preference of watching foreign TV series regardless of the language. However, the results of visitations of foreign streaming platforms are not drastic: on Netflix they are 24,9%, on Amazon Prime Video platform only 0,6% respondents.

Due to the growing trend of following TV programme live, one of the most serious challenges is how to attract young adult population, so it is important to get to know them better, to recognise their wishes and expectations and to be prepared to respond to them. Owing to the characteristics of digital natives to change quickly and to accept new trends, their pulse and viewing affinities ought to be regularly gauged, which was also declared in some previous studies. Since more and more devices are coming to the hands of the young audience, the consumed contents and quantity are to bring major changes, not only in terms of the manner the content is delivered, but the kind produced for the viewers. "No matter whether they watch short clips on YouTube or they listen to podcasts, they are constantly consuming content on their devices. When somebody begins to employ certain kinds of technology or even methods at their early age, it becomes a norm." (Salandria, 2020, p. 20-21) With consumers looking for more practical ways to view contents, media companies have redirected their focus from linear television to the platforms for direct access to live programme and contents on demand. The same is being done by cable and IPTV operators developing their video streaming platforms that present a combination of TV channel streams and programme content catalogues in VoD (Video on Demand) or SVoD (Subscribe Video on Demand) service.

5. CONCLUSIONS

The first thing we may derive as a conclusion from the conducted research is that the trends of following videos are in line with worldwide trends, from traditional watching to following videos on demand. Moreover, global data indicating that the greatest traffic on the Internet has been made by video contents, found their confirmation in the affinities of the surveyed target group in Serbia. Following series and movies on video streaming platforms and short videos, mostly on Instagram, then on TikTok, fitted into the wider picture of this audience's viewing habits, which did not only follow professional, standard formats, but also generated contents on YouTube and social networks. From the point of content type, as well as of the themes interesting to the target group, this research has provided significant results that could serve as guidelines for content creators and, especially, for the editorial board of the digital platform RTS Planeta. The conclusion is that the presence should be reinforced on social networks and YouTube, where young adult population dwells on a daily basis, to attract and motivate them to explore domestic platforms, on which the available contents can be of interest for them.

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QUANTITATIVE AND FINANCIAL ASPECTS OF TOURISM IN THE COUNTRIES OF SOUTHEAST EUROPE

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Abstract: The purpose of this study is to identify key patterns, similarities, and differences in the development of the tourism sector in Southeast European countries through a comprehensive comparative analysis of quantitative and financial tourism indicators, as well as to examine its role in the broader regional and global context. The research covers nine countries in the region: Greece, Croatia, Romania, Albania, Serbia, Bulgaria, Bosnia and Herzegovina, Montenegro, and North Macedonia. The methodological framework is based on a quantitative analysis of secondary data obtained from relevant official statistical and institutional sources, with a particular focus on comparing tourism traffic indicators, generated revenues, and the degree of utilization of tourism potential. Descriptive and comparative statistical methods were applied in order to identify trends and changes over the observed period. Special attention is given to the periods before and after the COVID-19 pandemic, which allows for an assessment of structural changes caused by the global crisis. The results show significant variations among countries. Croatia, Albania, and Montenegro achieved above-average results due to coherent tourism policies, modernization of infrastructure, diversification of the tourism offer, and successful international promotional strategies. Their progress was further supported by a focus on sustainable development, improvements in service quality, and proactive involvement of the private sector in creating tourism products. In contrast, some countries still face limitations in terms of insufficient institutional capacity, investment barriers, and infrastructural shortcomings, resulting in lower resource utilization and reduced competitiveness in the global market. Slower adaptation to contemporary trends and limited promotion further hinder their position in the international tourism market. The study's conclusions indicate that an integrated approach, involving the synergy of public and private sectors, regional coordination, and standard harmonization, represents a key prerequisite for sustainable tourism development. Such a model entails jointly defining strategic objectives, aligning development policies, and establishing an institutional framework that enables efficient exchange of relevant information, expertise, and innovative solutions among countries. The recommendations derived from the study include strengthening institutional and regulatory frameworks, promoting innovation and digitalization, enhancing sector resilience to crises through diversification of the tourism offer, and improving local community participation in decision-making processes. Additionally, joint marketing projects and regional initiatives can significantly contribute to positioning Southeast European countries as recognizable tourism destinations on a global scale, creating long-term benefits for all stakeholders in the sector. With this approach, the region could be positioned as a competitive and sustainable tourism destination, capable of responding to contemporary challenges and ensuring the conditions for long-term development.

Keywords: *tourism, tourist traffic, income, COVID-19 pandemic, Southeast Europe*

Field: Social sciences

1. INTRODUCTION

Tourism is one of the most dynamic sectors of modern economies, with a pronounced potential for generating income, creating jobs and stimulating the growth of related activities such as transport, hospitality, trade and creative industries (Portella-Carbó, Perez-Montiel, & Ozcelebi, 2023). In the context of Southeast Europe, tourism has an additional dimension of importance, because it relies on a rich cultural and historical heritage, diverse natural resources and strategic geographical location. Although this region has significant potential for the development of tourism, there are marked differences in the degree of utilization of that potential among individual countries. Compared to the countries of the region, Serbia still lags behind in key quantitative indicators, such as the number of foreign tourists, foreign currency inflow and length of stay, although it shows certain positive growth trends. In contrast, Greece, Croatia and Albania record significantly higher volumes of tourist traffic, thanks to the attractiveness of the Adriatic coast, greater recognition on the international market and a long-term strategic approach to the development of tourism. Bulgaria and Romania, on the other hand, use a combination of coastal, cultural and spa tourism, with significant support from European funds for the improvement of infrastructure.

The quality of the tourist offer and the financial performance of the sector largely depend on structural factors such as: the level of development of the transport and accommodation infrastructure, digital presence and visibility, institutional support and political stability. In many cases, the competitiveness

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of tourism in the region has been further enhanced through strategic branding policies, investments in human capital and the promotion of sustainable forms of tourism. In recent decades, the tourism sector in the countries of Southeast Europe has faced numerous challenges and transformations. In addition to economic, political and infrastructural factors, the critical moment for the sector was the COVID-19 pandemic, which seriously disrupted tourist flows and required the redefinition of existing development strategies.

2. MATERIALS AND METHODS

The research is based on a comparative quantitative analysis of the basic indicators of tourist traffic in the countries of Southeast Europe. The time frame, which includes the period from 2019 to 2023, allows a detailed insight into the state of tourism before the pandemic, during the pandemic restrictions and in the post-pandemic recovery phase. The analysis is focused on indicators such as the number of tourist arrivals and overnight stays, as well as income from international tourism. The goal is to identify development trends, similarities and differences in the volume of tourist traffic among the analyzed countries.

The data used were taken from publicly available and reliable sources, including the Eurostat database, national statistical institutes of the observed countries and reports from the World Tourism Organization (WTO). In addition, relevant scientific and professional publications were consulted in order to ensure contextualization and substantiation of the derived conclusions. As part of the analytical procedure, descriptive statistical methods were applied. Special attention was paid to the analysis of absolute and relative indicators, as well as annual rates of change in the analyzed period. The results are presented in tabular and narrative form, which enables a clear interpretation of the data.

When interpreting the findings, possible limitations were taken into account, such as differences in data collection methodology between countries, as well as the limited availability of some statistical series. Despite this, the approach applied in this paper enables a comparable and reliable analysis of trends in the tourism sector at the regional level.

3. RESULTS

Dynamics of tourist traffic - quantitative aspect of comparison

Tourist traffic in the countries of Southeast Europe in the last few years is subject to significant changes due to the influence of global and regional factors, including the pandemic, geopolitical events and economic conditions. This is best shown by a tabular overview of the total number of tourists (domestic and foreign) and overnight stays.

Table 1. Arrivals and overnight stays of tourists in the countries of Southeast Europe from 2019 to 2023

		2019	2020	2021	2022	2023	% changes 23/19
Greece	Arrivals	34,202,053	10,104,236	18,015,347	31,413,356	35,782,424	4.6
	Overnight	143,594,467	38,745,016	73,886,813	132,745,904	147,209,821	2.5
Croatia	Arrivals	19,553,495	6,997,382	12,778,754	17,769,145	19,486,573	-0.3
	Overnight	91,178,083	40,771,344	70,171,684	90,005,383	92,341,148	1.3
Albania*	Arrivals	12,103,767	5,419,417	9,616,679	13,009,619	17,125,595	-41.5
Romania	Arrivals	13,277,449	6,398,137	10,042,590	12,374,615	13,665,729	2.9
	Overnight	29,889,894	14,454,464	22,422,471	26,614,221	29,205,568	-2.3
Bulgaria	Arrivals	8,187,634	4,023,763	5,647,634	7,621,234	8,640,448	5.5
	Overnight	27,154,791	11,968,483	17,620,268	24,173,291	26,865,046	-1.1
Serbia	Arrivals	3,689,983	1,817,929	2,589,400	3,869,235	4,192,797	13.6
	Overnight	10,073,299	6,201,290	8,162,430	12,245,613	12,440,935	12.4
Montenegro	Arrivals	2,645,217	444,065	1,670,879	2,183,975	2,613,306	-1.2
	Overnight	14,455,920	2,587,255	9,872,573	12,428,787	16,389,279	13.4
Bosnia and Herzegovina	Arrivals	1,641,226	501,026	971,604	1,477,189	1,754,882	6.9
	Overnight	3,374,751	1,242,519	2,258,373	3,221,691	3,690,900	9.4
North Macedonia	Arrivals	1,831,529	352,870	545,749	798,935	999,476	-45.4
	Overnight	2,294,883	874,339	1,322,284	1,818,886	2,072,926	-9.7

* The Albanian Statistical Institute does not keep official records of overnight stays by tourists

Source: Authors based on Eurostat data and national statistical reports

Based on the given data on tourist arrivals and overnight stays for the countries of Southeast Europe in the period 2019-2023, the following conclusions and comments can be drawn by country, with an emphasis on recovery after the pandemic and trends in tourism.

Greece, with the largest number of tourist arrivals and overnight stays, recorded moderate but stable growth in tourism during the mentioned period. With an increase in arrivals of 4.6% and overnight stays of 2.5%, it remains one of the most attractive destinations in the Mediterranean. The number of visitors from

the EU, the USA, and Asia is growing. The most visited destinations are Athens, Thessaloniki, Mykonos, Santorini, Crete, Rhodes, and Halkidiki. Key trends include the expansion of luxury and cultural tourism, the development of sustainable accommodation, the digitalization of services, and the extension of the tourist season, with museums, archaeological sites, and festivals playing an important role in attracting visitors (Douros, Papageorgiou, & Milioris, 2024).

Croatia is returning to the pre-pandemic level, but did not achieve significant growth in the observed period. The number of overnight stays increased by only 1.3%, and there was a slight decrease in arrivals of 0.3%. Saturation, rising prices and competition from Albania and Montenegro have influenced the stagnation of the number of tourists. Nevertheless, in terms of the total number of tourists, Croatia is the main tourist destination in the Balkans. About 20 million tourists a year, mostly from Germany, Austria, Italy, the Czech Republic and Slovenia, visit Croatia. Thanks to such a volume of visits, tourism accounts for a fifth of the country's gross domestic product. The focus is on coastal tourism (Dubrovnik, Split, Zadar, Istria), but also continental tourism (Zagreb, Plitvice).

Albania recorded the highest growth in tourism in the region – arrivals +41.5%, overnight stays +34.3%. This trend is mainly fueled by the increased interest of young people, digital nomads and tourists from Western Europe, thanks to the low prices and attractive coast. Durrës, Saranda and Wallona stand out as tourist destinations (Burlea-Schiopoiu & Ozuni, 2021). Although it has great potential, weaker infrastructure remains a challenge in future development.

Romania recorded a slight growth in tourist arrivals of 2.9%, with an average stay shortened by 2.3%. The focus is on natural and cultural tourism, with attractions such as Transylvania, Bucharest, and the Danube Delta. The government is working on sustainable development, digitalization, and extending the duration of stays. Although tourism is growing, it is not yet the main driver of GDP. Romania possesses a rich and diverse heritage, including cultural, historical, and folkloric resources with high potential for tourism valorization (Ardelean & Bădulescu, 2023). The challenges include uneven infrastructure outside the cities and the need for stronger international promotion.

In Bulgaria, a slight increase in the number of tourists of 5.5% was recorded, while at the same time a decrease in overnight stays by 1.1% was observed, indicating a shortening of the average length of stay. This trend may signal a decrease in the destination's attractiveness or the redirection of tourists to other locations. Bulgaria's tourism offer is traditionally based on summer tourism on the Black Sea and winter tourism in Bansko, which are particularly popular among tourists from Eastern Europe. The country's geographical location and favorable climatic conditions are the main reasons for the popularity of summer recreational tourism, as well as numerous alternative forms of tourism, such as cultural tourism, religious tourism, and spa tourism (Naidenov, Naumov, & Varadzhakova, 2023). The country's competitive advantage is reflected in affordable prices, which attract visitors on a limited budget. Serbia records stable growth in tourism, with an increase in the number of tourists and overnight stays of 13.6% and 12.4%, above the regional average. The number of foreign guests is growing, especially from Russia, Turkey, China and Western Europe. The most visited destinations are Belgrade, Novi Sad, Zlatibor, Kopaonik, Tara, Vrnjačka Banja and Sokobanja. Key trends include the development of rural, eco and gastronomic tourism, wine routes, as well as the increase of low-cost flights to Belgrade and Niš (Novović & Lukić, 2025).

In Montenegro, the number of tourists in 2023 is slightly below 2019 (-1.2%), but the significant increase in overnight stays of 13.4% suggests a longer stay of visitors, which is a positive signal. Montenegro is still an attractive destination for summer holidays. In this country, tourism is a key economic activity, as it comprises over a fifth of the gross domestic product. The largest number of tourists comes from Serbia, Russia, Ukraine and the countries of the European Union. Popular destinations are Budva, Kotor, Herceg Novi, Ulcinj, Durmitor (Ratković, Rađenović, Zečević, & Jablan, 2021; Božović & Čaušević, 2024). In addition to coastal tourism, mountain and adventure tourism is also developing.

Bosnia and Herzegovina recorded growth in tourism: arrivals +6.9%, overnight stays +9.4%. Although the country has great potential, development is slowed down by weak marketing activities and political instability. The country positions itself as a destination for sustainable tourism due to its favorable location, climate, and natural resources (Lugonja, 2014). Traditional towns, historical sites, and wine-adventure routes make it competitive in the region.

North Macedonia recorded a slow recovery of tourism, with a drop of 45.4% in arrivals and 9.7% in overnight stays, due to weaker promotion, insufficiently developed infrastructure and less attractiveness compared to neighboring countries. The majority of tourists visit Skopje and Ohrid, with Lake Ohrid, protected as a UNESCO site, attracting a large number of visitors. Cultural, wine and ecotourism are becoming increasingly important segments of the tourist offer, and the national parks Pelister, Mavrovo and Galicia stand out as destinations that attract lovers of nature and adventure tourism.

The analysis of overall trends in the tourism sector of Southeast Europe shows that there has been a gradual recovery, but that the achieved growth remains below the expected level, despite the recorded increase in the number of arrivals and overnight stays. Albania, Serbia and Bosnia and Herzegovina represent the main drivers of this growth, while North Macedonia records a significant decline in tourist activity.

Tourism revenues - the financial aspect of the comparison

Tourism revenues are an important source of income for Serbia and the countries of the region, with a positive impact on catering, transport and trade. The growth in the number of tourists contributes to the economy, and the competitiveness of destinations relies on natural beauty, cultural heritage and gastronomy. Although there are infrastructural differences between countries, there is a noticeable trend of investing in the modernization and promotion of tourist capacities, with the aim of making tourism an even stronger driver of economic growth. A comparative view of the realized income from international tourism in the five-year period is shown in the following table.

Table 2. Tourism revenues (in million USD) in the countries of Southeast Europe from 2019 to 2023

	2019.	2020.	2021.	2022.	2023.	% changes 23/19
Greece	20,276	5,015	12,351	18,141	22,268	9.2
Croatia	11,753	5,493	10,773	13,445	15,785	34.3
Romania	3,576	1,441	3,294	4,711	4,975	39.1
Albania	2,332	1,129	2,262	2,990	4,512	93.5
Bulgaria	4,294	1,693	2,483	3,413	4,032	-6.1
Serbia	1,604	1,245	1,882	2,576	2,770	72.7
Montenegro	1,230	165	896	1,111	1,630	32.5
Bosna and Herzegovina	1,173	431	967	1,414	1,619	38
North Macedonia	396	252	385	481	599	51.3

Source: World Tourism Organization (2024). International Tourism Highlights, 2024 Edition, November 2024, UN Tourism, Madrid, p. 21

The data shows that all countries analyzed saw a sharp drop in income in 2020 due to the COVID-19 pandemic, border closures and travel restrictions. In the period of the next three years, a gradual and in some places an accelerated recovery was recorded, with some countries achieving tourism revenues in 2023 that exceeded the level from the pre-pandemic period.

In the observed period, Greece recorded a strong recovery and stable growth of tourist revenues. After 20,276 million USD generated in 2019, the revenue in 2020 fell to 5,015 million. Already in 2021, they reach 12,351 million USD, while in 2022 they record further growth to 18,141 million. The record was achieved in 2023 with 22,268 million USD, which represents an increase of 9.2% compared to 2019. These results confirm that Greece remains one of the most competitive tourist destinations in Europe, thanks to its diverse offer, rich cultural heritage, developed infrastructure and strong branding of islands and coastal cities.

In the mentioned period, Croatia achieved the highest tourism revenues in the region, with a strong recovery and growth after the pandemic. After USD 11,753 million in 2019, revenues fell to USD 5,493 million in 2020. Already in 2021, they reach 10,773 million, and in 2022 they exceed the pre-pandemic level with 13,445 million USD. The record was set in 2023 with 15,785 million USD, which is a growth of 34.3% compared to 2019. These results confirm that Croatia has further strengthened its position as a leading tourist destination in the region, thanks to the developed coast, quality services and strong international recognition.

In the same period, Romania showed a strong recovery and a moderate growth in tourism revenues. After USD 3,576 million in 2019, revenues fell to USD 1,441 million in 2020 due to the pandemic. Already in 2021 there is a sharp recovery with 3,294 million, then 4,711 million in 2022, while in 2023 revenues reach 4,975 million USD - which is a growth of 39.1% compared to 2019. This trend confirms that Romania is successfully positioning itself as an attractive tourist destination, thanks to its diverse offer, including mountains, spas, cultural and historical sites and continuous investments in promotion and quality service.

Albania's tourism revenue has seen strong growth from 2019 to 2023, despite a decline during the pandemic. After revenue fell from USD 2,332 million in 2019 to USD 1,129 million in 2020 due to global restrictions, there was an almost complete recovery from USD 2,262 million in 2021 and growth to USD 2,990 million in 2022. The peak was reached in 2023 at USD 4,512 million, a growth of 93.5% compared to 2019. This jump confirms that Albania is one of the fastest growing tourist destinations in the region, thanks to its natural beauty, competitive prices and greater international recognition.

From 2019 to 2023, Bulgaria followed the global trend of decline and gradual recovery of tourism revenues. After revenue of 4,294 million USD in 2019, the pandemic led to a drop to 1,693 million in 2020. A gradual increase followed: 2,483 million in 2021, 3,413 million in 2022 and 4,032 million USD in 2023,

which is almost a return to the level of 2019. Although it has not yet exceeded the pre-pandemic results, Bulgaria is recording stable growth and maintains a significant role as a tourist destination in Southeastern Europe, thanks to the resorts on the Black Sea and developed infrastructure.

In the observed period, Serbia's tourism revenues showed a strong growth despite the crises. After falling from USD 1,604 million in 2019 to USD 1,245 million in 2020 due to travel restrictions, there has been a recovery: USD 1,882 million in 2021, USD 2,576 million in 2022 and a record USD 2,770 million in 2023. This is a growth of 72.7% compared to 2019, showing increased tourist interest and improved infrastructure and promotion of Serbia as an attractive destination.

During the observed period, Montenegro recorded large fluctuations in tourism revenues. After USD 1,230 million in 2019, revenues fell to just USD 165 million in 2020 – one of the deepest declines in the region. A recovery followed: 896 million in 2021, 1,111 million in 2022, and a record 1,630 million USD in 2023, which is a growth of 32.5% compared to 2019. This trend confirms the successful return of Montenegro as an attractive tourist destination, thanks to the natural beauty, the coast and the increased promotion of luxury but affordable tourism.

Tourism revenues of Bosnia and Herzegovina showed a gradual recovery after the pandemic. After falling from USD 1,173 million in 2019 to USD 431 million in 2020, growth followed to USD 967 million in 2021, then USD 1,414 million in 2022 and USD 1,619 million in 2023. In total, revenues increased by 38% compared to 2019. Although the recovery is steady, it is slower than in some other countries region, with significant potential for further development and better international promotion.

During the observed period, North Macedonia recorded a gradual recovery of tourist revenues. After 396 million USD in 2019, revenues have fallen to 252 million in 2020. During 2021, they approach the pre-pandemic level of 385 million, and in 2022 they grow to 481 million USD. In 2023, they will reach 599 million, which is a growth of 51.3% compared to 2019. This increase indicates a growing interest in North Macedonia, thanks to cultural attractions, natural beauty, affordable prices and improvement of tourism infrastructure and promotion.

In general, SEE countries have shown a high degree of recovery in the post-pandemic period, with most exceeding previous levels of tourism receipts. However, there are pronounced differences in the intensity and structure of that growth, which are conditioned by different national policies, the degree of attractiveness of destinations, available capacities and the efficiency of adaptation to new demands and expectations on the tourist market.

4. DISCUSSIONS

The analysis of tourist traffic and income in the countries of Southeast Europe shows various recovery trends after the challenges brought by the COVID-19 pandemic. Although the entire tourism sector was affected by a significant drop in tourist arrivals and income during the crisis, most countries have recorded a stable or accelerated recovery in recent years, with varying degrees of success.

Greece maintains its status as one of the most competitive tourist destinations in Europe, with strong revenue recovery despite challenges in global tourism. Although the growth in the number of visitors was not dramatic, the country generates significant income from tourism thanks to a diversified offer, a focus on quality and a well-developed tourist infrastructure. This approach enables further development of the sector and preservation of the leadership position among the countries of Southeast Europe.

Croatia occupies a significant position in regional tourism, although it still records high tourist revenues. The growth in the number of tourists is moderate, but stable, and the quality of services and developed coastal infrastructure allow the country to maintain a strong position on the market. Despite the strengthening of competition, Croatia remains an attractive destination thanks to its natural resources, safety and adaptability to different segments of tourists. High quality services and developed infrastructure allow the country to maintain its leading position and further strengthen the tourism sector.

Albania is recording the most pronounced growth in tourist traffic and income in the region, especially thanks to the attractive coast and competitive prices. The rise of digital nomads and young travelers is further contributing to this trend, although the country still needs to improve its infrastructure to sustain and increase growth.

Serbia stands out as an example of a successful recovery, with the growth of both the number of tourists and overnight stays, as well as tourist revenues, which exceeded the level before the pandemic. This trend indicates efficient tourism policies, diversification of tourist offer and improvements in infrastructure, which attracted both domestic and international visitors.

Bosnia and Herzegovina is showing a gradual recovery in the tourism sector with stable revenue growth, although the pace is slower due to challenges such as political instability and weaker promotion.

Nevertheless, the country has significant potential for the development of sustainable and authentic tourism, which can contribute to a further increase in traffic and income.

Bulgaria and Montenegro show different trends. Bulgaria recorded a slight increase in the number of tourists, but a reduction in the length of stay, which affects revenues. On the other hand, despite a slightly lower number of tourists compared to the period before the pandemic, Montenegro achieves an increase in income thanks to a longer average stay and a higher quality of services.

North Macedonia and Romania are experiencing a slower recovery, with challenges in the area of infrastructure and promotion, but positive trends in tourist traffic and income indicate potential for further development, especially through cultural, rural and ecotourism.

Overall, tourist traffic and income in the countries of Southeast Europe follow similar patterns of recovery, but with differences that reflect the specificities of each country. Key success factors include diversification of the tourist offer, investments in infrastructure and sustainable development, as well as effective promotional activities. Regional cooperation and adaptation to global trends will be of crucial importance for the future growth of the tourism sector.

5. CONCLUSIONS

The tourism sector in the countries of Southeast Europe went through numerous challenges in the previous period, and the COVID-19 pandemic was a key test of its resilience, flexibility and ability to quickly adapt. Nevertheless, the data from 2023 show that most countries in the region managed not only to recover pre-pandemic results, but also to achieve additional growth in tourist traffic and income, thus reaffirming tourism as one of the strategic drivers of economic growth and development.

In this context, countries like Croatia, Albania and Montenegro have shown exceptional results, thanks to clear tourism development policies, strong promotion on international markets, improvement of infrastructure and establishment of integrated tourism products. Their success indicates the importance of synergy between state policy, the private sector and local communities in shaping a competitive tourist offer. On the other hand, countries like Serbia, Bosnia and Herzegovina and North Macedonia follow positive trends, but face structural and institutional challenges.

Common challenges in the region include seasonality, uneven development of destinations, limited access to financing and insufficient regional cooperation. In this sense, the future development of tourism in Southeast Europe will depend on the ability of countries to implement sustainable and integrated policies, aimed at modernization of the sector, diversification of the offer and strengthening of institutional capacities. Strengthening regional connectivity, both physical and promotional and strategic, would enable a more competitive joint positioning of the region on the global tourism market.

Given that tourism is no longer only a service sector, but also an instrument of territorial cohesion, preservation of cultural heritage and encouragement of local and regional development, the long-term success of the countries of Southeast Europe will depend on their ability to adapt to modern trends, including digital transformation, sustainability and green transition, while simultaneously preserving authenticity and local identities. Only through cooperation, innovation and strategic planning can the region ensure stable, inclusive and competitive tourism development in the decades to come.

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PHARMACEUTICAL MARKETING VALUES AND RESEARCH OF USER SATISFACTION IN MEDICAL PHARMACY INSTITUTIONS

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Abstract: The primary objective of this research was to examine the factors that contribute to the decision to buy medicines that can be bought in a pharmacy without a prescription and that are not on special lists of medicines that require special approval. The research collected socio-demographic, medical, professional, and institutional data. The collected data were processed using the software IBM SPSS (Statistical Package of Social Science) version 25. In the paper, descriptive statistics were applied to describe the sample, correlation analysis to examine the association, t-test of independent samples, and one-factor analysis of variance (ANOVA) to examine differences between groups. Pharmaceutical marketing is not a new phenomenon, but with the constant advancement of technology, this field of marketing offers a large field for applied research. Pharmacy as an activity is particularly sensitive, and when studying it and pharmaceutical marketing, it is necessary to include both societal marketing and socially responsible marketing. Pharmacy visits are typically not routine, occurring during times of illness, emergencies, or when seeking health advice. Such infrequent visits can make consumers more sensitive to the service they receive as they are stepping into an unfamiliar environment, often filled with anxiety or urgency. Opposite, the social dimension of a pharmacist's role cannot be overstated. Pharmacists are not just dispensers of medication; they are vital healthcare providers who often engage in patient counseling and health education. They must balance the need for profitability with the imperative to serve public health interests. This includes offering affordable medications, providing free consultations, and participating in community health initiatives. The pharmacy profession needs to be continuously supported by laws with an impact at both professional and organizational levels. The results of this research will be useful to pharmaceutical institutions in developing programs that affect the quality of life.

Keywords: *pharmaceutical marketing, consumer of pharmaceutical products, medicines without a doctor's prescription.*

Field: Social Economics

1. INTRODUCTION

The pharmaceutical profession in the territory of Serbia has long been highly valued and complex. Namely, this profession involved a combination of chemist, alchemist, and psychotherapist for each patient. Patients demanded a personalized approach to solving the most complex health problems, which posed a serious challenge to the pharmacists of that time in finding solutions. Today, being a modern pharmacist means a lot, research work in the field of pharmacy, distribution of drugs and medicines, but also the performance of numerous marketing functions as well as the application of modern commercial business. Pharmaceutical medicine is a scientific field within medicine focused on the entire lifecycle of medicinal products, from their initial discovery and development to their evaluation, documentation, ongoing monitoring, and marketing, all with the aim of improving patient health and the well-being of the community. (Ratković et al., 2011). The basic aspects that influence consumer expectations are user needs, previous experience, recommendations, and promotional promises (Radu et al., 2017).

Over recent years, the pharmaceutical industry has experienced significant growth, highlighting its rising prominence both domestically and across Europe. This expansion within the medical field has prompted numerous experts to focus on the sector, particularly examining how communication strategies can impact patients (Radu et al., 2017). The pharmaceutical function contains highly specialized pharmaceutical services that must be provided primarily by highly specialized personnel in the field, therefore pharmaceutical marketing has a broader meaning than marketing medical products because in this marketing the light is on the specialized services of pharmacists and all forms of pharmaceutical patient care. Pharmaceutical marketing (marketing in pharmacy) is not a new phenomenon. The connection between pharmacy and marketing begins at the beginning of the 19th century in the unregulated medical market using advertising, trademarks and packaging (Mackey et al., 2012). Since then, until today, pharmaceutical marketing has gone through and is going through numerous changes, among which

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probably the most important change is market regulation. (Mihajlović et al., 2021).

Marketing in pharmacy means managing the distribution of medicines as well as enabling customers - patients to get the right medicine in the right place and at the right time. In order for this basic function of marketing to be achievable in such a sensitive area as pharmacy, it is necessary to manage the demand and required quantities and organize the logistic delivery of medicines in accordance with the norms and the needs of pharmacists. So that quality becomes an important element in order to achieve a competitive advantage and achieve the strategy of successful service organizations based on quality. Medicines that are distributed through pharmacy institutions are limited by legal norms and regulations, which vary from country to country. Also most of these medicines are divided into two groups: those obtained by prescription and those purchased over the counter. In this research paper, the authors wanted to shed light on the role of pharmacists in meeting the needs of consumers for medications from another group. Medicines belong to an unpopular group of products, regardless of whether they are obtained by prescription or bought over the counter. The price of medicines is constantly under the scrutiny of the public, and they are often discussed publicly (Govender et al., 2020). Price has a marketing dimension if it is formed according to research on consumer requirements, while promotion is a highly visible marketing activity. Towards the most transparent marketing activity, promotion is a form of communication, and it is known that "the process of exchange begins and ends with communication".

Promotion as an integral part of marketing in the pharmaceutical industry is regulated by numerous laws and by-laws. For example, advertising to the population is allowed only for drugs sold without a prescription, while advertising to the population is prohibited for drugs of other groups. This way of separating medicines is a big limitation for the pharmaceutical industry, but on the other hand, it is a protection for the consumer against the unethical behavior of pharmacists. At that moment, the knowledge and skills of pharmacists in the "field" come into play. In this aspect, the role of social marketing is especially important. Socially responsible marketing encompasses a comprehensive understanding of ethical principles and societal expectations across all facets of marketing, including environmental stewardship, legal compliance, and socially conscious initiatives. This concept demands adherence to the ethical and social implications inherent in marketing practices. (Dašić et al., 2022).

A socially responsible marketing concept is imperative for every pharmaceutical company; it implies the business of a pharmaceutical company that goes beyond its primary business goal, which is profit maximization. The focus of every pharmaceutical company must first of all be social aspects, ecological aspects, and then also economic aspects of business, i.e. profit maximization. The concept of social marketing, which is otherwise very close to pharmaceutical marketing, is linked to the 50s of the last century and the appearance of the book by Bowen - "Social Responsibility of business people" (Bowen, 2013). This pioneer in the study of something so epoch-making, laid the foundations of social marketing, especially in professions that operate on the edge between empathy and humanity on the one hand and the foundations of inexorable economic figures on the other. The pharmaceutical industry is certainly this area. Therefore, the most comprehensive representation of socially responsible marketing would be, according to Farnsworth (Farnsvort,2017), where socially responsible business includes "a whole range of business initiatives and policies that provide a positive contribution to the well-being of the company and shareholders, regardless of whether it is employees, consumers or the local community, and at the same time operating in the interest of another group of shareholders - its shareholders" (Friedman, 2021). Social marketing is a condition for good relations with customers, and "good relations with customers represent a factor of competitive advantage" (Ratković, 2023). Kotler and Lee define socially responsible business as follows; "Corporate social responsibility is a determination to improve the welfare of the community through discretionary business practices and contributions at the expense of the corporation's resources" (Kotler, 2007). If we start from this definition as a basic premise, we can clearly define what marketing in the pharmaceutical industry should entail, which is certainly the following:

- Pharmaceutical products belong to the so-called unwanted products, unlike some other products such as fashion products, food products or, for example, cosmetic products. When a person is sick, he has only one wish, and that is to be healthy, so these products are related to a state in which no one wants to find themselves voluntarily, and the products are very specific in their characteristics compared to all others, so they also require specific marketing approach.

- Researching the market of pharmaceutical products does not only refer to the research of supply and demand but above all to the research of the real need for the product. Research of the price area, which is limited on the one hand by legal regulations and on the other by the actual production costs and the need to operate profitably. Research also goes in the direction of packaging and promotion of these products, because the legal regulations in many countries are extremely strict and vary from country to country, even in the EU, and therefore promotion and distribution channels require prior market research

and coordination.

- Sales channels of pharmaceutical products must ensure the closeness of the patient to the pharmacist, then the exceptional expertise of the pharmacist, both in the field of pharmacy itself and in the adequate commercial knowledge and skills that the pharmacist uses in the presentation of the product. The point of sale requires a special note of comfort due to the specific condition of the patient with a tendency for the patient to have the intention of returning to the same institution.

- "The basic task of modern marketing is building good relations with relevant market participants, but also with the social community" (Smith et al., 2002), and the key prerequisite for this is to deliver the right product at the right time and in the right place. In order to realize this task optimally, it is necessary to manage supply and demand and to organize a logistical short supply chain. For this purpose, standardized processes in all spheres of marketing help pharmacists a lot. A key part of quality management is standardization, which forms the foundation for having a quality system in every business and throughout the entire economy. So, when talking about quality, we always begin by assuming that standardization has already been taken care of, because it's believed that quality cannot exist without the right standards in place. (Panvelkar et al., 2023).

- Legal regulations that regulate the promotion of drugs and other pharmaceutical products are extremely rigorous, leaving the marketing space for this form of activity very narrow. Also, these products, and making a decision about their purchase, is very unpopular because of the specific condition of the consumer, so you have to be especially careful because the promotion as such can cause a counter effect in the consumer.

- Medicines as products are divided into two groups, those that can be bought over the counter and those that can only be obtained with a doctor's prescription, and their distribution is under strict control. This division of products and different regulations for these two groups imposes the need to build a marketing plan separately for each group. All this increases marketing costs for the pharmaceutical industry, but it also limits the room for maneuver of marketing. On the other hand, extremely rigorous legislation that regulates all areas of the pharmaceutical industry protects the consumer from unethical behavior and practices in the pharmaceutical industry.

The future of the pharmaceutical industry will not only be in terms of the adoption of new technologies and discoveries in the production process, it also lies partly in the development of specific pharmaceutical marketing, which must take into account all the peculiarities of both the products themselves and the market, as well as the legislation itself, which is different from country to country and very strict. In the work before you, we tried to investigate the differences in patient satisfaction in relation to trust and pharmaceutical services provided. This paper aims to extend previous research of marketing in pharmacy practice through the study of pharmacists' values and it is a part of a larger project intended to explore user satisfaction with the pharmaceutical service in a community. Opportunistic motives are focused on making a profit as a key goal, based on attracting new customers, that is, maintaining relations with existing ones. Contrasting them, there are altruistic motives whose main goal is to help the customer of the pharmaceutical product, and then there are other goals that do not have to bring any profit. (Ratković et al., 2013). Pharmaceutical marketing certainly brings a large number of opportunities for research in the near future. The overall aim of this study was to analyze factors that affect customer satisfaction with the service provided in pharmacies. The secondary aim is to determine the correlation of these factors to pharmacists' perceptions of difficulty and frequency of ethical issues in community pharmacy settings.

2. MATERIALS AND METHODS

Statistical data processing and analysis were performed using the software IBM SPSS (Statistical Package of Social Science) version 25. In the paper, descriptive statistics were applied to describe the sample, correlation analysis to examine the relationship, a t-test of independent samples, and one-factor analysis of variance (ANOVA) to examine the difference between groups. A level of 0.05 was used for the threshold value of significance. The data analysis also included descriptive statistics and correlation analysis (Hughes et al., 2003, Popescu, 2011).

3. RESULTS

We conducted marketing research using 150 patients aged between 16 and 74 years, affiliated with pharmacies in Serbia. The period of collecting data was 12 May - 15 October 2024 and it used an online survey based on a questionnaire with 20 questions. The scales used were the semantic scale, Likert scale, and open questions. 150 subjects participated in the research, of which 83 were male and 67 were

female. The age range of the respondents is from 16 to 74 years ($M=37.44$, $SD=11.23$). The vast majority of respondents have completed high school (60.7%), while only one respondent has completed doctoral studies. Most respondents are in a relationship (41.3%) or single (39.3%). Almost all respondents are employed (95.4%) with a predominantly monthly income of RSD 65,000 to 90,000 (62.7%). Most respondents are from Belgrade and its surroundings (38%) and Western Serbia (30%). Most respondents, when they have a cold, buy one of the combinations for colds at the pharmacy (36%) or go to the doctor (37%). The vast majority of respondents answered that they buy medicines in case of need, especially when they do not go to the doctor for a prescription or the medicine cannot be obtained through a prescription because it is not on the list (60.67%). More than half of the respondents answered that they use a preparation every day (53.3%) and that they remember television commercials for medicines or other preparations (88.7%). The purchase of a vitamin or natural preparation was most influenced by consultation with a pharmacist in a pharmacy advice from a pharmacist (27.73%) and advice from a doctor (23.47%). The majority of respondents answered that they had no such experience (42.67%), while the majority of respondents had the experience of being offered the most expensive preparation first (29.33%). Respondents most often return to the same pharmacy because it is the closest to them (22.57%) and because of the staff, their kindness, and expertise (21.31%). Respondents are sometimes satisfied with the range of medicines offered in the pharmacy ($M=4.28$, $SD=0.91$). Based on the results, it can be concluded that respondents are most satisfied with employees' willingness to help patients ($M=4.19$, $SD=0.99$), while they are least satisfied with employees' genuine interest in the patient's problem ($M=3.56$, $SD=0.99$). The research investigated whether there is a significant difference in the respondents' satisfaction with shopping at the pharmacy in relation to gender, professional education, marital status, work status, monthly income, and region. The t-test of independent samples was used to examine differences in relation to gender, while the one-factor analysis of variance (ANOVA) was used to examine differences in relation to professional education, marital status, work status, monthly income, and region. Based on the results of the t-test, it can be concluded that there is no significant difference in the respondents' satisfaction with shopping at the pharmacy in relation to the gender of the respondents. Based on the results of the ANOVA test, it can be concluded that there is a significant difference in the respondents' satisfaction with shopping at the pharmacy in relation to the respondents' professional qualifications. Based on the post hoc test, it can be concluded that there is a significant difference between respondents with a high school diploma and respondents with a higher education ($p=0.008$), where respondents with a higher education have a higher degree of satisfaction. Based on the results of the ANOVA test, it can be concluded that there is no significant difference in the respondents' satisfaction with shopping at the pharmacy in relation to the region, the respondents' work status and the respondents' marital status.

4. DISCUSSIONS

In a survey of user satisfaction with the service provided by a pharmacist in a pharmacy, users showed a high degree of overall satisfaction. The research findings show that patients are happiest when the employees are ready to help them, and therefore they choose the nearest pharmacy from the neighborhood to which they are always happy to return. In this institution, they have intimate and personal contact with the pharmacist, which confirms the safety of the recommended and chosen medicine. Patients are the least satisfied with the fact that pharmacists do not show genuine interest in their health problems and do not engage in studying the diagnosis and course of the disease itself. Taking basic demographic parameters such as gender, marital status, level of education, place of residence and level of income, we can point out that the highest degree of satisfaction with the service provided is expressed by married people with a higher level of education and income. A large number of respondents showed overall satisfaction, which can be seen from the comments posted in the part of the questionnaire intended for that purpose. The procedures for the procurement of medicines that state-owned pharmacies go through are different from the procedures that apply to pharmacy establishments in private ownership. This type of discrimination makes state pharmacies non-competitive and inflexible to market demands, and they do not have active interaction with patients where they would be able to respond to almost every request. Unfortunately, in this way, state-owned pharmacy establishments become uncompetitive, poorly supplied with outdated interiors of sales facilities, which all in all leaves a less favorable impression on the end user. Service users generally have objections to the assortment and supply in state-owned pharmacies, as well as in pharmacies that belong to health centers. Privately owned pharmacy establishments are well supplied, as research shows, and they are also flexible when it comes to procuring the missing medicine. The research highlighted key factors influencing patient satisfaction with pharmacy services, particularly when purchasing over-the-counter medications. The findings underscore the crucial role

of pharmacists in the decision-making process of patients, where friendliness, expertise, and advisory approach are pivotal factors positively affecting service perception. Notably, respondents expressed the highest satisfaction with the willingness of staff to assist, while the lowest level of satisfaction was related to pharmacists demonstrating genuine interest in patients' problems. The analysis revealed no significant differences in satisfaction based on gender, marital status, employment status, or region. However, a statistically significant difference was observed in satisfaction levels concerning educational attainment, with respondents possessing higher education reporting greater satisfaction. Additionally, key purchasing decisions for vitamins and natural supplements were predominantly influenced by pharmacist and physician recommendations, while proximity to the pharmacy and staff expertise were the main reasons for repeat visits. These results highlight the need for continuous improvement in pharmaceutical services through further education and motivation of pharmacists, as well as the adaptation of marketing strategies to better meet patient needs.

5. CONCLUSIONS

The implementation of socially responsible marketing principles can strengthen consumer trust and achieve a competitive advantage in this sector. Future research should include a larger sample and examine specific aspects of customer satisfaction in more detail, aiming to enhance the quality of public healthcare. In the future, researchers need to pay more attention to the factors that influence how drugs are marketed and the ethical issues that come up in the pharmaceutical field. This study shows that we have only looked at a small part of this big and complicated area of science.

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CONTEMPORARY RELATIONSHIPS BETWEEN MARKETS, PRICES AND COSTS

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Abstract: The modern market is a complex system in which various factors such as price, supply, demand and production costs meet and intertwine. Understanding the relationship between these elements is the most important for business efficiency, competitiveness and profitability of the company. The price, as the basic regulatory mechanism in the market, is a monetary expression of the value of goods or services, and its formation is directly related to production costs and market movements. The work is based on modern research and theoretical approaches from the field of economics and management. The subject of research in this paper is the analysis of modern relations between the market, prices and costs, with special emphasis on the influence of market conditions on the formation of prices and cost management in the modern business environment. The objectives of the research are focused on: Examining how prices are determined on the modern market depending on production costs; Analysis of cost accounting methods that companies use to form competitive prices; Understanding the impact of market changes and competition on price and cost adjustments; Identification of modern approaches that enable effective management of prices and costs. The research methodology is based on a combination of qualitative and quantitative approaches: Analysis of professional literature and current research in the field of economics, management and marketing; Use of primary data through case studies of successful companies that apply modern cost accounting methods; Secondary analysis of data from relevant market and financial reports; Comparative analysis of traditional and modern cost accounting systems in the context of their effectiveness and impact on price. The results of the research show that effective management of costs and their precise allocation allows companies to define competitive prices that correspond to market requirements and consumer expectations. Modern calculation systems, such as Activity-Based Costing, significantly improve the accuracy in determining costs and thus directly affect the formation of more realistic and sustainable prices for products and services. Also, in conditions of high market dynamism, flexibility in adjusting prices in relation to costs proves to be crucial for preserving profitability and market position. These studies confirm the importance of an integrated approach to the market, prices and costs as a necessary condition for successful management in the modern business environment.

Keywords: *market, costs, prices.*

Field: economy

1. INTRODUCTION

The relationships between markets, prices, and costs form the foundation of the economic system and the functioning of every economy. Supply and demand meet in the market, and prices serve as a signal that informs producers and consumers about the relative scarcity of goods and services. Production costs, on the other hand, determine the profitability limits for producers and condition their ability to survive in a competitive environment. Traditionally, price was considered a result of the interaction between costs and market factors, while in contemporary conditions, these relationships are much more complex and dynamic (Varian, 2014).

Globalization, digitalization, and rapid technological development over the past decades have significantly changed the nature of markets. Markets are no longer geographically limited but have become largely digital and global (Brynjolfsson & McAfee, 2014). Price formation accelerates and becomes more flexible thanks to algorithms and digital platforms, while cost structures transform through automation and reductions in marginal costs, especially in the field of digital goods and services (Shapiro & Varian, 1999).

2. THEORETICAL FRAMEWORK

Since the time of Adam Smith, the market has been viewed as an “invisible hand” guiding resources toward efficient allocation (Smith, 1776/1991). In classical economics, price is the result of the relationship between supply and demand, while production costs are largely determined by labor and natural resources (Ricardo, 1817/2001). Karl Marx further developed the labor-based value theory, emphasizing that labor

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is the key factor determining value and production costs (Stošić Mihajlović, 2022).

In classical theories, the relationship between prices and costs was linear and stable: costs determined the minimum price a producer had to achieve, while the market, through competition, established equilibrium. However, this approach is insufficient today to explain complex relationships in the global and digital economy.

With the development of neoclassical economics in the late 19th and early 20th centuries, the focus of analysis shifted. Instead of labor-based objective value, the concept of subjective utility was introduced. Price was no longer seen as a direct consequence of costs but as a result of consumers' subjective preferences and the balance of supply and demand (Marshall, 1890/2013).

Neoclassical theory introduces the concepts of marginal cost and marginal utility, emphasizing that equilibrium is reached when price equals marginal production costs. This concept still forms the basis of microeconomic analysis (Varian, 2014). Institutional economics, on the other hand, highlighted the importance of institutions, rules, and norms in shaping prices and costs. Transaction costs (Coase, 1937/1990) became a central factor, as markets do not function in a vacuum but within a legal and institutional framework. This is particularly relevant in the contemporary context of digital markets, where regulation, competition protection, and the "rules of the game" play a crucial role (North, 1990).

With the development of information technologies and digital platforms, the relationships between markets, prices, and costs have undergone radical changes. The digital economy introduces concepts such as network effects, platform markets, and extremely low marginal costs (Shapiro & Varian, 1999). In this context, price no longer depends solely on costs but on a company's ability to create additional value for users and manage network effects.

Globalization has further intensified competition and created markets that are both global and digital. Consumers today have access to a wide range of goods and services, placing pressure on businesses to reduce costs and optimize prices to remain competitive (Stiglitz, 2010).

The information society, based on knowledge and technology, has shifted the focus from material costs to intangible factors – brand, reputation, service quality, and customer experience. In the modern economy, price increasingly reflects perceived value rather than just production costs (Kotler & Keller, 2016).

3. MARKET IN THE MODERN ECONOMY

The market is the central coordination mechanism in the modern economy. Its main function is the allocation of resources through price signals. When the price of a good rises, it signals producers to increase production while motivating consumers to rationalize consumption. In this way, the market aligns supply and demand (Samuelson & Nordhaus, 2010).

The market determines the equilibrium price through the interaction of supply and demand. Modern markets are characterized by global competition, digital platforms, and network effects. However, in a globalized environment, markets gain a new dimension. Trade liberalization, the growth of international investments, and the integration of financial markets have made national markets part of a broader global system (Krugman, Obstfeld, & Melitz, 2018). This increases competition but also economic dependence on global flows.

Modern markets also play a significant role in fostering innovation. Global competition forces businesses to invest in research and development to reduce costs and differentiate products (Porter, 2008). At the same time, markets become more volatile due to factors such as geopolitical tensions, climate change, and digital disruption.

One of the most important market transformations in the 21st century is the emergence of digital markets and platform business models. Digital platforms such as Amazon, Alibaba, eBay, act as intermediaries connecting buyers and sellers in a digital environment. They significantly reduce transaction costs, increase price transparency, and expand market reach to a global level (Parker, Van Alstyne, & Choudary, 2016).

Unlike traditional markets, digital markets are characterized by network effects. The value of a platform increases with the number of users – the more buyers and sellers are involved, the more attractive the platform becomes to new participants (Rochet & Tirole, 2003). This leads to a "winner-takes-all" phenomenon, where a small number of platforms dominate the global market.

Moreover, digital markets enable personalized pricing, as platforms collect vast amounts of consumer data. Based on analytics and algorithms, companies can adjust offers and prices for individual users (Chen, Mislove, & Wilson, 2016). This benefits consumers through lower prices and better offers but also raises challenges in terms of privacy and fairness. While classical economic theory assumes

perfect competition, modern markets are far from this ideal. Many industries are dominated by oligopolies and monopolies, particularly in the digital sector, where giants such as Google, Apple, Facebook, and Amazon (GAFA) dominate (Zuboff, 2020). This market structure has mixed consequences. On one hand, large companies possess resources for research, development, and innovation. On the other hand, their market power can limit competition, slow innovation, and result in pricing that does not reflect actual costs (Stiglitz, 2010). In this context, market regulation becomes a key factor. Antitrust policies and competition protection laws aim to prevent abuse of market power and ensure fair conditions for all participants. For example, the European Union has introduced measures against digital giants, including fines for abuse of dominant positions and new regulations for digital platforms (European Commission, 2020). Market regulation today faces additional challenges. Traditional measures may be effective in the “physical” economy, but digital markets require new forms of regulation that consider algorithmic pricing, data collection, and the global nature of platforms.

4. PRICES IN CONTEMPORARY BUSINESS CONDITIONS

Traditionally, prices have been formed through two main approaches: the cost-based approach and the market-based approach. Cost-based approach assumes that the price must cover total production costs and ensure a certain level of profit. This model is particularly applied in industrial products and sectors where costs can be calculated precisely (Kotler & Keller, 2016). Market-based approach is based on supply and demand. The price is formed as a result of interaction between consumers and producers, where competition plays a key role in setting boundaries. In perfect competition, the price approaches the level of marginal production costs (Varian, 2014).

These two approaches still form the foundation of economic theory and practice, but modern business conditions require their adaptation. In highly competitive markets with homogeneous products, the cost model is still significant, whereas in innovation-driven, branded, and digital services industries, flexible pricing models increasingly play a role.

With the development of information technologies and digital platforms, dynamic pricing has emerged. This model involves adjusting prices in real time according to changes in supply, demand, and individual consumer characteristics (Elmaghraby & Keskinocak, 2003). Well-known examples include: 1) The airline and hotel industries, where ticket and room prices change depending on occupancy and booking time; 2) Ride-sharing platforms (Uber, Bolt), where algorithms adjust ride prices based on real-time demand and driver availability; 3) E-commerce, where companies like Amazon use sophisticated algorithms to adjust competitor prices and customer behavior. The most successful firms are those that have as their number one priority a total comprehension of the value perceived by their customers combined with innovative approaches to monetization.”

(Zatta, 2023). Dynamic pricing allows for revenue maximization and more efficient resource management. However, it raises ethical and fairness concerns, as consumers may pay different prices for the same products or services (Chen et al., 2016). Additionally, algorithmic pricing can lead to tacit collusion, where competing firms’ algorithms independently set similar prices, reducing competition and increasing market prices (Ezrachi & Stucke, 2017).

In contemporary business conditions, price is no longer merely a reflection of costs and market relations but also of the perceived value that a product or service provides to consumers. This approach is known as value-based pricing (Nagle, Hogan, & Zale, 2016). Brand and reputation play a key role in price formation. Companies such as Apple or Tesla successfully charge premium prices due to strong branding and perceived innovation and quality, even though their production costs do not fully explain the price difference compared to competitors (Kapferer, 2012).

Customer experience is also increasingly important. Consumers are willing to pay higher prices for products and services offering additional value through better service, personalization, and post-sale support. This is especially pronounced in the service sector, such as telecommunications, financial services, and healthcare (Lemon & Verhoef, 2016). In the digital economy, the freemium model has emerged, where basic services are free while additional features are paid. Companies such as Spotify, LinkedIn, and many software providers use this model, creating a large user base while generating revenue from consumers willing to pay for added value (Anderson, 2009).

5. COSTS AND THEIR TRANSFORMATION

In classical economics, costs are traditionally divided into fixed and variable. Fixed costs do not depend on production volume (e.g., rent, machine depreciation, administrative salaries). Variable costs change proportionally with production (materials, energy, labor in production). Digitalization has significantly changed the cost structure, reducing marginal costs.

Table 1. Compare costs in classical and digital economies.

Cost Type	Classical Economy	Digital Economy
Fixed Costs	High (equipment, buildings)	Relatively low (cloud, software)
Variable Costs	High (materials, labor)	Low (marginal tends to zero)
Distribution	Transportation costs	Digital distribution – negligible costs

Source: Authors' research

Total costs are the sum of fixed and variable costs, while average and marginal costs allow firms to analyze optimal production volume (Varian, 2014). Traditionally, companies based strategies on reducing production costs to offer competitive prices and maintain profitability, particularly in the industrial era where economies of scale played a key role in lowering average costs (Marshall, 1890/2013).

Digitalization has significantly altered cost structures in modern economies. In the digital economy, fixed costs are high, while marginal production costs are very low or nearly negligible. Examples: For software products, most costs relate to development and testing; distributing an additional copy generates almost no extra cost (Shapiro & Varian, 1999); In digital services (streaming, cloud computing, online courses), the marginal cost of serving an additional user approaches zero; Automation and AI reduce the need for human labor in routine tasks, lowering variable costs in the long term (Brynjolfsson & McAfee, 2014). This shift changes the traditional relationship between prices and costs. While in the industrial economy price largely reflected production costs, in the digital economy price is based on perceived value and competitive dynamics rather than just costs. This change pressures traditional industries while creating new business models based on subscriptions, advertising, and freemium approaches (Anderson, 2009).

Besides digitalization, globalization is another key factor transforming costs. Global competition forces companies to optimize costs through: 1) Outsourcing and offshoring – relocating production to countries with lower labor costs (Gereffi & Fernandez-Stark, 2016); 2) Lean management and just-in-time systems – reducing storage costs and increasing production efficiency; 3) Automation and robotics – replacing labor with technology.

However, globalization also carries risks, such as dependence on global supply chains, which became evident during the COVID-19 pandemic (Evenett, 2020).

6. INTERACTION BETWEEN MARKETS, PRICES, AND COSTS - DISCUSSION OF FINDINGS

In traditional economics, the relationship between markets, prices, and costs was relatively linear: costs determined minimum price, while the market adjusted it to equilibrium through supply and demand (Marshall, 1890/2013). Today, this model is no longer sufficient. In the digital economy, markets and competition often dictate prices, which then force firms to adjust costs. For example, in electronics or e-commerce, global competition lowers product prices, pushing producers to optimize processes, source cheaper materials, or invest in automation to remain profitable (Brynjolfsson & McAfee, 2014). Thus, while price once followed costs, today costs increasingly follow market-determined prices. This inversion represents a fundamental change in modern economic logic. Analysis shows that relationships between markets, prices, and costs are far more complex in modern conditions than in classical models. Theories assuming stable links between these elements no longer suffice to explain the dynamics of digital and globalized economies. Key challenges today include: 1) Regulation of digital markets to prevent abuse of dominant positions and ensure fair competition (Crémer et al., 2019); 2) Ethics of algorithmic pricing, as personalized prices may lead to consumer discrimination; 3) Balancing efficiency and sustainability, as global competition and cost pressure may threaten labor rights and environmental protection.

At the same time, changes in these relationships create new opportunities. Digitalization enables lower transaction costs, greater accessibility of goods and services, and more market transparency, enhancing consumer access and enabling firms to pursue global growth.

7. CONCLUSIONS

The relationships between markets, prices, and costs have undergone deep transformation in recent decades. While in the industrial economy costs were the primary factor in determining prices, today the market and competition increasingly define the framework in which firms must adjust their costs.

Modern market-price-cost relationships are a key segment of the economic system in contemporary capitalist environments. Understanding these interdependencies enables better cost management and proper price setting, essential for successful market positioning and optimal profitability.

The introduction of modern cost accounting systems and monitoring of market changes is necessary for efficient operation in current conditions. Digitalization has brought about zero marginal costs and algorithmic pricing, while globalization has intensified competition and cost pressures. These changes pose new challenges in regulation, pricing fairness, and sustainable development.

The market comprises all interactions between producers and consumers in the exchange of goods and services. In modern markets, supply and demand determine product prices. Supply shows how much of a product or service can be offered at a given price, while demand reflects consumers' willingness to buy at that price. Price is formed through dynamic interaction between these factors, where changes in one variable can significantly impact overall market outcomes. For example, a reduction in natural gas supply can lead to significant price increases, which also affects other essential goods markets. Beyond supply and demand, prices are influenced by factors such as time frames, price elasticity, resource access, and technological progress.

Production costs are key to defining the minimum price at which producers can sell. They include all expenses related to the production process, from raw materials to labor and overhead. Modern cost accounting systems, such as Activity-Based Costing (ABC), enable more precise cost determination by product or service, aligning prices with actual production costs. Unlike traditional systems that may omit specific costs or provide less precise data, modern systems offer detailed insights into cost structures, allowing competitive pricing while maintaining profitability. Modern market conditions require companies to have quick and accurate information on costs and prices to make optimal business decisions. Increased competition and market volatility demand sophisticated cost accounting methods and monitoring of market trends. Production costs directly affect product prices but are also subject to changes due to technology, raw materials, regulation, and other factors. The market shapes the conditions under which prices and costs align. Companies effectively using modern cost systems gain a competitive advantage. Market dynamism and price variability require continuous adaptation of pricing strategies and cost management.

For the future, developing new theoretical models explaining market-price-cost relationships in digital and global contexts will be crucial. Policymakers must also balance support for innovation with consumer protection to ensure sustainable and inclusive economic growth.

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ERIGON AND HERMES: A COMPARATIVE JUNGIAN AND LACANIAN PSYCHOANALYSIS OF IDENTITY, SPIRITUALITY, GUIDANCE, AND TRANSFORMATION

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Abstract: This paper presents a comparative psychoanalytic study of Jordan Plevnesh's avant-garde drama *Erigon* (1982) and the figure of Hermes from Greek mythology, focusing on themes of identity, spirituality, guidance, and transformation. Using Jungian and Lacanian frameworks, the analysis interprets *Erigon*'s protagonist, Isidor Solunski, and his canine alter ego as manifestations of archetypal and unconscious dynamics, including the shadow, the Self, individuation, and the mirror stage. The study highlights how *Erigon* functions as a modernized psychopomp and trickster, paralleling Hermes's role as messenger, guide of souls, and liminal boundary-crosser. Jungian theory reveals *Erigon*'s journey as a paradoxical individuation culminating in death-as-transcendence, while Lacanian theory elucidates the fragmentation of identity across the Imaginary, Symbolic, and Real registers, and the perpetual pursuit of desire. The comparison demonstrates that both *Erigon* and Hermes embody transformational processes that dissolve boundaries between life and death, human and animal, and individual and collective identity. By merging mythic archetypes with postmodern dramaturgy, Plevnesh reimagines the Hermes figure as a vehicle for cultural and spiritual renewal in a fractured European landscape.

Keywords: *Erigon*, *Hermes*, *Jungian psychoanalysis*, *Lacanian psychoanalysis*, *archetype*.

Field: Humanities

1. INTRODUCTION

Jordan Plevnesh's avant-garde drama *Erigon* (1982) reimagines classical themes through a surreal, symbolic narrative. Critics call *Erigon* a "stage anathema" and "theatrical surrealistic fantasy" that shatters the conventions of Macedonian drama. Plevnesh himself invokes mythic motifs – he named the play after the ancient river *Erigon* (Crna Reka) in his homeland and populates it with charged imagery (e.g. a black dog named *Erigon* and its human counterpart Isidor Solunski). This paper applies Jungian and Lacanian psychoanalytic theory to interpret *Erigon*'s psychology and symbolism, and contrasts it with the figure of Hermes from Greek myth. In mythology, Hermes serves as messenger, trickster, and psychopomp (guide of souls) between worlds. By exploring *Erigon* and Hermes side by side, we illuminate themes of identity, spirituality, guidance, and transformation in both works, using Jungian concepts (archetype, shadow, Self, individuation) and Lacanian ideas (mirror stage, Symbolic/Imaginary/Real registers, desire). We draw on Plevnesh's dramaturgy and recent literary criticism and on psychoanalytic scholarship to ground our analysis.

2. METHODS

This study is a qualitative psychoanalytic literary analysis. We examine the text of Plevnesh's *Erigon* (original 1982 play and translations) alongside classical accounts of Hermes, interpreting symbols, character arcs, and dialogues through Jungian and Lacanian lenses. Jungian theory posits universal archetypes (e.g. the trickster, the Shadow, the Self) embedded in the collective unconscious. We identify such archetypal patterns in Plevnesh's characters and plot. Jung also theorized individuation as the process of integrating unconscious and conscious aspects into a unified Self; we consider whether *Erigon*/Isidor's journey reflects this process. Lacanian theory contributes complementary tools: the mirror stage (formation of the ego via misrecognized images) and the tripartite registers – Imaginary, Symbolic, and Real – that structure subjectivity. Lacan's mirror stage (the ego as an "other") and the Imaginary explain characters' self-image and fantasies, while the Symbolic (language, law, social code) and Real (unsymbolizable trauma or jouissance) illuminate conflicts between societal structures and inexpressible drives. Lacanian analysis has been fruitfully applied to literature, as in studies using the mirror stage and Symbolic/Real registers to read character identity and silences in narrative. Accordingly, our method is to read *Erigon*'s narrative and imagery in light of these psychoanalytic approaches, comparing *Erigon*'s

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role to Hermes's mythical functions (psychopomp, trickster, messenger) and examining how Jung/Lacanian concepts manifest in each. Where possible, we corroborate interpretations with scholarly insights on myth, psychoanalysis, and dramatic symbolism.

3. DISCUSSION

Erigon's psyche and symbolic world

In Plevnesh's play, the protagonist Isidor Solunski – a Macedonian actor – embarks on a grotesque odyssey through 20th-century Europe accompanied by his black dog, Erigon. (Notably, Erigon is given meaning as “man in flight,” linking the dog's name to both the ancient river and a fugitive condition.). The play interweaves reality, dream and myth: Isidor recounts visions (e.g. the Apostle Paul commanding him to spread Christ's message through Europe) as he tours Europe's theatres. Ultimately, the narrative culminates at a surreal “European Congress of Dog Rights and Freedoms,” where Solunski is executed by an Orwellian council of dog-parties while the dog Erigon – impregnating a German witch named Erinia – survives. The final image, Madame Dubois, Owner of the Institute for Bathing the Dead in Paris, Collector of Dead Bodies, Dogs, and Ideals, in an attempt to marry dead Isidor, kisses him, haunting declaration: “Now we are alone and thus dead!”. Psychologically, Erigon is a journey of split identity and extreme transformation. Isidor's split self is literalized: he exists both as a human actor and as the dog Erigon (his alter ego or companion). On one level, this can be read as a Shadow-theme: the dog embodies repressed, animalistic or subversive aspects of Isidor and, by extension, of Europe. Jung described the shadow as “the negative side of the personality” – all that one does not wish to acknowledge. Erigon the dog – wild, fertile, outside human law – projects what Solunski cannot be under societal order. In the play's framing, Solunski proclaims to the dog (and to himself): “From now on we are alone”, underlining a merging of identities. Eventually Isidor and the dog share a final fate (“thus dead”), suggesting a dark individuation: unlike many narratives of self-realization, here wholeness is achieved only in a paradoxical death-embrace of conscious and unconscious parts.

This fantastical plot reflects Plevnesh's mythic dramaturgy. Critics note that he infuses Erigon with associative, “mythic and poetic images”. The omnipresent motif of theatre itself – from prologue to epilogue – becomes a metaphor: Solunski's life is a play (the theatre as destiny or even fate). One scholar calls the play a “mythic model” where theatre itself becomes subject and world as play and dream. Indeed, Isidor's opening line (“Now we will be alone”) is directed to Erigon, as if addressing an inner double. Through these surreal devices, Plevnesh stages a psychic confrontation with history and the self. The character's name, Solunski (from Thessaloniki), invokes martyrdom and apostolic mission, tying personal identity to collective “spiritual” destiny – Macedonia's role in “European idea”. Thus Erigon/Isidor can be seen as a vehicle for Plevnesh's vision of cultural transformation: a figure who must die (or be “torn to pieces” at the Congress) to renew Macedonia's spiritual legacy in Europe.

Hermes: archetype of the guide and trickster

In Greek myth, Hermes is a complex symbol. He is the psychopomp (the conductor of souls to Hades), the messenger god of Olympus, and a notorious trickster and boundary-crosser. In Jungian terms, Hermes embodies an archetype of transformation and communication. He “mediates between the unconscious and conscious realms” – guiding souls and also messages. Jungian writers often identify Hermes (and his Roman counterpart Mercury) with the process of integration: as quaternity figure, he joins opposites and assists the ego's passage to a higher Self. Jung alludes to gods like Hermes when discussing the unconscious's images. Notably, one Jungian analyst observes that the trickster quality of Hermes offers “audacity and cunning,” and in myth gave figures like Pandora boldness – reinforcing the Shadow-like or boundary-breaking aspect.

Hermes's qualities have clear resonances with Plevnesh's Erigon. Like Hermes, the black dog Erigon acts as a guide of souls – though invertedly. He leads the playwright-poet and the audience through Europe's moral decay (the “perverse, decadent” Europe of the 20th century toward a kind of post-mortem reckoning. After Solunski's execution, Erigon impregnates Erinia (a German spiritual figure); this act of regeneration and the final union of Erigone and Solunski in death mirrors the psychopomp motif of rebirth and passage to another realm. Furthermore, both Hermes and Plevnesh's protagonist serve as transitional figures between cultures. Hermes moves freely between Olympian and mortal worlds, and between life and death, just as Solunski/Erigon traverses national borders (Macedonia, France, German landscapes) and ontological borders (life vs death, human vs animal). Indeed, Erigon includes prophetic dreams (the Apostle Paul) that explicitly cast Isidor as bringing a “Christ's joyful message” through Europe, echoing Hermes's role as divine messenger.

In Jungian language, both Erigon and Hermes enact the archetype of the Self-in-becoming.

Jung defines the Self as the totality of the psyche, whose goal of individuation is unity of conscious and unconscious. Erigon's narrative can be seen as a distorted path toward that unity. The dog (Erigon) and actor (Solunski) eventually coalesce: Plevnesh stages their merger as both literal (one body in two parts) and symbolic (their final spoken unity). This finale – where “the person recognizes their own self-worth and uniqueness and embraces both the conscious and the unconscious” – is twisted into a vision of death as transcendence. Hermes's own symbolism is similarly about unification: traditionally, Hermes unites heaven and earth, psyche and Logos. His caduceus (staff) famously entwines snakes, suggesting the union of opposites. In this way, Erigon can be read as a Hellenistic homage: the dual-natured hero who, like Hermes, completes a dangerous journey and merges with the sacred (“Christ's message”) in a figurative transformation.

Jungian archetypes – shadow and Self

From a Jungian perspective, Erigon heavily invokes the Shadow archetype. The dog Erigon represents the “animal side” of Solunski and of the collective psyche. Erigon's primal instincts and defiance of social order embody what the human characters repress or reject. Jung noted the Shadow contains the “inferiorities” one denies; in Erigon, the execution of Solunski (and the dog's primal act of impregnating the witch) could be seen as the liberation of this violent potential. Madam Dibua's final cry – “Now we are alone and thus dead!” – underscores a frightening catharsis: the ego (Isidor's persona) can only be free of conflict when all identity is dissolved into the unconscious (death).

By contrast, the Self-archetype in Jungian theory aims for wholeness. The play seems to invert this ideal: the union of Solunski with Erigon is consummated only through destruction. One might say Plevnesh radicalizes individuation: rather than gradual integration, Solunski's identity is forcibly split and then extinguished. Yet the implicit message (and Plevnesh's interest in Macedonian destiny) is that from this violent end, a new collective Self might emerge – much as Hermes's journey across worlds yields renewal (Hermes often presides over commerce, learning, culture). The explicit motif of resurrection (“thus he revived [Macedonia] to life” via Europe) in Solunski's dream suggests hope that the “death” of the old ego will transform into a spiritual rebirth for a nation. Jungians would note this as a mythical enactment of Self: death and renewal as a single process of achieving a higher state of being.

Lacanian analysis – mirror, Symbolic, Real, desire.

Lacan's ideas shed further light on the imagery of split identity and catastrophe. The mirror stage – where the infant first misrecognizes itself in a coherent mirror image – establishes the ego as an Other. In Erigon, one could analogize Solunski encountering his dog as encountering his mirror double: Erigon is both beloved companion and disturbing “other” self. Solunski's repeated address to Erigon (“we are alone”) hints that his ego (Imaginary self-image) depends on an “alter-ego” relationship. As Lacan writes, the ego is essentially an alienated image – “me” is always an other (le petit autre). In this way of analyzing the playwright under the Lacanian theory, Solunski's self cannot be whole until his dog-Other vanishes (or, rather, both vanish into the Real). The mirror stage thus frames the tragedy: Solunski's identity is destined to shatter, since it was constructed in relation to a misrecognized image (the dog as mirrored man) from the start.

The Symbolic order (language, law, cultural norms) looms large in Erigon. The play is laced with references to official discourse: congresses, court sentences, pronouncements in French and German, all set on a theatre stage. Lacan defines the Symbolic as the network of signifiers (e.g. legal codes, political ideologies) that give structure to subjectivity. Here, the “Dog Rights” Congress and its kangaroo court symbolize the grotesque exterior reality that Solunski navigates. These structures are the law of the land – in Lacanian terms, the Big Other. Yet they are fundamentally absurd (Orwellian puppets of power), signifying that the Symbolic order is corrupt or false. For example, Erinia's execution order and the dog panels mimic human justice but pervert it. Lacan might say this is a Symbolic system that has lost touch with the subject's true demands, forcing the protagonists into the Real – what Lacan calls what “resists symbolization”. Indeed, the Real in Erigon emerges as the violence and chaos that symbols cannot assimilate: Solunski's torture, the execution, and the dismemberment of Erigon are events beyond rational discourse – they are the traumatic “Real” that shatters the characters' illusions.

The Imaginary register – fantasy, images, mirror illusions – pervades the play as well. Scenes of dream-visions and symbolic doubling are Imaginary structures: Solunski dreaming of Paul, the actor playing a dog, Erinia's transformation, all create an illusory reality. Lacan noted the Imaginary is fictional yet necessary. In Erigon, the Imaginary sustains the narrative but also perpetuates the ego's misrecognitions. Only by confronting the Real horror (the bloody final tableau) can the Imaginary charade collapse.

Finally, desire in the Lacanian sense – desire of the Other – operates beneath the surface. Every character is entwined by the unsatisfied wants of Others. Solunski seeks to realize a national-mythical dream (his sense of mission is infused with his mother Macedonia's desire for recognition). Erigone (the

dog figure) seeks sexual object (Erinia), a libidinal act that Lacan would see as chasing an objet petit a – the unattainable object-cause of desire. Erinia's womb becomes a locus of desire (she says "How beautiful death is, Erigone!" before his sacrifice), suggesting a link between sexual union and existential transformation. In Lacanian terms, both human and canine characters are caught in circular substitutive quests – the lover's desire for the beloved's love, the colonizing Other's desire for control – that can never be fully satisfied. The play's resolution ("we are dead") poignantly underscores Lacan's idea that all desire is marked by lack: the one moment of consummation is a cessation of life itself.

Hermes vs. Erigon: synthesis of guidance and transformation.

Both Hermes and Erigon function as guides through liminal spaces. Hermes guides souls to the afterlife and travelers across boundaries; Erigon leads the audience (via Solunski) through a moral underworld and toward death-as-redemption. Spiritually, Hermes's role as psychopomp directly parallels Erigon's journey: as Jung noted, the psychopomp archetype mediates between unconscious and conscious realms, just as Solunski (a conscious "actor") is constantly confronted with unconscious visions and ultimately merges with death. Thematically, Erigon echoes Hermes's trickster aspect. Erigon (the dog) is cunning and subversive – impregnating a witch, infiltrating human institutions – undermining the "straight" order. Jung wrote that archetypal tricksters (like Hermes or Loki) "bring audacity and cunning" to upend normality, and Plevnesh's Erigon similarly unsettles the European status quo.

4. CONCLUSION

Finally, both characters embody transformation. Hermes is a liminal god: god of transitions, commerce, and magical change. In mythology he moves fluidly between states (life/death, god/man) and initiates metamorphoses (e.g. stealing Apollo's cattle, inventing music and language). Erigon's narrative is itself a series of transformations – Isidor transforms from artist to martyr to myth, and even the name Erigone (used by characters in the play) suggests rebirth (Erigone being a mythic daughter of Icarus in Greek lore). Jungian analysis would identify this as a cycle of death and rebirth: Solunski's ultimate "death" on stage and Erigone's pregnancy symbolize the regeneration of spirit. Lacan would note that the Real blow – the final annihilation of all signifiers ("we are dead") – paradoxically yields a new Symbolic for the characters: a state beyond life. In both Erigon and Hermes's myth, identity is not static but journey-like: one must traverse darkness (the underworld of psyche or dog-congress) to attain a new kind of wholeness.

In conclusion, Plevnesh's Erigon and mythic Hermes share archetypal functions. Using Jungian and Lacanian concepts, we see Erigon as a modern reinvention of the Hermes-figure: a guide of lost souls, a trickster who dissolves boundaries, and a catalyst for inner transformation. The comparisons illuminate how Erigon dramatizes universal psychic processes – the confrontation with shadow, the fragmentation and potential reunion of the self, and the perpetual desire driving human (and canine) actions – within a culturally specific but globally resonant myths.

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THE ROLE OF PHRASEOLOGISMS IN LEARNING SPANISH AS A FOREIGN LANGUAGE

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Abstract: Phraseological units are a fundamental yet often underexplored dimension of foreign language learning which is rarely or insufficiently integrated in Spanish teaching materials. In this article we examine a paradox that we observe in our experience as researchers and educators: while students display a strong interest in learning phraseologisms from the beginner levels, in textbooks and resources they are introduced at the more advanced levels. Through a review of theoretical frameworks and practical observations we argue that phraseological competence should not be postponed to higher levels as the benefits of teaching such expressions lie not only in their semantic and pragmatic functions, but also in their sociocultural dimension. Nonetheless, Spanish teachers must be cautious: phraseological usage varies across regions, and some expressions may hinder comprehension if introduced without contextualization. This underlines the need for careful pedagogical selection. We suggest that the systematic integration of phraseological units, even at early stages of foreign language education, would foster communicative competence, cultural awareness, and learner motivation. In this regard, we believe that greater presence of phraseological expressions in didactic resources is essential to reflect the authentic use of the language. The role of the teacher remains central, as effective instruction depends on providing contextualized, relevant, and culturally situated explanations. Ultimately, phraseological units should be considered not as peripheral elements, but as essential lexicon that facilitates both linguistic acquisition and intercultural understanding in the classes of Spanish as a foreign language.

Keywords: *phraseological units, Spanish as a foreign language, didactics.*

Field: Humanities

1. INTRODUCTION

In recent years, phraseology has become a popular subject of linguistic study and a theme of vigorous interest for a few main reasons, the first one being the relatively "young" age of this discipline, which makes it a ground still waiting to be "explored". The second reason is the desire of linguists to define and describe in the most precise way its scope and to determine precisely the range of word combinations that can be considered to be phraseological units (PUs from here on), to clarify their construction as well as their peculiarities. Another objective of the recent phraseological studies is to determine if they are truly so important in everyday communication and if their incorporation into the curriculums of foreign language classes could contribute to the faster and easier acquisition of the foreign speech. This argument leads to another type of linguistic studies that aim to propose didactical methods and materials which can facilitate the teaching and learning processes of PUs in the classroom.

In this global world where people from different countries communicate with each other on a daily basis, the necessity of having good command of foreign languages is a prime concern of many, leading to a high demand for not only educational institutions that provide these kinds of service, but also, and nowadays even more likely, for educational systems, tools and materials that facilitate the process of acquiring a new language. Unfortunately, the educational resources rarely contain PUs as a part of the targeted vocabulary for each level.

2. THE PROBLEM

When it comes to the Spanish language, our experience as Phraseology researchers and Spanish language lecturers has shown us a paradox that we are aiming to address in this paper. On one hand, the Spanish language students are eager to learn a lot of PUs from the start of their tuition (that is from the beginner levels), because they realize that these units help them formulate their speech easier and faster. On the other hand, the Spanish language resources, especially the students' books, include nearly no lexical material of this kind in the initial stages of the foreign language education. This inconsistency raises two main questions:

1. Do Spanish language students need to study PUs from the initial levels of their tuition, or should

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this type of expressions be reserved solely for the higher levels of language competence? (we are referring to Spanish learners in particular as the case with other foreign languages may be different).

2. Should the PUs be more present in students' books and materials for Spanish learners and what are the benefits and disadvantages of their presence or of their lack in the teaching resources?

The first question is one frequently asked by linguists whose research is aimed at didactics. We must point out that according to the two main guideline documents that give instructions on Spanish educational programs, activities and materials, i.e., The Common European Framework of Reference for Languages and The Cervantes Institute Curricular Plan (Instituto Cervantes, 2006), Phraseology is a part of the semantic and sociolinguistic competence that should be acquired by learners mostly on the levels of proficiency and mastery (C1-C2). As Naydenova-Chorbadzhiyska (2025) resumes: "Se trata de la conciencia y del control de organización del significado, así como de los conocimientos necesarios para abordar la dimensión social del uso de la lengua" [It involves awareness and control of the organization of meaning, as well as the knowledge necessary to address the social dimension of language use] (p. 354, own translation).

Many theorists share this view and consider only routine formulas such as Buenos días [Good morning], Hasta la vista [See you soon!] or ¡Qué va! [No way!] to be adequate to the beginner levels of education. They observe that learners should have sufficient linguistic resources in order to start using formulaic language. Other authors such as Nenkova (2018), Leal Riol (2011), Saracho (2020), observe the limited presence of such phrases in the educational materials for foreigners and express concerns regarding this fact. In this regard Rădoi (2021) points out:

... if the native speakers recur to the use of PUs constantly, as long as they are present in conversations, songs, movies, media and advertising, it is inconceivable for the PUs to not be incorporated into teaching, even from the initial level. (p.14)

We agree with this school of thought as our experience with Bulgarian students has shown us the high level of interest that the students hold from the beginning of their education in this language. They justify this curiosity they have with the additional materials they tend to use (mostly from the area of entertainment, i.e., music, movies, series) in order to get acquainted with the language in a faster and more natural way. We believe that this initial drive to knowledge should not be held back during the educational process, on the contrary, it has to be encouraged with the proper didactical means. In this sense, we agree completely with Nenkova's observations (2020):

La importancia del conocimiento de las unidades fraseológicas no radica tanto en su significado semántico, sino en su uso pragmático, es decir, en lo que se persigue a través de ellas: enfatizar, advertir, dar consejos, mostrar indiferencia, rechazo, agrado, desagrado, queja, amonestar o simplemente llamar la atención del interlocutor. [...] El profesor de ELE debe priorizar que lo aprendido se pueda aplicar de manera adecuada a la situación comunicativa [the importance of knowing PUs lies not so much in their semantic meaning, but in their pragmatic use, that is, in how they are intended to be used: to emphasize, warn, give advice, to show indifference, rejection, pleasure, displeasure, complain, to admonish, or simply to draw the interlocutor's attention. [...] The SFL (Spanish as a Foreign Language) teacher must prioritize ensuring that what has been learned can be appropriately applied to the communicative situation]. (p. 63, own translation)

In order to answer the second question, we must note that at present the majority of didactical material for Spanish learners barely includes phrasemes as a part of the aimed lexicon. Nenkova (2020) confirms that the current methods of teaching foreign languages insist from the outset on teaching and learning fixed phrases (for greeting and farewell, for expressing gratitude or apology, for lamenting), universal comparisons and some collocations that have no idiomatic or figurative meaning. But regardless of the fact that at the higher levels (B1 to C1) there are exercises or sections dedicated to the use of more complex PUs, they still seem to be insufficient. According to Nénkova (2020):

...la excepcionalidad de estos ejercicios o apartados demuestra una vez más la escasa atención que se concede a la fraseología en la enseñanza de español como lengua extranjera. Esporádicamente aparecen ejercicios de comprensión, de memorización y de reagrupación de las unidades fraseológicas por campos semánticos. [...] Con todo, en el proceso de enseñanza y aprendizaje de lenguas extranjeras, en general, no se profundiza demasiado en el estudio de las unidades fraseológicas. [...the exceptional nature of these exercises or sections demonstrates once again the scarce attention given to the Phraseology in the teaching of Spanish as a foreign language. Comprehension exercises, memorization exercises, and exercises for grouping phraseological units into semantic fields appear sporadically. [...] However, in the process of teaching and learning foreign languages, in general, not much depth is given to the study of phraseological units]. (p. 62, own translation)

We consider this lack of sufficient material to be a problem, because the fixed phrases that are

united under the name of PUs do not only contain lexical meaning and do not serve solely as pragmatic means of expression. Their cultural, historic and social significance sparks the curiosity of the learners and submerge them in the world of the native speakers. In other words, PUs serve as cultural representatives of the language they belong to and as such are highly informational to the learners. But, if there is one thing we can agree on, it is that not all PUs facilitate learning Spanish. In fact, we want to emphasize that sometimes they can hinder the communication; that is because not all foreigners are aware that some collocations, idioms and phraseological statements are not used in all areas where Spanish is the primary language. Therefore, we believe that in class the teachers should have great caution when they introduce these structures. They should inform the students of the peculiarities of the phrases, while also considering if the PUs are appropriate for the objectives and the level of knowledge of the attendees.

We believe it is necessary to review the concepts of what is considered to be a PU in order to explain what we are referring to.

3. THEORETICAL ASPECTS

One of the most controversial aspects we encounter when dealing with the topic of PUs is their definition and classification. Their common characteristics are fixation and idiomaticity, although they have other specific characteristics as well. There are numerous definitions and classifications on the subject, but the one by Corpas Pastor (1996) is interesting for its educational purposes. According to her, the PUs are:

...las unidades fraseológicas son unidades léxicas formadas por más de dos palabras gráficas en su límite inferior, cuyo límite superior se sitúa en el nivel de la oración compuesta. Dichas unidades se caracterizan por su alta frecuencia de uso, y de coaparición de sus elementos integrantes; por su institucionalización, entendida en términos de fijación y especialización semántica; por su idiomaticidad y variaciones potenciales; así como por el grado en el cual se dan todos estos aspectos en los distintos tipos. [...lexical units formed by more than two graphic words as a minimum, and whose maximum is located at the level of the compound sentence. These units are characterized by their high frequency of use and the co-appearance of their constituent elements; by their institutionalization, understood in terms of semantic fixation and specialization; by their idiomaticity and potential variation; as well as by the degree to which all these aspects are present in the different types]. (p.20, own translation)

When it comes to the theoretical studies of PUs, we are faced with a wide variety of definitions, all of which share common characteristics: fixation, stability, reproducibility, semantic integrity, idiomaticity. According to Corpas Pastor (1996) in order for a word combination to be considered a PU it has to be comprised of several word, it has to be institutionalized, it must have a certain degree of stability and present a certain syntactic or semantic peculiarity.

Regarding the classification of PUs there are also different opinions, but the one we consider most relevant is that of Corpas Pastor (1996), as she establishes three groups: collocations (word combinations fixed by the norm, but which do not constitute complete statements), set phrases or idioms (which function as components of the sentence and belong to the system of the language), and phraseological statements (self-contained statements and speech acts fixed in discourse). The first two do not constitute complete statements; they are equivalent to syntagms, so they need to be combined with other linguistic elements to have full meaning within the act of communication. They have referential meaning. The phraseological statements, on the contrary, can stand alone as independent sentences or speech acts.

Of course, we do not advocate for teaching these theoretical postulates to the Spanish learners, even less so in the beginner levels of their tuition. What we consider appropriate is for different kinds of PUs to be incorporated in the education, so that foreign learners can get used to them from the very start of their acquaintance with the language and start to consider them a crucial part of it, as they truly are such.

We have already mentioned the cultural, historic and social significance of the PUs, and also, especially in Spanish, the geographical variations that may present difficulties in the teaching-learning process. Both aspects deserve to be explained and described for more clarity.

4. CULTURAL ASPECTS

Understanding the cultural characteristics of PUs is of significant importance not from a theoretical, but from a practical perspective. When learning foreign languages, students generally encounter idioms and everyday expressions, which provide an opportunity to experience their cultural dimensions, regional variations and historical connotations. However, upon teaching these expressions, it is essential that

the tutors consider the students' competence level carefully. For example, an idiom such as *más vale tarde que nunca* [better late than never] may have slightly different interpretation in different Spanish-speaking regions, as the cultural values it reflects may vary between patience and perseverance. While incorporating such expressions allows students to develop pragmatic and sociocultural competence by enhancing their comprehension and authentic use of PUs in real communicative context, these phrases may not be suitable for all levels or all regions. Let us give some more examples:

- *Despedirse a la francesa* [to leave without saying goodbye] - In Spain it means to leave without farewell. In Latin America this phrase would be incomprehensible as in this case the people there use the verb *esfumarse* [to disappear].

- *Hacerse el sueco* [to play dumb] - In Spain this phrase is used when someone is acting as if they do not understand what they are being told. In Latin America this phrase is unknown, and, in such context, people tend to say *hacerse el loco* [to play dumb].

- *Pasar de alguien* [to ignore] - In Spain, it means to ignore someone or to not pay attention to them. In some countries in Latin American, the phrase can be interpreted as a physical action (walking past someone) rather than an act of ignoring them.

- *No me rayes* [don't confuse me] - In Spain, it means "don't confuse me" or "don't bother me." In Latin America, this usage is not common, and the verb *rayar* is usually associated with drawing lines or leaving marks on a surface. In Venezuela, for example, it can also be used as an expression, but its meaning would be "don't embarrass me".

- *Ser la leche* [to be the best, to be incredible] - In Spain, it means that something is incredible. In Latin America, the use of *leche* in this context does not exist, so it may sound confusing or funny.

- *Ser una fiera* [to be skilled at something] - In Spain, this expression means to be very skilled or talented at something. In Latin America, *fiera* is more associated with a wild animal or a beast, and the phrase can be interpreted literally.

- *Dejar el peleró* [to escape fast] - In Latin America this phrase means to escape fast from someone or something, where in Spain it is not used. The people there say *salir por patas*.

- *Estar en las nubes* [to daydream] - This expression is used in Latin America to say that someone is daydreaming or is absent-minded. In Spain the phrase used in this case is *estar en Babia*.

5. CONCLUSIONS

Some of these expressions may be difficult for beginners, not because of their vocabulary, but because of their usage. This does not prevent the teachers from incorporating them in the classroom; instead, it gives them a good opportunity to teach such phrases through their practical use and the cultural context to which they belong. There are many expressions worth adding in the beginner's levels, as their use is more widespread and general across different regions and cultures. They may even have similarities with the students' mother tongues. Some examples are: *estar por las nubes* [head in the clouds], *dormir la siesta* [to take a nap], *ir de compras* [to go shopping], *ser la oveja negra* [to be the black sheep], *ser una gallina* [to be a coward], *pelear como perro y gato* [to fight like cats and dogs].

We consider it important to include more PUs in the lessons for foreign learners, since when we learn a language, we are not only referring to its lexis, grammar or spelling, but also to a community and culture that will allow us to understand its way of thinking and acting. And as López Vázquez (2011:) points out:

Las expresiones fijas han sido tratadas tradicionalmente como un fenómeno anecdótico y, por lo tanto, de poco interés a la hora de aprender una nueva lengua. Sin embargo, las investigaciones más recientes demuestran que la competencia fraseológica tiene una gran importancia en los intercambios comunicativos de cualquier comunidad lingüística y, en consecuencia, el componente fraseológico debe ocupar un lugar fundamental en la adquisición de una lengua extranjera [Fixed expressions have traditionally been treated as an anecdotal phenomenon and, therefore, have been of little interest when learning a new language. However, the most recent researches show that phraseological competence is of great importance in the communicative exchanges within any linguistic community and, consequently, the phraseological component must occupy a fundamental place in the acquisition of a foreign language]. (p.531, own translation)

In addition, we would like to mention that in the recent years we have noticed a decrease in competence among young people when it comes to the phraseological units in their mother tongue. We do not aim to discuss the reasons for this phenomenon in the present paper, but to emphasize on the importance of this knowledge as pointed out by Salmerón Luckes (2023) "...si se presta mayor atención a la fraseología de la lengua materna, los hablantes poseeremos mayor competencia comunicativa ya

que nos aportan también mejoras en nuestra destreza discursiva” [...if greater attention is paid to the phraseology of the native language, speakers will have greater communicative competence, as it also improves our discursive skills]. (p.174, own translation)

In this regard Martín Rider (2022) notes: “Actualmente, el desarrollo de la competencia comunicativa es la finalidad del proceso de enseñanza-aprendizaje de cualquier lengua, tanto materna (LM) como extranjera (LE). Para lograr ese fin, el conocimiento léxico en general y fraseológico en particular es imprescindible” [Currently, the development of communicative competence is the goal of the teaching-learning process of any language, both native (L1) and foreign (L2). To achieve this goal, vocabulary in general and phraseological knowledge in particular are essential]. (p.10 own translation).

Spanish phraseology is vast, which makes the task of grouping and compiling it into a single manual quite difficult, if not impossible. Nevertheless, it should have greater presence in textbooks designed for foreign learners. The role of the teachers is essential, as based on their experience and knowledge they can provide students with the most appropriate examples and relevant explanations. Expressions, on their own, hold little value if they are not accompanied by their corresponding sociocultural components.

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INITIAL TEST IN SERBIAN LANGUAGE AND LITERATURE CLASSES IN ELEMENTARY SCHOOL

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Abstract: Starting from the premise that initial assessment within school subjects is defined by the Rulebook on Student Assessment in Elementary School and is mandatory for every subject, we were interested in understanding how much importance students attach to this type of assessment, given the fact that it is not graded. We also aimed to explore how important the results of the initial test are to them, considering that the outcome of this test serves the teacher as a tool for planning future lessons and monitoring student progress.

In line with this, the objective of the study was to determine the significance of applying the initial test in the subject Serbian Language and Literature among upper elementary school students. To achieve this goal, we conducted a survey among students to examine their attitudes toward the results of this test. Statistical analysis indicated that, regardless of the test's purpose, there is no significant correlation between the initial test results and students' final academic achievement.

The conclusion of the study suggests that students perceive the test as a mere formality, do not dedicate enough attention to it, and that its effectiveness and purposefulness in the teaching process are therefore questionable.

Keywords: *initial test, Serbian language and literature, elementary school.*

Field: Social Sciences and Humanities

1. INTRODUCTION

Testing students is an integral part of the process of acquiring knowledge and checking student's achievement. Testing and checking student's knowledge is an integral part of the teaching process and every assessment is most often connected with grades (Grandić, 1999: 186). Grading can be formative- by monitoring student's work with a recommendation for improvement, and summative- by giving grades to students which is, as stated by Grandić, a relationship between "the acquired knowledge and desired results" (Grandić, 1999: 186).

The application of testing in assessing student achievement requires providing test standardization which includes metric characteristics in terms of validity, discriminativeness, reliability and objectivity (Jeremić, 2023: 288). In practice these are often non-standardized tests, i.e. informal tests that don't have all the metric characteristics, "but they meet the requirements of standardization in a narrow sense" (Jeremić, 2023: 288). Tests that teachers make and apply independently belong to the category of those tests (Rudner & Schafer, 2002 according to Jeremić, 2023: 289). The initial assessment, within the subject of teaching Serbian language and literature, is defined by the Rulebook on Student Assessment in Elementary School: "at the beginning of the school year, as a rule by the end of the third week since the beginning of the school year, the teacher assesses the student's previous achievements within a certain area or topic, which are of importance for the subject (hereinafter referred to as initial assessment) in that school year" (The Rulebook). The authors Antonijević and Radenović (2022) call it pre-assessment (Antonijević & Radenović, 2022: 36).

The achievement results on the initial assessment serve the teacher to plan further work and follow the progress of students. Their evaluation is not in the form of numerical rating, but rather a percentage with a recommendation which areas of the test need to be reviewed and improved. The feedback that is given should be incentive support for the student and for his self-regulation of learning, and automatically generated feedback content is increasingly being used (Cavalcanti et al., 2021), with the note that an individual approach to each student should be respected.

In various foreign literature this initial test is also known as placement test, basic test, pre-test, diagnostic test etc. (Oliveira et al., 2001; Berry, 2008; Skibickij & Bucior, 2012; Delucchi, 2014; Burkholder et al., 2020; Giannoulas et al., 2025). The initial test checks previous achievement and further work with the student is planned accordingly. Diagnostic test is a progress test and serves to identify the weak points of the test taker (Oliveira et al., 2001: 134). We can say that the initial test is the combination of the placement test and diagnostic test. Although there are slight differences in the types of these tests,

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their goal is the same: determining the level of knowledge within the field/course content and accordingly assigning students to different course levels, i.e. adjusting the method and content of work- individual approach to working with students. In the available literature addressing the use of initial testing in the Serbian education system, the topic has been insufficiently explored. Therefore, we decided to conduct a pilot study in order to identify the reasons behind students' underachievement on this type of test compared to the expected results.

2. METHODS

We applied survey testing of students in order to examine students' attitudes about the importance of applying initial testing, considering the fact that the students of the older grades of elementary school mainly study for the current grade, and this type of test is not graded, so the students lack motivation for permanent acquisition of knowledge.

The authors Pejić and Radivojević (2017) state, based on the research conducted in 2011, that school tires students and that knowledge is not a measure of success (Pejić & Radivojević, 2017: 3), which is also shown by the answers of students conducted in our survey. The results of our research were obtained and interpreted using the survey method, as well as the descriptive method.

3. RESULTS AND DISCUSSION

Results of the initial test of students (N=62) in the seventh grade of the school year 2024/25 showed that students did not do the test with dedication (70%), and that they did not care (69%) how they would do the test, because it was not graded. Also, they showed that parents were not interested in the achievement of students on this type of test (71%). Furthermore, students didn't care that this test was taken (47%), but they didn't worry about how they would take it (67%) and they didn't do the test with dedication.

74% of students believed that it was not important to them what results they would achieve on the initial test, given that it was not graded. 68% showed indifference as to whether they would remember/know the answers to the questions of the material from the previous year Table 1.

Table 1. Initial Test in Serbian Language and Literature

		f	%
I do the initial test with dedication.	Completely correct	8	8
	Correct	22	22
	Incorrect	52	52
	Completely incorrect	18	18
When a test/assessment is announced, I worry about how I will do it.	Completely incorrect	9	9
	Correct	24	24
	Incorrect	31	31
	Completely incorrect	36	36
Before the test, I revise the previous material that the teacher pointed out to me.	Completely correct	18	18
	Correct	22	22
	Incorrect	48	48
	Completely incorrect	11	11
I don't try to do well because it isn't graded.	Completely correct	18	18
	Correct	56	56
	Incorrect	15	15
	Completely incorrect	11	11
I know it is evaluated descriptively, so I don't really care.	Completely correct	13	13
	Correct	40	40
	Incorrect	40	40
	Completely incorrect	7	7
I wish there were no such tests.	Completely correct	11	11
	Correct	13	13
	Incorrect	23	23
	Completely incorrect	53	53
My parents/guardians monitor my test results.	Completely correct	14	14
	Correct	15	15
	Incorrect	32	32
	Completely incorrect	39	39
I believe that I will remember most of the content of the material.	Completely correct	8	8
	Correct	24	24
	Incorrect	52	52
	Completely incorrect	16	16
I care how I will do the test.	Completely correct	8	8
	Correct	23	23
	Incorrect	40	40
	Completely incorrect	29	29

Source: Authors research

In support of the students' answers we received, we noticed that the initial test 1) had no effect on the student's final grade in the subject, regardless of the individual approach to working with the student, 2) that entered as a percentage formative monitoring of student knowledge at the beginning of the school year did not give a prediction of what the student's final grade or further progress would be. On the initial test, the maximum was 17 points, and the student's achievement showed a result of at least 1 point to a maximum of 12 points. The correlation of student achievement on the test and the final grade was 53.0%, which indicated the fact that such tests were not a good indicator of student language skills and knowledge in the field of Serbian language and literature. Also, they pointed the fact that it was difficult to determine the language competence of students through this kind of assessment, and that the results obtained in this way were not reliable. The correlation of students' final grades between classes was 89.1%, which indicated the mentioned fact that students studied for grades, not for knowledge. We were aware of the fact that for students, grading was an indicator of their achievement and success (Antonijević & Radenović, 2022: 35), to which the authors Antonijević and Radenović warned that "it was harmful if the rating [it] became the main goal for students" (Antonijević & Radenović, 2022: 35).

The initial assessment, in whatever form it was, although it was legally required, did not motivate students to devote themselves to it, and the results obtained from this assessment couldn't serve to improve future work and indicate weak points and potentially less acquired areas. Therefore, it was necessary to find a model to satisfy the legal obligation, and to motivate students for the sake of determining current and previous knowledge.

Teaching language and literature included knowledge of three areas: language, language culture and literature. It was clear that in the initial tests the structure of the tasks was largely reduced to the characteristic concepts of each area for the given age. In order for the test to be valid, it was important that it was well designed, that the tasks were set clearly and unambiguously, that they were positioned from easier to more difficult ones and that most of the tasks were at intermediate and basic level, and that there were the least tasks of advanced level of knowledge. The tasks were divided according to the well-known Bloom's taxonomy - from tasks of recognition, knowledge, understanding, to the level of analysis and synthesis (Bloom, 1981 according to Jeremić, 2023: 289). "Although the content and metric characteristics of tasks were of crucial importance for their quality, it was undoubtedly important to think about the form of tasks as an aspect of their quality" (Jeremić, 2023: 290). Also, the validity of the test was ensured by the fact that the test was done in the real immediate environment of the student, and not in electronic form. Amultairi (2023) emphasized the fact that taking the test electronically brought a low level of reliability and validity.

4. CONCLUSION

1. We conclude that the initial tests are the legal obligation of teachers working in Serbia, but that the results they show are not significant for further teaching work with students.

2. The question of assessing the student's language level, as well as the knowledge of literature in one class, can hardly be used to classify students by knowledge level, taking into account the fact that students do not take the initial tests seriously and do not devote themselves to testing, because such tests are descriptively evaluated, and do not affect the final grade of the student in the subject.

3. It is necessary to design a different knowledge assessment that will not be formal but purposeful and that will encourage students to review important areas of language and literature, and to thoroughly and permanently acquire knowledge in the area of language, language culture and literature.

4. A possible method of initial assessment would be about different checking methods that, when cross-checked, would give a more complete picture about student's knowledge.

5. Examples of initial tests:

i) Presentation of language tasks of a given area, sorted by levels, focused on outcomes (maximum 5 tasks);

ii) In the second test sequence, students would complete the sentences and thereby check the area of language culture (maximum 5 representative tasks);

iii) Writing a short-written task about a literary work, given by random choice, and that with written guided reflection (Deti et al., 2023), which allows the student to articulate knowledge from literature and at the same time renew the techniques of creating a written composition and language culture, and (self) assess the level of achievement according to predetermined criteria.

6. It is also possible to consider a shorter oral test of knowledge in the form of one student's answer, and assessment of the level of the answer by other students.

7. Improve the feedback so that the student will also participate in the evaluation of achievements,

the student will record the information and record his/her progress in the work in potentially weak or strong areas, and if necessary, the student will strengthen the knowledge in weaker areas with supplementary work.

8. Individualization of the teacher's evaluation and (self) monitoring of the student's work is necessary for the development of quality teaching.

9. Development of a research action plan (Stamatović & Zlatić, 2019) in each school for the purpose of improving the results and approach to the implementation of the initial assessment.

5. IMPLICATIONS FOR FURTHER RESEARCH

This pilot survey is important to point out the need to change the attitude towards the initial test in Serbian language and literature, and, in general, the initial test in other subjects. Checking the metric and validation characteristics of the test, cross-referenced with the stated attitudes of the students should contribute to changing the attitude about the initial test, and therefore its structure. It is necessary to avoid mere formalism in conducting the test and focus on the cognitive, emotional and perceptive characteristics of students at the beginning of the school year, and the purpose of the given test. In the case of ensuring its effectiveness and evaluation, the students' attitude towards it would also change. Examining a larger sample of students and demonstrating the impractical procedures of creating and implementing the test would indicate the importance and consequences of the formalistic approach in the implementation of the initial assessment, the legal obligation of the teacher.

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THE EFFECT OF PROBLEM-BASED AND INQUIRY-BASED LEARNING ON THE SCIENTIFIC LITERACY OF YOUNGER SCHOOL-AGE STUDENTS IN THE TEACHING OF NATURE AND SOCIETY

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Abstract: Early school age is marked by the introduction of various concepts about the world around us. It is crucial for children to develop clear understandings of these concepts in order to apply them in new situations. Functional knowledge fosters scientific literacy, which is of significant importance for individual development and is emphasized in Nature and Society classes through various teaching models. This study aims to examine the impact of problem-based and inquiry-based learning on scientific literacy in the context of teaching Nature and Society to younger school-age students. The research focused on content related to the planet Earth and Space—topics rich in scientific concepts and highly abstract. A parallel-group experiment was conducted with 224 fifth-grade students from two elementary schools in the Republic of Srpska. One group followed the inquiry-based learning model, another the problem-based model, and a control group was taught using traditional methods. Students were matched by gender, average grade in Nature and Society, and results of an initial test taken at the end of the fourth grade, and were randomly assigned to groups. After a seven-week experimental program, a final assessment was conducted. The results showed that students in both experimental groups outperformed those in the control group, with no statistically significant difference between the experimental groups. The study concludes that both problem-based and inquiry-based learning positively impact scientific literacy, highlighting the need for their wider application in the teaching of Nature and Society. Future research should explore these models across more diverse content areas to better understand their broader applicability.

Keywords: *problem-based learning; inquiry-based learning; scientific literacy; early school age; Nature and Society instruction.*

Field: Social Sciences and Humanities

1. INTRODUCTION

Children's development is significantly influenced by the patterns, situations, and contexts they encounter within the family and peer groups. Starting from the development of motor skills and language, children must learn a wide range of concepts on which they will later build systemic knowledge. Vygotsky (1977) states that even before entering school, children have a concept of certain subjects—they understand the representations these subjects form, though they may not yet be fully aware of the concept itself. These early, spontaneous concepts, as Vygotsky refers to them, are eventually deepened, systematically organized, and defined through verbal descriptions and non-spontaneous actions to become scientific concepts. The development of scientific concepts lays the foundation for acquiring scientific knowledge and, consequently, scientific literacy—the ability to apply this knowledge in new situations and maintain a positive attitude toward science (Pavlović Babić, Baucal, & Kuzmanović, 2009). A scientifically literate person is able to offer scientific explanations for phenomena, design and evaluate scientific research, interpret data, and make informed decisions. Therefore, the goal of science education should be to develop competencies for researching, evaluating, and using scientific information in decision-making and action (OECD, 2025).

Through the teaching of Nature and Society, children become familiar with their natural and social environment, which forms the basis for studying natural and social sciences throughout their schooling. In the Republic of Srpska, the curriculum for primary education (2021) outlines a range of topics, including humans, flora and fauna, transportation, family, geography, celestial bodies, materials, and movement. These topics are introduced during the first five years of primary education. Active learning is a core element of effective science education in the natural sciences (Kanphukiew & Nuangchalerm, 2024), with various teaching methods supporting this approach, such as problem-based learning (PBL), project-based learning, inquiry-based learning (IBL), and STEM education.

Inquiry-based learning is less known, less applied, and less researched in the Republic of Srpska than other models. However, it is closely related to problem-based learning, with both focusing on the development of scientific literacy. This study aims to examine the impact of problem-based and inquiry-

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based learning on the scientific literacy of younger school-age students in Nature and Society instruction.

2. MATERIALS AND METHODS

The study was conducted using an experimental method with parallel groups during the 2023/24 school year, involving 224 fifth-grade students from two elementary schools in the Republic of Srpska. The content covered topics about the planet Earth and the universe—rich in scientific concepts and abstract in nature. The study focused on this content because it is typically introduced for the first time in the fifth grade, making it ideal for exploring the effects of problem-based and inquiry-based learning. To investigate the impact of these two teaching methods, two experimental groups and one control group were formed. The first experimental group studied the material through inquiry-based learning, while the second experimental group used problem-based learning. The control group was taught using traditional methods. Students were matched based on gender, average grade in Nature and Society, and performance on a pre-test administered at the end of the fourth grade. They were then randomly assigned to one of the three groups. The experimental program lasted seven weeks and included lessons on “Celestial Bodies” and the “Origin and Composition of the Earth.” These topics aimed to help students understand key scientific concepts such as stars, planets, meteors, satellites, the Solar System, Earth’s atmosphere, hydrosphere, biosphere, and more.

While problem-based and inquiry-based learning share similar principles, key differences were highlighted during the experiment. In problem-based learning, students were primarily guided by the teacher to solve problems, while in inquiry-based learning, students conducted independent research with minimal teacher intervention. As the lessons progressed, both groups were encouraged to take increasing responsibility for their learning, with the goal of fostering independence and initiative.

The research tested the following hypotheses:

- Main Hypothesis: The experimental program enhances scientific literacy in the teaching of Nature and Society.
- Auxiliary Hypothesis 1: The experimental program will positively influence student performance on the knowledge test.
- Auxiliary Hypothesis 2: No statistically significant differences will exist between the experimental groups on the knowledge test.

Two knowledge tests were used as measuring instruments: a pre-test (administered at the end of the fourth grade) and a post-test (administered after the experimental program). The tests assessed content areas related to scientific literacy and were validated based on their alignment with the prescribed curriculum outcomes (2021). The reliability of the tests was high, with Cronbach’s alpha values of 0.75 (pre-test) and 0.89 (post-test). Sensitivity was verified through the Kolmogorov-Smirnov test, which showed no statistical significance. Objectivity was confirmed with a Pearson correlation coefficient of 0.99, indicating consistency between examiners.

The sample of respondents was balanced by gender (114 boys, 110 girls), average grade in Nature and Society, and pre-test performance. After the experimental program, a final assessment was conducted, and the results were analyzed using ANOVA, LSD, and t-tests.

3. RESULTS AND DISCUSSION

In accordance with the research hypotheses, the existence of differences and their statistical significance between the experimental groups and the control group in terms of achievement on the final test, as well as the differences in achievement among the experimental groups themselves, were examined.

After statistically significant differences were found across all questions of the final test, according to ANOVA (with a significance level of $p \leq 0.05$), the LSD test was applied to determine which groups benefited from the observed differences in responses to each question of the final test (Table 1).

Table 1. Differences in achievement between the control group and the experimental groups

Question	MEA	Sig.	MEA	Sig.
	K – E1		K – E2	
1	-1.62	0.000	-1.76	0.000
2	-1.21	0.000	-0.99	0.000
3	-0.65	0.000	-0.30	0.027
4	-1.87	0.000	-1.17	0.000
5	-0.29	0.000	-0.23	0.002
6	-0.43	0.000	-0.48	0.000
7	-1.01	0.000	-0.86	0.000
8	-2.51	0.000	-2.72	0.000
9	-0.22	0.017	-0.28	0.002
10	-1.55	0.000	-1.47	0.000
11	-0.63	0.000	-0.58	0.000
12	-0.37	0.006	-0.52	0.000
13	-1.87	0.000	-2.13	0.000
14	-0.55	0.000	-0.77	0.000
15	-1.43	0.000	-1.61	0.000
16	-0.25	0.002	-0.30	0.000
17	-0.33	0.000	-0.40	0.000
18	-0.28	0.001	-0.33	0.000
19	-2.03	0.000	-2.25	0.000
20	-0.63	0.000	-0.64	0.000

Legend: MEA – maximum extreme difference between the expected and obtained distribution; K – control group; E1 – first experimental group (inquiry-based learning); E2 – second experimental group (problem-based learning); Sig. – statistical significance of the differences between the groups.

Source: Authors' research

The differences in achievement between the control group and the first and second experimental groups were statistically significant for each question, given that the significance level was $p \leq 0.05$, and none of the differences exceeded this threshold. A negative sign in front of the reported differences indicates that the advantage is in favor of the second group, i.e., in favor of the experimental groups.

Table 2. Differences in achievement between the experimental groups

Question	MEA	Sig.
	E1 – E2	
1	-0.14	0.474
2	0.26	0.201
3	0.35	0.054
4	0.40	0.180
5	0.05	0.523
6	-0.05	0.655
7	0.16	0.492
8	-0.21	0.343
9	-0.06	0.567
10	0.08	0.701
11	0.06	0.727
12	-0.15	0.324
13	-0.26	0.273
14	-0.22	0.131
15	-0.18	0.455
16	-0.06	0.514
17	-0.08	0.388
18	-0.06	0.530
19	-0.22	0.317
20	-0.01	0.948

Legend: MEA – maximum extreme difference between the expected and obtained distribution; E1 – first experimental group (inquiry-based learning); E2 – second experimental group (problem-based learning); Sig. – statistical significance of differences between groups.

Source: Authors' research

Certain differences in responses between the experimental groups were observed (Table 2). In some questions, the differences favored one group, and in others, the second group (as indicated by the sign of the MEA value). However, these differences were not statistically significant, as the p-values exceeded the $p \leq 0.05$ threshold (ranging from 0.054 to 0.948). These results confirm that students in the experimental groups achieved approximately the same results and did not differ significantly in their performance on the final knowledge test.

Table 3. Differences in the achievements of the groups on the final testing

Group	F	t	df	Sig. (2-tailed)
E1 - K	3.73	14.70	149	0.000
E2 - K	5.85	15.70	145	0.000
E1 - E2	0.09	-1.593	148	0.113

Legend: E1 – first experimental group; E2 – second experimental group; K – control group; F – Levene’s test; t – t-test value; df – degree of freedom; Sig. (2-tailed) – statistical significance.

Source: Authors’ research

Overall differences among the groups are shown in Table 3. The t-test values for the experimental groups compared to the control group (14.70 and 15.70) were statistically significant in both cases (2-tailed Sig. = 0.000). No statistically significant differences were observed between the experimental groups regarding their achievements on the final test (2-tailed Sig. = 0.113).

Based on these results, it can be concluded that both auxiliary hypotheses were confirmed. Both problem-based and inquiry-based learning positively influenced the quality of knowledge acquisition about celestial bodies, contributing to adequate scientific literacy in this domain. This fully supports the general hypothesis: “The experimental program contributes to the development of scientific literacy in the teaching of Nature and Society.”

The quality of problem-based and inquiry-based learning regarding its impact on the development of scientific competencies, interest in studying content, and achievement in natural sciences has also been examined by other authors (Ting Wen et al., 2020; Unlu & Dokme, 2020; Yakobi Kaliun, Ahmad Muslihin, Ahmad Rashid & Abdullah, 2020; Rafafy Batlolone & Franky Souisa, 2020; Nainggolan, Situmorang & Hastuti, 2021; Zhao, He, Liu, Tai, Hong, 2021). Scientific literacy, as argued by Wen, Liu, Chang, Chang, Chang et al. (2020), is a strong predictor of research behavior. Inquiry-based learning can motivate students with different levels of achievement in science, helping them understand the purpose of experiments and research (Wu & Wu, 2011). Such experiences and understanding of science, scientists, and their methods remain relatively stable during the early school years (Bartels & Lederman, 2022). Younger students can explore scientific ideas qualitatively and conceptualize the type of knowledge developed through scientific research (Akerson, Cesljarev, Liu, Lederman, & El Ahmadie, 2023). Problem-solving fosters research competence, improving the quality of education and enabling knowledge transfer (Sulichka, 2024). Radivojević and Gavrić (2023) found that active learning models positively influence students’ enthusiasm for acquiring science content. Implementing models such as inquiry-based learning enhances students’ attitudes, motivation, sense of responsibility, and environmental values (Unlu & Dokme, 2020). Both learning models support the acquisition of abstract concepts, such as processes in humans, plants, and animals, meteorological phenomena, and the water cycle, highlighting the need to examine these approaches across a broader range of content.

4. CONCLUSIONS

Problem-based and inquiry-based learning are effective approaches in modern science education for younger students, aimed at developing scientific literacy. Both approaches enable students to build knowledge independently. While many studies have examined these models individually or in combination with other teaching methods across various natural and social science topics, this study is distinguished by its comparative examination of the methodological potentials of problem-based versus inquiry-based teaching. The research was conducted in the Republic of Srpska, where inquiry-based learning is relatively unfamiliar. The study aimed to confirm the positive effects of both problem-based and inquiry-based teaching, providing a basis for further research on implementing these models among primary school teachers in the subject Nature and Society.

This subject includes scientific content essential for students, such as plant and animal life, materials, movement, and the human body. In this study, the effects of problem-based and inquiry-based teaching were examined using content on celestial bodies, which is highly abstract for younger students.

Future research could focus on content related to human organ systems. Evaluating the effectiveness of these models across a broader range of topics will facilitate better recognition of their applicability in science education.

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THE EFFECTS OF EXPORTS ON ECONOMIC GROWTH: A COMPARATIVE ANALYSIS OF SERBIA AND NORTH MACEDONIA

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Abstract: The aim of this paper is to empirically examine the impact of exports on the economic growth of Serbia and North Macedonia. Both countries represent small, open economies of the Western Balkans that rely heavily on trade with the European Union and undergo similar transition processes, but differ, among other things, in market size, export structure, and industrial capacity. The comparative analysis provides insights into the specific challenges and potentials of both countries and may serve policymakers in the Western Balkans in shaping strategies for sustainable economic growth. The research is based on annual time series covering GDP per capita growth rate, the share of exports in GDP, the share of imports in GDP, and the share of foreign direct investment (FDI) inflows in GDP for the period 1995–2024. The analysis was conducted using the Autoregressive Distributed Lag (ARDL) model, which is particularly suitable for examining macroeconomic time series of different orders of integration. The results of the ARDL bounds test indicate the existence of cointegration among the observed variables in both countries. In the long run, exports have a positive and statistically significant effect on GDP per capita growth in Serbia and North Macedonia. However, in the short run, exports in Serbia show a lagged negative effect on economic growth, while in North Macedonia their short-run effect is not statistically significant. Imports and FDI serve as control variables in the model. In Serbia, imports stimulate growth in the short run but pose a risk of negative long-term effects, indicating dependence on the external sector and an unfavorable import structure. In North Macedonia, imports have no statistically significant effects. FDI in both countries represent a consistent and significant growth factor, as they exert both short-run and long-run positive effects on GDP per capita growth, confirming the importance of capital inflows and technology transfer for sustainable economic growth.

Keywords: *export, economic growth, ARDL, Serbia, North Macedonia.*

Field: Social sciences (economy)

1. INTRODUCTION

International trade represents one of the key drivers of economic development, with the export of goods and services playing a significant role in shaping the economic performance of countries (Chu et al., 2023). The role of exports as a catalyst for economic growth has long been one of the central topics in contemporary economic theory and policy. Within the framework of an open-economy model, exports enable countries to exploit comparative advantages, expand production, stimulate employment, and increase national income. Many developing and transition economies view exports as a crucial lever for achieving sustainable growth and integrating into global economic flows (Fraser et al., 2020; Cherif & Hasanov, 2024). In this regard, Huang et al. (2023) emphasize that countries heavily reliant on international trade have made substantial progress in accelerating economic growth over the past decades. This development approach has been particularly evident in Asia, where, since the 1960s, several economies have built their growth strategies around export-oriented activities. Thanks to such a model, countries such as Malaysia, Taiwan, South Korea, Hong Kong, and Thailand – most notably China and India – have achieved remarkable results in the process of modernization and global economic affirmation (Ego, 2024).

In the context of transition economies, such as Serbia and North Macedonia, exports can potentially contribute to economic growth through several mechanisms. First, exports provide access to wider markets, which may increase the scale of production and efficiency (Stephen & Obah Daddy, 2017). Second, exports may enhance foreign exchange reserves, thereby strengthening macroeconomic stability. Third, exports can stimulate innovation and technological progress, as competition in international markets often requires improvements in products and processes. Fourth, exports may increase employment in export-oriented sectors, thereby reducing unemployment and raising household income. Finally, exports can help reduce trade deficits, improving the balance of payments and the overall financial position of the country.

Exports undoubtedly generate numerous benefits for the economy. However, it is important to recognize that in the global context, constant changes occur that can negatively affect the volume and structure of exports, and consequently, the dynamics of economic growth. One of the recent shocks was the outbreak of the COVID-19 pandemic, which prompted governments to adopt measures such as social

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distancing and border closures. These restrictions resulted in higher unemployment, a decline in exports, and a slowdown in economic growth (Liu & Chu, 2024).

The subject of this study is the impact of exports on economic growth through a comparative analysis of Serbia and North Macedonia over the period 1995–2024. Both countries represent small, open economies of the Western Balkans, highly dependent on trade with the European Union and undergoing similar transition processes. However, they differ, among other factors, in market size, export structure, and industrial base capacity.

Given that exports represent one of the key determinants of economic growth and integration into the global economy, the aim of this paper is to empirically examine the long-run and short-run effects of exports on GDP per capita growth in Serbia and North Macedonia. The comparative analysis provides insights into the specific challenges and potentials of both countries and may serve as a useful reference for policymakers in the Western Balkans in designing strategies for sustainable economic growth.

This paper is structured into four sections. Following the introduction, Section 2 describes the data and methodological framework, while Section 3 presents and interprets the results. Finally, Section 4 outlines the key findings, policy implications, and directions for future research.

2. DATA AND METHODS

The empirical analysis in this paper is based on a set of macroeconomic variables selected in line with the relevant literature on the relationship between exports and economic growth. The dependent variable is the annual GDP per capita growth rate, as it is most commonly used as the primary indicator of overall economic performance and growth dynamics. Exports, measured as a percentage of GDP, represent the independent variable. This variable captures the net contribution of exports to overall economic activity and reflects their structural importance, namely the extent to which exports are integrated into economic growth and the degree to which the national economy depends on foreign trade (Balassa, 1978; Feder, 1983).

Imports, expressed as a percentage of GDP, are included in the analysis as a control variable. Since higher levels of exports are often accompanied by higher levels of imports, particularly in countries that import intermediate goods, technology, or capital goods for export-oriented production (Ali, 2024; Awokuse, 2008), controlling for the effect of imports allows for a more accurate isolation of the true contribution of exports to economic growth. Foreign direct investment (FDI), also measured as a percentage of GDP, is likewise employed as a control variable. Given that FDI may generate multiple effects on the economy, such as technology transfer, productivity growth, and access to new markets, its inclusion in the model enables consideration of this additional dimension of influence on GDP (Ali, 2024; Borensztein et al., 1998). At the same time, FDI often affects exports, as foreign companies may use the domestic economy as a base for accessing international markets..

This study employs annual time series data for the period 1995–2024 for all relevant variables. To ensure comparability, data were obtained from the World Bank's World Development Indicators (WDI) database. The analysis was conducted using the econometric software EViews, version 10. For clarity, Table 1 provides abbreviations and a brief description of the observed variables.

Table 1 Summary of Variables Included in the Analysis

Abbreviation	Explanation
Y	GDP per capita growth (annual %)
EXP	Exports of goods and services (% of GDP)
IMP	Imports of goods and services (% of GDP)
FDI	Foreign direct investment, net inflows (% of GDP)

Source: Calculations by the author, 2025

In the analysis of the impact of exports on economic growth, the ARDL model is employed (Pesaran & Shin, 1998; Pesaran et al., 2001). The first step in the analysis is to examine the stationarity of the time series. The ARDL model allows the time series to be of different orders of integration, provided that none is integrated of order two (I(2)). After that, the ARDL model is specified in order to test for cointegration among the observed variables. Accordingly, to conduct the bounds test, i.e., to examine cointegration among the variables, the following equation is applied:

$$\Delta Y_t = \alpha_0 + \sum_{i=1}^{q_1} \beta_1 \Delta Y_{t-i} + \sum_{i=0}^{q_2} \beta_2 \Delta EXP_{t-i} + \sum_{i=0}^{q_3} \beta_3 \Delta IMP_{t-i} + \sum_{i=0}^{q_4} \beta_4 \Delta FDI_{t-i} + \gamma_1 Y_{t-1} + \gamma_2 EXP_{t-1} + \gamma_3 IMP_{t-1} + \gamma_4 FDI_{t-1} + \varepsilon_t \quad (1)$$

where α_0 and ϵ_t are the intercept and random error terms, respectively, while Δ is the first difference operator. Short-term relationships are measured by the parameters β_1 , β_2 , β_3 and β_4 , while long-term relationships are represented by the parameters γ_1 , γ_2 , γ_3 and γ_4 . The parameters q_1 , q_2 , q_3 , and q_4 indicate the optimal lag length for the corresponding variables in the model.

Based on equation (1), the existence of cointegration among the variables is tested using the F-test. The test is based on the null hypothesis $H_0: \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = 0$, which implies that there is no cointegrating relationship among the variables. In contrast, the alternative hypothesis $H_1: \gamma_1 \neq \gamma_2 \neq \gamma_3 \neq \gamma_4 \neq 0$ indicates the existence of cointegration. The obtained F-statistic is compared with the critical values established by Pesaran et al. (2001).

If a cointegrating relationship exists in the model, the next step is the estimation of the long-run coefficients. Given the previously defined ARDL model, the long-run coefficients can be estimated using the following equation:

$$Y_t = \alpha_0 + \gamma_1 Y_{t-1} + \gamma_2 EXP_{t-1} + \gamma_3 IMP_{t-1} + \gamma_4 FDI_{t-1} + \epsilon_t \quad (2)$$

Then, in order to identify the short-run relationships between the variables, an error correction model (ECM) based on the ARDL model is constructed. In accordance with the ARDL model defined in equation (1), the ECM can be expressed as follows:

$$\Delta Y_t = \alpha_0 + \sum_{i=1}^{q_1} \beta_1 \Delta Y_{t-i} + \sum_{i=0}^{q_2} \beta_2 \Delta EXP_{t-i} + \sum_{i=0}^{q_3} \beta_3 \Delta IMP_{t-i} + \sum_{i=0}^{q_4} \beta_4 \Delta FDI_{t-i} + \theta ECM_{t-1} + \epsilon_t \quad (3)$$

where ECM_{t-1} error correction term, is the error correction term, i.e., the component of the model that captures the short-run dynamics of the system and determines the speed of adjustment toward equilibrium.

After estimating the coefficients in the aforementioned equations, diagnostic tests are conducted to identify potential issues, such as serial correlation, heteroskedasticity, model specification error, deviations of the residuals from normality, and instability of the model parameters.

3. RESULTS AND DISCUSSIONS

The stationarity analysis of the time series revealed that the observed series have a mixed order of integration. The results of the Augmented Dickey-Fuller (ADF) test (Dickey & Fuller, 1979) are presented in Table 2. For Serbia, the series EXP, IMP, and FDI are stationary at level ($I(0)$), while the series Y becomes stationary only after first differencing ($I(1)$). Similarly, for North Macedonia, the series EXP, IMP, and FDI are stationary at level ($I(0)$), whereas Y is stationary at first difference ($I(1)$). None of the series are integrated of order two ($I(2)$). Based on these results, the application of the ARDL model is justified, as it allows for the analysis of time series with a mixed order of integration.

Table 2 Results of ADF unit root test

Level form				
Series	Y	EXP	IMP	FDI
Serbia	-2.664417	-4.783513*	-4.543241*	-5.117034*
North Macedonia	-2.246892	-6.788676*	-3.359167***	-3.700281**
First-differenced form				
Series	ΔY	ΔEXP	ΔIMP	ΔFDI
Serbia	-6.597922*	-	-	-
North Macedonia	-4.973407*	-	-	-

Source: Calculations by the author, 2025

Note: *, **, and *** denote significance levels of 1%, 5%, and 10%, respectively. The symbol “-” indicates that the test was not performed because the series is stationary in level.

After specifying the ARDL model, the F-test was applied to equation (1) in order to determine whether cointegration exists among the observed variables. The results of the ARDL Bounds test, presented in Table 3, indicate the existence of a long-run relationship between the observed variables in both countries. For Serbia, the ARDL model (2,2,2,1) yields an F-statistic of 8.9800, which exceeds the upper critical bounds ($I(1)$ bound) at all significance levels (10%, 5%, and 1%), thereby confirming the presence of cointegration. Similarly, for North Macedonia, the ARDL model (1,2,0,0) produces an F-statistic of 8.8383, which also surpasses the corresponding upper critical bounds, thus confirming the existence of a stable long-run relationship between the variables in this case as well.

Table 3 ARDL Bounds Test Results

Country	ARDL model (optimal lag)	F-Statistic	Critical Value Bounds						Cointegration
			I(0) Bound			I(1) Bound			
			10%	5%	1%	10%	5%	1%	
Serbia	(2,2,2,1)	8.9800	2.72	3.23	4.29	3.77	4.35	5.61	Yes
North Macedonia	(1,2,0,0)	8.8383	2.72	3.23	4.29	3.77	4.35	5.61	Yes

Source: Calculations by the author, 2025

Note: The optimal lag structure of the ARDL model was selected based on the Akaike Information Criterion (AIC).

Given that a cointegrating relationship exists between the variables in the model, the next step involves estimating the long-run coefficients using equation (2). The results of the long-run coefficient estimates from the ARDL model are presented in Table 4. In the case of Serbia, exports have a positive and statistically significant effect on economic growth, while imports exert a negative effect, significant at the 10% level, implying that a higher level of imports may slow down economic performance. Foreign direct investment shows a positive and highly significant effect, confirming its important role in long-run growth. For North Macedonia, exports also have a positive and significant impact, while imports are not statistically significant. Foreign direct investment exhibits a strong positive and highly significant effect, highlighting its crucial role in ensuring sustainable growth. These findings suggest that exports and FDI are key drivers of long-run economic growth in both countries, while the effect of imports is heterogeneous and less stable across the observed economies.

Table 4 Estimated Long-run Coefficients in ARDL Model (Dependent variable: Y)

Country	Regressor	Coefficient	Probability
Serbia	EXP	0.4408	0.0188**
	IMP	-0.8762	0.0923***
	FDI	0.0380	0.0041*
North Macedonia	EXP	0.6860	0.0156**
	IMP	0.2477	0.8843
	FDI	0.2020	0.0000*

Source: Calculations by the author, 2025

Note: *, **, and *** denote significance levels of 1%, 5%, and 10%, respectively.

The results presented in Table 5 represent the coefficient estimates from the ECM model given in equation (3). In the short run, exports in Serbia exhibit a lagged negative effect on economic growth, while in North Macedonia their impact is not statistically significant. Regarding the other variables, imports and foreign direct investment have a positive and statistically significant effect on economic growth in Serbia, whereas in the case of North Macedonia only foreign direct investment shows a strong and highly significant positive effect. The ECM(-1) variable in both models has the expected negative sign and high statistical significance, confirming the existence of a stable adjustment mechanism. In Serbia, about 36% of deviations from the long-run equilibrium are corrected within one year, while in North Macedonia the adjustment dynamics are faster, amounting to approximately 47% per year.

Table 5 ARDL Short-run Results with Error Correction Model (Dependent variable: ΔY)

Country	Regressor	Coefficient	Probability
Serbia	$\Delta Y(-1)$	0.0095	0.9604
	ΔEXP	0.1309	0.7618
	$\Delta EXP(-1)$	-0.0438	0.0612***
	ΔIMP	0.3120	0.0436**
	$\Delta IMP(-1)$	1.1731	0.0902***
	ΔFDI	0.1264	0.0380**
	ECM(-1)	-0.3651	0.0000*
North Macedonia	ΔEXP	0.5320	0.3888
	$\Delta EXP(-1)$	0.7665	0.1947
	ΔIMP	0.7108	0.2471
	ΔFDI	0.1950	0.0000*
	ECM(-1)	-0.4715	0.0000*

Source: Calculations by the author, 2025

Note: *, **, and *** denote significance levels of 1%, 5%, and 10%, respectively.

As the final step in the analysis, diagnostic tests were conducted to verify the model assumptions, and the results are presented in Table 6. The diagnostic tests indicate that the estimated ARDL models for both Serbia and North Macedonia satisfy key assumptions. The Breusch-Godfrey LM test shows no evidence of serial correlation ($p > 0.05$), while the Jarque-Bera test confirms that residuals are normally distributed ($p > 0.05$). The Breusch-Pagan-Godfrey test does not reveal significant heteroskedasticity ($p > 0.05$) in Serbia, and although the p-value is lower for North Macedonia, it remains above conventional significance levels. The Ramsey RESET test suggests that the functional form of the models is correctly specified ($p > 0.05$). Finally, both CUSUM and CUSUM of Squares tests indicate that the models are stable over time.

Table 6 Diagnostic Tests Results

Test	Serbia		North Macedonia	
Breusch-Godfrey LM Test (Serial correlation)	0.425	(0.6611)	1.496	(0.2479)
Jarque-Bera (Normality)	2.029	(0.3624)	0.860	(0.6503)
Breusch-Pagan-Godfrey (Heteroscedasticity)	0.560	(0.8235)	2.806	(0.1350)
Ramsey RESET Test (Functional form)	1.541	(0.2322)	0.065	(0.8002)
CUSUM Test	Stable		Stable	
CUSUM of Squares Test	Stable		Stable	

Source: Calculations by the author, 2025

Notes: Values in parentheses are p-values. CUSUM and CUSUM of Squares tests indicate model stability.

4. CONCLUSIONS

This study aimed to examine the long-run and short-run effects of exports on economic growth in Serbia and North Macedonia. The model includes the annual per capita GDP growth rate as the dependent variable. Exports, expressed as a percentage of GDP, serve as the independent variable, while imports, also as a percentage of GDP, and foreign direct investment (FDI) as a percentage of GDP are included as control variables. The analysis of annual time series was conducted for the period 1995–2024 using the ARDL model.

The results of the ARDL bounds test confirmed the existence of cointegration among the observed variables in both Serbia and North Macedonia. In the long run, exports have a positive and statistically significant effect on per capita GDP growth in both countries. However, in the short run, exports in Serbia exhibit a lagged negative effect on economic growth, whereas their short-term impact in North Macedonia is not statistically significant. The long-run effect of imports on economic growth is negative in Serbia, while it is not statistically significant in North Macedonia. In contrast, imports have a positive short-run effect on economic growth in Serbia, whereas in North Macedonia this effect is not statistically significant. Foreign direct investment shows a strong and consistently positive impact on economic growth in both the long and short run, confirming its key role in the development of both economies. The results also indicate the existence of a stable adjustment mechanism toward long-run equilibrium, with deviations being corrected more slowly in Serbia than in North Macedonia.

The findings highlight the importance of export-oriented policies and attracting foreign direct investment as key factors for promoting economic growth. Policymakers should develop measures that facilitate access to international markets, enhance the competitiveness of domestic products, and attract investments that contribute to technological advancement and employment.

Although the results provide valuable insights into the role of exports and foreign direct investment in the economic growth of Serbia and North Macedonia, the study has certain limitations, such as its focus on aggregate-level data and the omission of sectoral differences within exports. These limitations can serve as a basis for future research. In this context, it would be useful to examine the impact of the sectoral composition of exports on economic growth, the interaction between foreign direct investment and innovation, as well as the assessment of the effects of global shocks, such as geopolitical conflicts, on the sustainability of economic growth in transition economies.

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ART AS A WEAPON: SERBIAN EPISODES (A CHRONOLOGY)

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Abstract: The idea of the paper is to show that art is not (only) an expression of its time, or a subsequent interpreter of history, but an active participant in historical events. The paper shows the role of art in the dramatic change of ideology, which took place in Serbia between 1986 and 1991, which was the period of social and political crisis and the beginning of the breakup of Yugoslavia. The chronology of the historical process is presented, in which gradually the national history, culture, literature and art (which were forgotten or neglected) are revived, and corresponding new cultural features are created, with the aim of eventually removing the existing features related to the socialist revolution and socialist organization of society. This chronology consists of a series of "episodes" (events, affairs, problems, projects) in which it is not only a matter of concern for living art or artistic tradition: activity (in the media, criticism, cultural protection and cultural policy) is directed against political opponents, and tends to change people's view of the world. When that process was over, it became obvious that at its base was an - unchanged, and constantly present in Serbian culture -comprehension of art as a social (political) weapon.

Keywords: *writing on art, society, crisis, Serbia, 20. century.*

Field: Social Sciences and Humanities

1. INTRODUCTION

Let's think about art not only as a way of memorizing and presenting, that is, remembering and subsequently presenting or interpreting history, but also as an active participant in the events of a crisis period.

How does art get into that position? In short, it is about the fact that all those who appear close to the work of art (artist, critic, theoretician, historian, conservator, politician, audience, the general public) sometimes tend to use it (its existence, content, function or meaning) in order to achieve a certain non-artistic goal. Roughly speaking, art as a part of memory is often involved in education (Kiurski, 2023), political manipulation (Makuljević, 2022), in official propaganda (Stefanović, 2025) and even in real war and reconciliation (Božić Marojević, 2024). There are many historical data on bans in art (Lopušina 1991), on the destruction of works of art, on the banning of work and the persecution of artists (Mitrović 1983), and the number of recent books on censorship amounts to hundreds, if we only count those that are available online. History records congresses, decisions, laws, actions, social mechanisms, prohibitions, abuses, but that is what is outside. The question is, what is the basis, what is the understanding from which such harmful consequences arise. We called it the understanding of art as a social or political weapon or, for short, art as a weapon. This understanding is derived, through theoretical generalization, from the history of the environment's relationship to art, and in this case from a series of examples in recent Serbian history (hence the title of the paper).

2. MATERIALS AND METHODS

From a distance of thirty years, one can trace the role of art in the change of the ideological model that took place between 1986 and 1991, at a time of social and political crisis that ended with the breakup of Yugoslavia.

We will look at the chronology of a historical process, in which gradually the national history, culture, literature and art (which were forgotten or neglected) are revived, and corresponding new monuments are created, with the aim of eventually removing the existing features related to the socialist revolution and socialist organization of society. This chronology consists of a series of "episodes" (events, affairs, problems, projects) in which it is not only a matter of concern for living art or artistic tradition, but activity (in the media, criticism, cultural protection and cultural policy) is directed against political opponents. and in the direction of changing the world view. At that time, "Politika", the leading daily newspaper in Serbia, was the source of official information about the work of state and party leadership, about public life, cultural policy and the like.

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3. RESULTS

A few years after the death of Josip Broz in 1980, the tradition of the national liberation struggle and the socialist revolution is still being maintained, in the spirit of the so-called brotherhood and unity of the Yugoslav peoples and national minorities. Nevertheless, a strong economic, as well as social and political crisis is shaking the country. Part of the political leadership begins to use culture and art to show their ideas about how society should be organized.

3.1. 1986: SOCIALISM PREVAILS

In 1986, the socialism still prevails. In mid-1986, a monument to the revolutionary Rodoljub Čolaković was unveiled in Belgrade (Anonim, 1986), the memorial house of the revolutionary and official Milentije Popović was opened in Leskovac. At the same time, the public was shaken by the affair surrounding the wrongly restored (i.e. demolished) house of the painter Đura Jakšić in the center of Belgrade; there are open protests by citizens (Anojčić, 1986). In the fall of 1986, a monument to the 1941 uprising was ceremonially unveiled in Niš; at the ceremony, a speech about the modern working class; in the newspaper report, 19 names of politicians are mentioned, but there is no name of the author of the monument. At the same time, the exhibition of the painter Milić of Mačva was banned in Sremski Karlovci, due to "nationalism"; In his paintings, Milić showed his vision of the Serbian people and their history; the director of the city gallery, who previously allowed the exhibition to be set up, was suspended and will be rehabilitated at the end of 1989 (Štraser, 1986, p.18; Dragičević, 1989a).

In October 1986, plans were made to erect a monument to vojvoda Živojin Mišić, a Serbian military leader from the First World War, in Valjevo by the end of 1987. There is also an idea to open a Museum of the First World War in his house in Struganik, but there are problems with financing (Živković, 1987b, p.14). At the end of 1986, the question was raised, why some private villas were being built near the Sopoćani monastery, and who was responsible for that.

3.2. 1987 FRACTURE: JUXTAPOSITION OF FEATURES

1987 marks the 50th anniversary of Tito's arrival at the head of the Communist Party of Yugoslavia. Tito has been dead for seven years, and this celebration is an attempt to preserve the party's ideological unity. In the first months of 1987, the great importance of the "Josip Broz Tito" Memorial Center was emphasized (Anonim, 1987a), but it was noted that the number of visitors to the "Banjica concentration camp Museum" in Belgrade was declining (Mijalković, 1987). In mid-1987, the exhibition "Tito-Party" (Č., 1987) was opened in Belgrade. A few weeks later, the "To Tito with Love" exhibition was opened in Novi Sad, with 160 exhibits of the "most eminent" Yugoslav artists (Anonim, 1987b), and almost at the same time, a plan for the construction of the largest Yugoslav monument and memorial center dedicated to the partisans was presented in Đakovica. In the same time, the public is more strongly reminded of national history, tradition, and culture. Since February 1987, the construction of the Monument to the Defenders of Belgrade in 1915 has been planned; there is no money, and there are also some "technical difficulties". The idea is for the monument to be 6 meters high and to contain words from the famous speech of Major Gavrilović, which ends with: "for the King and the Fatherland" (Anojčić, 1987a, p.12). In April 1987, a memorial plaque was placed on Nikola Pašić's house in Belgrade (Anojčić, 1987b). In June 1987, the press reported that the restoration of the memorial house of vojvoda Mišić, a Serbian military commander from the First World War, had been completed, and the construction of his equestrian monument was announced in 1988 (Stojić, 1987). In August 1987, plans were made for a memorial house of vojvoda Stepa Stepanović, another important Serbian military commander from the First World War (Jeličić, 1987). In November 1987, a competition was opened for the construction of a monument to Mišić in Mionica; the precise demands of the citizens are that the sculpture cannot be a modern abstraction, nor a stylization, but a realistic and recognizable figure of Mišić on a horse; that sculpture must "reflect" all the characteristics of brave Serbian soldiers from the Balkan wars and the First World War. Critics and theoreticians from cultural institutions support those criteria and help with their theoretical explanations, despite the protests of individual sculptors (Živković, 1987c, 1987d, 1987e). In the last days of 1987, the historical exhibition "Serbia in the Balkan Wars" (B., 1987) was opened in the Sava Congress Center in Belgrade.

3.3. 1988: RESTORATION OF NATIONAL VALUES

The whole year of 1987 was dedicated to the 200th anniversary of Vuk Karadžić. In January 1988, Vuk is already a political symbol, declares in Vienna one of the members of the Central Committee of the Union of Communists of Serbia (Anonim, 1988a, p.14). At the same time, in Svetozarevo (today:

Jagodina) there is a debate about whether a relief with the image of Vuk Karadžić should be exhibited at all costs, even if it has no artistic value (Žikić, 1988). Along with the anniversary of Vuk, the restoration of the Cyrillic alphabet begins with the questions: how to save the Cyrillic alphabet as a national script, and: who is to blame for the current situation - the school system, the media... (Džunov, 1988b). In September 1988, the Cyrillic alphabet will return to Serbian television, one Sunday afternoon, a foreign film with Cyrillic subtitles is broadcast for the first time.

At the beginning of 1988, the public's attention was attracted by an exhibition of paintings by Milić of Mačva in the windows of Belgrade shops, in the area from Slavija to Kalemegdan (Kršić, 1988). At that time, the works - which were called restoration - in the church of St. Sava in Belgrade continued. In February 1988, the Belgrade Museum of Applied Art held an exhibition on the history and construction of that Temple (its building started before the Second World War, but it remained unfinished). It is an announcement that the construction, interrupted 50 years earlier, will be continued; in the following months, thousands of pilgrims come to Belgrade to see the Temple of St. Sava (Antić, 1988, 1988a). In March 1988, there were polemics about the state of cultural monuments in the area of Novi Pazar, especially the Sopoćani monastery; the question arises: is that area (in terms of vulnerability) the new Kosovo (Živković, 1988a). In April 1988, the Fruška Gora monasteries were in focus: 20 Serbian monasteries that were centers of Serbian spirituality; it is emphasized that during the Second World War they were systematically destroyed by the ustašas, and after the war they were left to the negligence of the (communist) authorities (Mićunović, 1988). In May 1988, the condition of the house of the Serbian composer Mokranjac in Negotin, which was allegedly turned into a cafe, was criticized (Popović, 1988; Todorović, 1988). At the same time, the restoration of vojvoda Mišić's house is again on the agenda (Dobrić, 1988). In June 1988, there was a decision to erect a 6.5 meter high bronze equestrian monument of vojvoda Mišić in Mionica, his birthplace; some cultural events are organized to raise money in this poor area (Živković, 1988b; Radošević, 1988). In June 1988, the wider public of Serbia was absorbed by the shocking news that a large part of the exhibition had disappeared in Novi Pazar; portraits of famous Serbs of the 19th century, owned by the National Museum in Belgrade, were stolen; discussions about responsibility arise in cultural institutions and in the general public; there is an opinion that "someone" regularly steals Serbian cultural heritage. A few weeks later, in August 1988, the paintings were found at a children's playground in Novi Pazar (Bakarčević, 1988; Blagojević, 1988). Meanwhile, at the end of June, concern was expressed that the Studenica monastery was in danger due to the possible construction of a dam (Džunov, 1988a; Vasić, 1988), and at the beginning of July, the same was the case with the Morača monastery (Đikanović, 1988). During that period, the holy relics of prince (called "emperor", "tsar") Lazar travel through Serbia; from Belgrade, via Fruška Gora and several monasteries in Serbia, then Gračanica, to Ravanica monastery. The connection between Ravanica monastery and Kosovo is explained to the public: the 600th anniversary of the Battle of Kosovo in 1389 and the 300th anniversary of the great migration of Serbs in 1690 are approaching (Antić, 1988c). In June 1988, preparations began for the creation of a monument to Miloš Obilić, the legendary hero of the 1389 Battle of Kosovo (Zejneli, 1988). In September 1988, newspapers write about unrest in the Gračanica monastery (Vujović, 1988). At that time, they also write about works of art of national value, which were illegally taken from the museum and are in the possession of some politicians (I.M., 1988). One year later, in September 1988, an (unfinished?) Monument to vojvoda Mišić was unveiled in Valjevo, on the occasion of the 70th anniversary of the liberation in the First World War and the formation of the Kingdom of SHS, later Yugoslavia. Allegedly, the monument was erected in haste, and the artist claimed the right to complete his sculptural work (Stojić, 1988, p.16). In the winter of 1988, the one-year campaign of the search for the Terazije fountain, ended. It "revealed" who was "destroying" the Serbian cultural heritage, where the Serbian works of art end up, how "indolent" the cultural institutions are, and promoted a new ideology and a new political strategy that was fully introduced in the 90ies (more details Dragojević, 2016). During 1988, memories of the socialist revolution appeared sporadically as a part of the routine, without much energy. In April 1988, an exhibition of Rade Stanković, an old sculptor of social and social-realist orientation (B., 1988), was opened in the House of the JNA. In mid-1988, the bust of revolutionary and national hero Blagoje Parović was ceremonially unveiled in Belgrade; the ceremony is attended by politicians and generals (R., 1988). On those days, in the small town of Bački Jarak near Novi Sad, in Vojvodina, a bust of partisan and post-war general, recently deceased, Kosta Nađ (Anonim, 1988b) was ceremonially unveiled. Something unusual is beginning to happen to the old landmarks of the revolution. In June 1988, it was revealed in Niš that the Monument to the victims of the Second World War, 1963, was in fact wrongly placed, contrary to the idea of the artist (Nešić, 1988). In the fall of 1988, the association of fighters claim that the photos showing Fadilj Hoxha - an Albanian communist and opponent of Slobodan Milošević - should be removed from the Museum of the Revolution 1941-1945 in Stolice; their explanation is that Hoxha committed an injustice to the revolution (Žugić, 1988).

3.4. 1989: REHABILITATION, RETURN

In May 1989, in the context of already open political conflicts, the so-called Šuvar's White Book was published in Belgrade - "the report of the Center of Croatian Communists for Information and Propaganda from 1984 on unacceptable ideological and political tendencies in art, literature, theater and film critics, and in public performances of creators" (Antić et al., 1989); the content of the book was understood as a kind of index auctorum prohibitorum and it mentions all the important Serbian visual artists, poets, writers, journalists... (more on Šuvar: Dragojević R, 2024).

In June 1989, painter Bata Mihailović, an emigrant who has lived in Paris since 1952, exhibited in the SANU gallery. In 1968, he received the prestigious state October Award, but it was soon taken away from him by the authorities. Mihailović painted the ruins of churches, the Serbian Empire, Kosovo, the Holy Warriors, King Milutin, the Čele Kula, Jasenovac... He had an exhibition in Belgrade in 1981, but then some pictures were removed and the catalog censored (black pages were printed). Everything that could not be seen before is now exposed (NN, 1989). In July 1989, the Serbian authorities rehabilitated the painter Mića Popović; almost thirty years earlier, Popović received the prestigious "Politika" prize for painting, but it was taken away from him in 1971 for political reasons (Živković, 1989a, 1989b). In August, the public is presented with the history of the well-known song "March on the Drina", on the occasion of the anniversary of the Battle of Cer in 1915 (Anonim, 1989a). The song is well known, it lives on in the people, it was also preserved in the famous Serbian movie of the same name. However, because it is tied to the national history and the army of the Kingdom of Serbia, it was not always suitable for official, ideologically colored, ceremonies and now it is gradually being rehabilitated. In September 1989, the exhibition "Kosovo as inspiration" was opened in the National Museum in Belgrade, where about 70 works of art by Serbian artists were exhibited (J., 1989). In September 1989, the Monument to the Defenders of Belgrade 1915 was completed (Anonim, 1989b). In November 1989, newspapers write about Hopovo Monastery (Dautović, 1989) and Krušedol Monastery in the context of the upcoming 300th anniversary of The great migration of Serbs 1690; on this occasion, the bad condition of many Serbian cultural monuments, icons and other valuables, as well as the frequent theft of cultural goods were mentioned (Dragičević, 1989b). At that time, a series of articles continued about the paintings that "disappeared", or were stolen, from the Gallery of Sava Šumanović, a Serbian artist who was killed by the ustašas during the Second World War; within that topic, it is indicated that some politicians abuse art and freely use some pieces from art collections (Dragičević, 1989c).

3.5. 1990: TAKEOVER

During 1990, at the time when the famous loan for economic revival of Serbia was announced, Association of Fine Artists of Serbia organized artists to present their works to citizens who give loans to Serbia (as a reward for the largest loan donors); the action is accompanied by the slogan: the pictures belong to the people. At the very beginning of the year, in January 1990, the memory of the Monument to King Peter I in Pančevo, authored by Petar Palavičini in 1932, was renewed; memories are evoked of the magnificent unveiling of the monument and the fact that it was removed by German soldiers in 1941 but destroyed by the communists in 1947 when it was sold for scrap (Šašić, 1990). At the same time, in the town of Svetozarevo (today: Jagodina), delegates in the municipal assembly decided that three social-realist paintings from 1972 depicting Marx, Lenin and the partisans are to be removed from the town hall. Their reasoning is that it is not art, but a distorted image of history, and that there should be no ideology in the decoration of the assembly (Žikić, 1990). In February 1990, newspaper write about the royal residences and the villas on Dedinje in Belgrade; it is emphasized that they should be opened for the public, for the people, which would leave politicians without privilege to live in there (Trklja, 1990). In those days, Miroslav's Gospel was also the subject of public comments; the topic is the conservation of this medieval manuscript, an occasion to criticize the previous cultural policy (Živković, 1990).

In March 1990, a scandal related to the so-called Sevso collection - silver objects found in the western parts of Yugoslavia, kept in secret for several decades, and sold to a foreign country in an unknown way. In a way, this is a contemporary version of the Terazijefountain problem; during the research, the established matrix of responsibility in cultural institutions, politics, the federal government, Broz's family... is repeated and it is shown that nothing has changed (Zec, 1990). However, spinning about the obscure silver objects did not mobilize the public as it was the case with the public fountain. In May 1990, the jury for the Monument to the First Serbian Uprising made its final decision (the competition was opened in February 1989); comprehended as a memory of the history of a nation, the monument has ocila, prominent features of Serbian identity (Stefanović, 1990). On the last day of May 1990, angry audience interrupted the theatrical play "Saint Sava" at the Yugoslav Drama Theater in Belgrade, explaining that the play gave a distorted picture of history and insulted the image of Saint Sava. The entire cultural public

was appalled by the act, but the play was never performed again (Simić 1990; Tirnanić 1990). In August, a Belgrade journalist “reveals” that the Serbs had their own art even under Turkish rule and calls on science to do its part (Nešić, 1990). That case is one of the indicators too that not politicians, but ignorant took the lead in matters of history, culture and art.

3.6. 1991-1992: REVENGE

In August 1991, in the city of Užice, a large Monument to Josip Broz Tito was removed from the main city square (Pejović, 1991). In September 1991, the state symbols of Serbia were changed: the red five-pointed star was removed from the flag, a new anthem was chosen, and a new coat of arms was introduced (Radisavljević, 1991a, 1991b). In the autumn of 1991, a huge retrospective of Milić of Mačva's paintings was organized in the National Museum in Belgrade, as a supreme tribute to the famous artist; for that occasion, part of the museum's permanent exhibition was removed which had never been done before (Subotić, 1992, p.249). In May 1992, on Ravna Gora, a political organization erected the Monument to Draža Mihailović. One of their political opponents comments that it is actually a monument to Tito, only slightly modified (Samardžija, 1992). This whole process of changing ideology - which cannot be read through party documents and resolutions, but through the attitude towards culture and cultural heritage - encountered echoes and reactions in other Yugoslav republics (cfr Dragojević, 2006).

4. DISCUSSION

When it comes to the wider public, it is interesting that at the beginning of the process of changing the world view, stand the public's reactions to a TV comedy series in 1989, and at the end, the reactions to the theatre play Saint Sava in 1990; the political sign and system of values changed, but the attitude towards art remained exactly the same, as shown by a comparative analysis of vocabulary, structure and meaning in both reactions in 1989 and 1990 (more details Dragojević, 1991). Regardless the obvious political and ideological differences of both criticisms (1989 and 1990), one could easily recognize their similarities in few main points: (1) in both it is said that criticized work of art does not reflect the “truth”, that it is politically incorrect, it is considered mockery, a public humiliation produced according to non-artistic, i.e. political, motifs. (2) Since its artistic value is being denied, author - or performer - is not considered artist. (3) Consequently, it is believed that it should be treated as a common act or product: one should penalize authors and performers if necessary, remove their product, prohibit its appearance, and even prevent its creation again, if possible... – therefore a suggestion that art in general should be controlled. (4) As a criterion for such a control, one gives an implicit definition of art, depending on what one considers “truth”. This structure of reasoning reveals a concept of art as a (social or political) “weapon”. According to that comprehension, art was a strong means that influenced the way of thinking, feeling and acting of people. Attitude to such a useful but dangerous means - as well as to anyone who produces, uses or distributes it - has much in common with the attitude towards any (deadly) weapon and person who has knowledge, motives and opportunity to use it. Its basic aim is to be supplied with such a weapon, and at the same time to prevent the opponents to have it. Even the advocates of this concept often openly use such comparisons (hence the name of this theoretical generalization).

5. CONCLUSION

The theoretical conclusions from a historical insight are as follows. The understanding of art as a social weapon is applied to current art, as well as to cultural heritage and often to visual communication and visual culture in general. It exists in the public, as well as among politicians, activists, experts and artists. Action in public follows from that attitude. In short, the first course of action is to control the use of that “weapon”, and the second to prevent all other social or political groups from using it. Basically, ideology and concrete political goals are identified with the definition and content of artistic creation; and everything that is different is considered unacceptable and labeled as quasi-art or non-artistic. One gives “own” artists a place in the public political, media and cultural space, and disable all the others, if possible. Moreover, one declares own activists as artists, and protect them with artistic freedoms; in the same time, blame others for abusing art, by denying them any artistic value. The purely political activity of a politically correct individual can be “enhanced” by the fact that he/she is an artist. The history teaches us that verbally renouncing artistic value to an opponent is only the beginning. Other, stronger, activities against what is unacceptable are possible. Various mechanisms, procedures and degrees of action have been recognized in art history - like economic pressure, censorship, threats, attacks, stalking, persecution, prohibition, closure, destruction of works or artistic heritage, the liquidation of the artist, general suspension of artistic

activities... That all depends on the historical circumstances, culture, conscience and social influence of those who advocate the belief that art is a weapon.

Nevertheless, all the elements of such comprehension appear to be connected as a whole. With certainty, upon recognizing one of the positions listed here, the others can be immediately discovered, or expected from the person who represents them. Examples can be found at various times and on many sites. Their recognition in the Serbian culture is an attempt to discover and abandon this attitude, which is nevertheless disastrous.

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GEOPOLITICAL ANALYSIS OF THE GREAT GAME AS A PRECURSOR TO THE CREATION OF THE ISRAELI STATE

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Abstract: The narrative of religious conflicts and divisions has long been present in the interpretations of events in Palestine during the 20th century, but the geopolitical component that led to them, actively recognised from the resettlement of Jews to the establishment of their state - Israel, cannot be ignored. In the analysis, the author dealt with the geopolitical aspect of the “Great Game” as a term for the mutual struggle of great powers to achieve their interests. Thru the relationships of political actors (great powers) toward the Middle East region in the 19th century and towards the Jewish question in the first half of the 20th century, the author sought to identify the influence of these relations on the emergence of the state of Israel. The United Kingdom of Great Britain and (Northern) Ireland, during its involvement in these areas, transitioned from actively interfering in the sovereignty of states, thru dividing and participating in the administration of newly formed (liberated) territories, and supporting Jewish immigration to Palestine, to finally supporting the Arabs in their conflicts in the same land. The United Nations, as the successor to the League of Nations, became involved in resolving the Arab-Israeli conflict from its very inception, attempting to diplomatically resolve the escalating intensity of the conflict, but proved inadequate. Through a sort of game the historical legacy of the conflict on Palestinian soil, which started in the 19th century as part of a larger conflict between emerging great powers in a broader geographical area (the Middle East and Southeast Asia), persisted into the 20th and 21st centuries. For centuries, there has been a tangle of historical battles involving land, state, nation, and religion.

Keywords: *Jews, Palestine, Middle East, Great Powers, Israel.*

Field: Social Sciences and Humanities

1. INTRODUCTION

Geographical area of the Middle East represents an area where the full complexity of international political relations can be seen. Until World War II, the term Middle East was commonly used to refer to the eastern coast of the Mediterranean Sea to the Persian Gulf, i.e., the area from Egypt in North Africa to Iran in Southwest Asia. The term “East” was assigned by the French and British in the 19th century in relation to the region’s position from their home countries, while the “Middle East” was primarily considered the Asian part of the Ottoman Empire between British colonial possessions in Asia and Africa. Geographically speaking, the territories of the following modern countries could be said to belong to the present-day Middle East (or Western Asia according to American terminology): Egypt, Iraq, Iran, Israel, Jordan, Lebanon, Syria, and Turkey. To these states should be added the Palestinian Authority, which is not an internationally recognised state, but is geographically and historically a constituent part of the Middle East, and is most often referred to as the Palestinian Authority, the West Bank, and the Gaza Strip. (Janković, 2007: 268). Its centre is Jerusalem, as the religious site of the three largest living religions - Judaism, Christianity, and Islam. According to religious texts, Jerusalem represents the City of the Temple for Jews, the Jewish capital; for Christians, it is the place where Jesus Christ was crucified and resurrected; and for Muslims, it is the city from which Muhammad ascended to Heaven (Janković, 2007: 270). Although in the first century almost all Jews in Jerusalem were killed or expelled by the Romans, the idea of a promised Messiah never left them (The concept of the Messiah in Jewish eschatology refers to a leader anointed by God, specifically the future king of Israel, a descendant of the line of David, who will unite all the Jewish tribes and liberate them from foreign rule. The arrival of the Messiah, or the Messianic Age, will herald an era of universal peace, harmony, and justice (Havel, 2013: 25)). Persecuted by all, they wandered Europe, condemned to be strangers, and only in the 15th and 16th centuries did they begin to return and settle in the “four holy cities” (Jerusalem, Tiberias, Hebron, and Safed) in Palestine, then part of the Ottoman Empire (got its name from Ottoman I who established the dynasty - sometimes translated as Osman, hence the term Osman Empire is also used)). In the following period, their position, along with that of Christians, was extremely difficult. While European powers competed to protect the rights of Christians (Catholics and Orthodox) within the Empire, there was no one to protect the Jews. Exposed to persecution and reprisals, Jews gradually immigrated to Jerusalem where there was some kind of Jewish community, and by the 1840s, they became the majority population of the city (Black, 2017: 43).

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Crimean War (1853 – 1856) marked a turning point in the lives of the subjects of the Ottoman Empire. The main cause of the war was try the Allied powers - France, Great Britain, the Ottoman Empire, Austria, Prussia, and Piedmont - to limit Russian geopolitical influence in the Black Sea and secure several key strategic positions to restrict the actions of the Russian Empire (Hopkirk, 1990). In response to the changed political circumstances after the Congress of Paris 1856, the Porte (name used in diplomatic circles for the government of the Ottoman Empire) was forced to expand the rights and privileges of non-Muslims, that is, to provide tolerance and greater security for their lives and property. Freedom of movement in the Ottoman Empire, as well as the opening of the Suez Canal (created as a result of international cooperation between France and Egypt, or Britain and Egypt, when the English bought out the French (majority) shareholding in 1875 (Petrović, Marković i Prokić, 1979: 48-50)), encouraged Jewish belief in the coming Messianic Age, leading to the emergence of more and more Jewish settlements outside of Jerusalem. Before the 1860's, the first Jewish settlement outside Jerusalem arose on a hill opposite Mount Zion. British banker and philanthropist Moses Montefiore purchased these buildings in 1860 from the Governor of Jerusalem with money from the American magnate of Jewish origin, Judah Touro, who organised fundraising in the USA for Christians suffering persecution in Jerusalem. Since the area around Jerusalem was exposed to the attacks and looting by Bedouins, the Jews from the overcrowded houses in the city were not enthusiastic about the idea of moving there. Only after a stone wall with gates that were locked at night was built around the estate did the settlement come to life. By the end of the following year (1861) about 2,500 Jews settled there, and the neighbourhood was named Mishkenot Sha'ananim (or Hebrew משכנות שאננים). After the first, in addition to Jerusalem, Jews also established other settlements: in 1870 Mikveh Israel (or Hebrew מִקְוֵה יִשְׂרָאֵל) was founded, and the Petah Tikva (or Hebrew פֶּתַח תִּקְוָה) in 1878. In the 1880s, the mass immigration of Jews from all over the world to Palestine, or the so-called Aliyah ("repatriation to Israel") (Хавел, 2013: 591) or Hebrew העלייה הראשונה, began. The FIRST ALIYAH from 1881 until 1903 brought between twenty-five and thirty-five thousand Jews from Europe, mostly farmers and craftsmen, to the inhospitable desert soil (Black, 2017: 43). French banker Abraham Edmond Benjamin James de Rothschild begins buying land in Palestine and financing Jewish agricultural settlements and industrial enterprises, and thus in 1882. the settlement of Rishon LeZion (or Hebrew רִשׁוֹן לְצִיּוֹן) was founded, and in gratitude to Rothschild, the settlement of Jacob's Tomb (or Hebrew זְכָרֵי יַעֲקֹב) was established in 1890 in memory of his father (Black, 2017: 44). The SECOND ALIYAH began in 1903 in response to rumours of a pogrom against Jews in Kishinev (then Russia) and would last until 1914, during which approximately forty thousand Jews, mainly from Russia, immigrated to Palestine, but more than half of them would leave before the start of World War I. It is characteristic that immigrants form kibbutzim (hebr. קִיבוּץ) - agricultural cooperatives in which everything is collectively owned (Havel, 2013: 592). Russia-withdrew from the War in 1917. However, in 1919, bloody internal conflicts initiated the launch of the THIRD ALIYAH, in which by 1923 another forty thousand Jews immigrated to Palestine (Black, 2017: 48). The FOURTH Jewish Aliyah began in 1924 and until 1928 approximately eighty-two thousand Jews immigrated to Palestine, mainly as a result of the economic crisis, anti-Jewish policies in Poland, and strict US immigration policies (Black, 2017: 65). In the period from 1932 until 1939 the FIFTH (and final) Aliyah took place, during which another two hundred and fifty thousand Jews immigrated as a result of the anti-Jewish policies of Germany and countries within its sphere of influence (Černicki, 2020: 26).

Political actions to establish a Jewish state began alongside the Aliyah. A young student Nathan Birnbaum in Vienna in 1883 founded Kadimah - a Jewish organisation which, in its newspaper Self-Emancipation (or german Selbstemanzipation!), first mentioned the terms "Zionist", "Zionism", and "political Zionism". They take a term "Zionism" from Mount Zion, the biblical site of the First Jewish Temple, and is synonymous with Jerusalem (according to Kabbalah, Jerusalem is merely the external manifestation of Zion). After the French Dreyfus affair (a French captain of Jewish descent who was accused and convicted of allegedly leaking French military secrets to Germany), which left a painful impression on all Jews in the world in 1896, the Austrian Jewish journalist Theodor Herzl published the book *Der Judenstaat* (or english *The Jewish State*) in Vienna, in which he proposed that Jews must have their own state in order to preserve their religion and culture. Herzl saw the solution to the "Jewish Question" only in an independent state that would be established either in Palestine (then under Ottoman rule) or Argentina, depending on which the Jewish people themselves choose. Herzl did not tie the "Jewish Question" solely to European Jews because he believed it was present wherever Jews lived in the world. His ideas were not supported by either liberal Jews, who believed there was no need for a separate state, or Orthodox Jews, who were waiting for the Messiah to lead them to the Promised Land (Black, 2017: 46, and Černicki, 2020: 23-24).

The 29th of August 1897 is the date of the establishment of the official Jewish political organization, in memory of the First Zionist Congress held in Basel, where the World Zionist Organisation was founded with the aim of establishing a Jewish homeland (Black, 2017: 47). Herzl was elected as its president, and

in that capacity, he travelled and in the following years met some rulers (German Kaiser Wilhelm II and Ottoman Sultan Abdul Hamid II), and in 1903 he managed to obtain the permission from Britain for the Jewish settlement in East Africa (in Rwanda), but the divided Jews did not accept this (Černicki, 2020: 25).

The role of the Ottoman Empire as the ruler over diverse territories shifted from unifying to openly hostile, and politically fueled Turkish-Arab conflicts accelerated its disintegration and the takeover of its territories by the Great Powers. However, these conflicts could not be stopped until the agents themselves declared their new, common enemy - the Jews and Israel. In the lull between the two World Wars, and after the decomposition of the Ottoman Empire (capitulated on the 30th of October 1918, and on the 10th August 1922 it signed the Treaty of Sèvres, by which the Turkish authorities renounced all non-Turkish territories) and the disappearance of the Russian Empire (on the 17th of March 1917 the Russian Republic was proclaimed), the first Jewish-Arab conflicts began on the soil of Palestine, over which “guardianship” was granted to the United Kingdom. The Turkish War of Independence after the Treaty of Sèvres forced the Western European powers back to the negotiating table on the 24th of July 1923 when they signed the Treaty of Lausanne, which divided its territories into British, French, and Turkish zones, effectively creating the Arab countries of the Arabian Peninsula and de facto legalising its disintegration (League of Nations, 1920). The period is characterised by the inability of the British civil administration to fulfill the promises it made to the members of both communities during the previous war. The frequent immigration of Jews increased their numbers relative to the native Arab population, leading to proposals for the equal division of Palestine or the formation of a single state jointly governed by Jews and Arabs on a proportional basis. Both British offers were rejected (Black, 2017: 52 - 57).

During World War II, the Jews decided to independently form their own state, and the post-war period led to open conflicts with the British administration. There is an internationally supported opinion emerging that Jews deserve their own state in Palestine. Unable to cope with the escalating problems on their own and prevent further escalation of the Jewish-Arab conflicts, the British administration decided to bring the issue before the United Nations in 1947.

2. THE GEOPOLITICAL ANALYSIS OF THE “GREAT GAME” AND ITS ECHOES IN PALESTINE

Geopolitics or international politics can be interpreted as the analysis of geographical influences on the relations between centres of power in an international context. In its broader meaning, it can be treated as any connection between the concepts of geography and politics, or in a narrower sense as a deterministic understanding according to which geography determines politics (for more, see in: Redakcija Vojne enciklopedije, 1972). Based on that, geopolitical analysis can be determined as a systematic approach to studying the influence of geographical characteristics on international political processes and strategies, with the aim of understanding and predicting international events and decisions. The term “Great Game” referred to the political and diplomatic confrontation that existed in the 19th and early 20th centuries between the British Empire and the Russian Empire on the territory of present-day Afghanistan and surrounding areas in Central and South Asia, and had direct consequences in Persia and British India. Otherwise, the term itself is associated with the British diplomat Arthur Conolly, who used it in 1840, or even Rudyard Kipling in the 1901 novel *Kim* (Hopkirk, 1990). The Great Game is used in geopolitics as a term for the mutual struggle of great powers to achieve their interests.

The United Kingdom's interests on the territory of the Ottoman Empire emerged at the beginning of the 19th century. The wealth of the Indian subcontinent as the richest colony created a need to protect land routes, and increased Russian activity in Persia and French activity in Egypt signalled to the British that they should begin a more intensive cooperation with the Ottoman Empire and the Central Asian khanates on Persian soil. After the Congress of Vienna in 1815, the United Kingdom emerged as a member of the Holy Alliance (along with Austria, Russia, and Prussia), which would essentially impose its interests on the rest of Europe for the next fifty years. Through territorial expansion at the congress itself (Malta, Mauritius, Ceylon, Helgoland, and the Cape of Good Hope), Britain positioned itself as a maritime power. The United Kingdom, now a world power, was keenly interested in its naval supremacy as it possessed significant overseas territories (Đuković Kovačević, 1975: 170). From this perspective, it considers itself called upon to preserve the territorial integrity of the Ottoman Empire as a land barrier to Russia's access to the Mediterranean Sea, i.e. to establish a buffer state in Persia that would cut it off from the Indian Ocean.

It was on these grounds that the aforementioned “Great Game” began, which was “played” between the United Kingdom and Russia in the 19th century, and which became a suitable term in the 20th century as it gradually included other powers interested in dominance in the central and southwestern Asian regions (a part of the Asian continent located between the Mediterranean and Red Seas to the west,

Pakistan to the east, the Black Sea, the Caucasus, the Caspian Sea, the Persian Gulf, the Turan Plain, and the Pamir mountain range to the north, and the western part of the Indian Ocean to the south - as a subregion of Asia, it partially overlaps with the traditional European Near and Middle East (Janković, 2007: 268)). What began as a conflict over the Russian expansion southwards (the 1813 Russo-Persian Treaty) and the British establishment of trade routes across Southwest Asia (in the 1830s), in the first half of the century escalated into the Crimean War in 1853 - 1856 between Russia and the coalition of the United Kingdom, France, the Ottoman Empire, and the Kingdom of Piedmont, i.e. in the Russo-Turkish War of 1877, or through a series of smaller wars waged by the United Kingdom (the First Anglo-Afghan War of 1838, the First (1845) and Second (1848) Anglo-Sikh Wars, as well as the Second Anglo-Afghan War of 1878), and it concluded with the signing of the Anglo-Russian Convention in 1907. The echoes of this conflict also spread to the Middle East, a border region that the British highlighted as their sphere of influence, where they held a certain level of cultural, economic, military, or political exclusivity.

In that context, the British influence on the Ottoman Empire should also be considered and understood, as well as the delicacy of the relationship between them and the United Kingdom. British politicians protected the Turkish rule in Europe out of fear of strengthening Russian influence. For that reason, in 1854, they declared war on Russia as a result of its attack on the border Turkish provinces of Wallachia and Moldavia a year earlier, i.e., at the first sign of the threat to Constantinople. And at the Berlin Congress of 1878, the United Kingdom concluded special agreements with Russia and the Ottoman Empire - with Russia regarding the Russo-Turkish War of 1875/76, the United Kingdom would “remain neutral if three geographical points essential to England’s maintenance of its empire were respected: the Suez Canal, the Dardanelles, and Constantinople” (Moroa, 1953: 220), namely, the Ottoman cession of Cyprus in exchange for the formation of a Turkish-British defense alliance (Moroa, 1953: 226).

Concerned about its interests from the very beginning of World War I, the United Kingdom spared no effort to protect the navigability of waterways to its colonies. The British, during the war, and especially after the failure of the Gallipoli (a joint British and French amphibious) operation in 1916., took new actions to establish and protect their interests in the event of the decomposition of the Ottoman Empire. Even during the military action, they were emphasising diplomatic activities with their allies (France, Russia, and Italy), as well as with the Arabs in the Ottoman Empire. Through a series of agreements (The Treaty of Constantinople in the period March-April 1915 between Russia, France, and Britain, and Italy later joining; British-Arab negotiations in July 1915 - March 1916, and the Treaty of Asia Minor in September 1915 - May 1916 between Britain and France (Đuković Kovačević, 1975: 186-189)), the United Kingdom effectively divided the still-existing Empire. The most famous is the Treaty of Asia Minor so-called Treaty of Sèvres (or even Sykes-Picot Agreement), which proposed the division of the Middle East into French and British zones of interest and control. Southern Iraq from Baghdad to the Persian Gulf (with Haifa and Acre in Palestine) would go to Britain, Syria and Cilicia to France, and the remaining Arab territories would be divided between Britain and France or a confederation of Arab states would be created. Palestine would be internationalised, meaning it was to be governed by an international condominium composed of the British, French and Russians. The British sphere of influence was considered to include Palestine, while respecting relevant French, Russian and Islamic interests in Jerusalem and the Holy Places (Black, 2017: 52 – 53, and Matanić, 2021: 26).

In Palestine itself, Britain was also taking direct steps that would lead to the downfall of the Ottomans. First, via their intelligence officer Thomas Lawrence (also known as Lawrence of Arabia) in 1916, they supported the establishment of a unified Arab state that would encompass a large area of the Middle East in exchange for Arab support for the British during the war. Simultaneously, they were also negotiating with the Sharif of Mecca, Hussein bin Ali, the then-national Arab leader, promising that his family would rule over a large territory in the region in exchange for supporting the Arab revolt against the Ottoman Empire (Janković, 2007: 270). The Arab Revolt of Ibn Ali and his sons Abdullah (Abd Allāh ibn al-Husayn) and Faysal (Faysal ibn Husayn), which was partly orchestrated by Lawrence, resulted in victory over the Ottomans. In the so-called The United Kingdom’s Sinai and Palestine Campaign of 1917, with the support of Arab nationalists, Palestine and Syria were occupied and would be governed by the British until the end of the war.

Inspired by these events, the World Zionist Organization, through its member Chaim Azriel Weimann, sent a letter to the Prime Minister of the United Kingdom proposing the de facto establishment of a Jewish community in Palestine. In response to this, His Majesty’s Government’s Foreign Secretary, Arthur James Balfour, on the 2nd of November 1917 recognised the need to create a “Jewish national home” in Palestine. His letter, addressed to Lord Walter Rothschild, at that time the representative of the English Zionist Federation, is also known as the Balfour Declaration. The Declaration states the following obligations: 1) Britain will help Jews establish their homeland in Palestine, 2) Jews will not endanger the

civil and religious rights of non-Jews living in Palestine, and 3) Jews living around the world will not be discriminated against (Vekarić, 1983: 36 – 38, Chomsky, 1999: 3, Janković, 2007: 271, and Matanić, 2021: 23).

Simultaneously, the following year (1917), the Jewish Legion was established within the British Army as (they calculated that the support from Jews would mobilise influential Jews in the US to join the war, and also due to the number of Jews in Russia). The year before, Britain took Jerusalem from Turkey, and the following year, the Ottoman Empire capitulated after being defeated in Syria. With the end of World War I and the Treaty of Versailles, an independent Arab state was created on the Arabian Peninsula. At the San Remo conference in January 1920, the United Kingdom continued to implement the policy from the Treaty of Sèvres (a peace conference between Turkey, a member of the defeated Central Powers, and the victors, members of the Allied Powers) and proposed further division of the Ottoman Empire. Since the League of Nations was created after the war and aimed to resolve political and national issues diplomatically, Britain could not simply declare Palestine its colony, but it also could not relinquish its dominant position in this essential region. Thus, a solution was found to seemingly separate parts of the Ottoman Empire that were of interest to the victorious powers of World War I and to determine their administration until conditions for independence were met. To this end, Britain proposed its Mandate for Palestine with the task of ensuring the creation of a Jewish state and securing the rights of the non-Jewish population (as it had committed to in the Balfour Declaration), while France proposed the Mandate for Syria and Lebanon (Janković, 2007: 271). The difference between a mandate and a colony was interpreted by the fact that Palestine was not an ordinary Crown colony and did not belong to the British Empire and that its inhabitants were the citizens of Palestine, not the United Kingdom (Janković, 2007: 272).

Even then (immediately after the end of the peace conference), conflicts and disagreements between the great powers and local communities began. The first Arab attacks on Jews in Jerusalem occurred on the 4th of May 1920 (Black, 2017: 63), and to protect the Jews, they founded the organisation Hagana (English: Defense or in Hebrew ההגנה) that same year. Previously, in the Ottoman Empire, Arabs readily sold land to Jews, but this led to a large number of landless Arabs migrating to cities and, with their poverty, putting pressure on the already unfavorable situation that arose after the Empire's collapse. Based on this, Islamic religious organisations emerged as a substitute for the promised Arab independence that the British had directed them toward in their resistance against the Ottomans.

The League of Nations, held in May 1922, recognised the mandates over Palestine and Syria for the United Kingdom and France (League of Nations, 1922), and in support of Jewish efforts, it provided for the establishment of the Jewish Agency for Israel. The previous year, the French army entered Damascus (Britain subsequently and on its own initiative assigned the Golan Heights to the French mandate), while the British already controlled Palestine and Mesopotamia (Black, 2017: 58 - 59). The remaining territories of the Middle East (excluding Iran, Turkey, and the desert regions of the Arabian Peninsula) were divided between Britain and France, or Italy (Libya). From the above, it can be seen that the British, in reality, treated the territories under their mandate as if they had been colonies.

With such actions, the United Kingdom sought to satisfy the growing appetites of the Arabs, which is why the idea of a new Jewish state was unfeasible for them. The increase in the number of Jews as a result of their persistent immigration to Palestine only created a collision between them and the Arabs, and harmed the existing situation. With the proclamation of the Republic of Turkey, the Turkish interests were somewhat satisfied, but a number of Arab states remained in the region. The conflicting Arabs and Turks realised that Britain skillfully used their conflicts to serve its own interests, so their conflicts soon ceased, with anger directed toward the Jews and the British. So, the “unbelievers” conquered Islamic lands, including one of the three holiest cities in Islam - Jerusalem, and used Muslims against each other (Arabs against Turks) (Janković, 2007: 271).

Arab-Jewish conflicts intensified in 1929 due to the violation of the status of the holy site (the Western Wall) in Jerusalem (Black, 2017: 67). To satisfy Arab demands and bound by previous treaties, the British were trying to prevent further Jewish immigration to Palestine. The Arab revolt against the Jews (and also against British rule) in Palestine broke out in 1936 (Black, 2017: 85). The United Kingdom government formed a special commission (the Peel Commission, named after the commission's chairman, Lord Robert Peel) which concluded that the only logical solution to the conflicting aspirations of Jews and Arabs was to divide Palestine into separate Jewish and Arab states (see Map 1 in the Appendix). The Arabs rejected the proposal because it would have forced them, by accepting a Jewish state, to have a portion of Palestinians living under “Jewish domination”. The Zionists rejected the proposed borders because they would have gained little more than a ghetto of 5,000 out of 26,700 km² of Palestine. However, it is important to note that the Zionists agreed to negotiate the proposal with the British, while

the Arabs refused to consider any compromises (UN GA Resolution 181, 1947). The British took another step toward resolving the conflict in Palestine in 1939 when they released the so-called White Papers that abandon the half-and-half division and propose the formation of a single state ruled by Jews and Arabs in proportion to their populations, with Jewish immigration limited to 75,000 over the next five years. In support of this, they strictly enforced a naval blockade aimed at preventing Jewish immigration to the Palestine region, but Jews bypass the ban through illegal immigration channels (Black, 2017: 86, 98 - 101).

During World War II, persecuted by the Germans, Jews found ways to immigrate to Palestine illegally. Based on these experiences, in 1942, the Zionists changed their plan: instead of an undefined Jewish homeland, they sought a Jewish Republic, and in 1944 proclaimed the so-called One Million Plan (the idea of bringing a million Jews to the Jewish Republic), which soon became official Zionist policy.

After the war ended, the British continued to block Jewish immigration to Palestine (although the US President had requested that 100,000 be allowed to enter). In order to align their positions, on the 4th of January 1946 the British and Americans formed, a joint committee (the Anglo-American Research Committee). The committee was tasked with examining the political, economic, and social conditions in Mandatory Palestine and the well-being of the people currently living there; consulting with representatives of Arabs and Jews; and making other recommendations - as “necessary” for the ad hoc resolution of these problems, as well as for their permanent solution. The report titled Report of the Anglo-American Committee of Inquiry Regarding the Problems of European Jewry and Palestine, was published in Lausanne on the 20th of April 1946 (see Map 2 in the Appendix). It was rejected again (Black, 2017: 114).

After the Anglo-American Committee published its report, a new committee was formed to determine how the Anglo-American proposals would be implemented. It was led by British Minister Herbert Morrison and American Ambassador Henry Grady. In July 1946, they proposed the Morrison-Grady Plan for a unitary federal trusteeship in Palestine (see Map 3 in the Appendix). Jewish and Arab provinces would have self-government under the British supervision, while Jerusalem and the Negev Desert would remain under direct British control. The plan became the starting point for the Palestinian conference convened by the British on the 1st of October 1946. However, the Arabs rejected the plan on the grounds that it would lead to division, while the Jews refused to attend. Instead, the Arabs proposed an independent unitary state.

The British government and military also believed that neither Jews nor Arabs would accept the committee’s recommendations. British Prime Minister Clement Attlee therefore appointed a group of senior officials to coordinate with the chiefs of staff in preparing an analysis of the committee’s recommendations. They concluded that the Jews would accept nothing but partition, and not only would the guerrilla attacks by the paramilitary groups Irgun and Lehi (formed from the Haganah) continue, but the Haganah could react by launching widespread attacks. In addition, the report concludes that a general Arab uprising in Palestine is likely, with financial and material support from the neighbouring Arab states. As the confirmation of this, on the 22th of July 1946, the Jewish terrorist organisation Irgun blew up the King David Hotel, which was the headquarters of the British authorities in Palestine. Radical Jews employed guerrilla and insurgent tactics against the British, believing they had betrayed Zionist goals. The consequence of this will be that in the coming period, the United Kingdom will support the Arabs but also announce its withdrawal (Black, 2017: 111 - 114).

At a later meeting of the Palestinian Conference in February 1947, Britain proposed a plan known as the so-called Bevin’s Plan for a five-year British trusteeship (according to the proposer – Ernest Bevin). The guardianship was supposed to lead to a permanent settlement that all parties would agree on. When both the Arab and Jewish sides rejected the plan, Britain decided to refer the problem to the United Nations (Black, 2017: 115).

The period of direct British influence in the wider Middle East region, specifically on the territory of Palestine, emerged as a logical extension of British-Russian conflicts in Central and South Asia, namely the naval control of the Mediterranean Sea and the retention of, first, land routes to India, and then, oil reserves in the Middle East. As an instance of significant influence for the initial period, we can take the Congress of Vienna in 1815 (which brought Britain onto the world political stage as a world power), whose power lasted until 1946 when the British Empire, pressured by the demands of its colonies, was leaning toward a reduction in power and influence. The importance of the Suez Canal, as a direct maritime and trade route, in the third quarter of the 19th century, and the prevention of German expansion eastward in the first half of the 20th century, necessitated a permanent British presence, reflected in the maintenance of the Ottoman Empire, and after its demise, direct influence or support for conflicts aimed at creating an artificial need for the United Kingdom to intervene in its elevated civilising role as a peacemaker. The policy of apparent concessions by the Ottomans to Jews and Arabs worked as long as the Ottoman

Empire extended over the entire region, but with its decomposition, the existing regions - its successors - could not fit into the existing international relations, nor did they have enough strength for independent life.

3. THE ROLE OF THE UNITED NATIONS IN THE FORMATION OF ISRAEL

With the end of World War II, the world became aware of the horrific Holocaust (in Greek *holókaustos*: *ολόκαυστος*; in English: completely burned) committed against the Jews, and the problem of resolving their national issue emerged onto the political stage. The waves of immigration to Jerusalem and Palestine have sparked hope that the time has come to declare their own state. The growing Jewish emigration (around 600,000) to Palestine in the mid-1940s was met with the fact that about 1.2 million Arabs, who did not view their plans for independence favourably, inhabited two-thirds of the territory. Unable to control the situation regarding the conflict between the two peoples, as well as the immigration of Jews from all over the world, the United Kingdom wanted to withdraw from Palestine and therefore, in February 1947, it proposed that the question of its division be considered at the next session of the United Nations General Assembly (Rudolf, 1968: 228 and Black, 2017:115).

At the General Assembly session dedicated to the formation of the Committee on Palestine on the 28th of April 1947, five Arab countries - Egypt, Iraq, Lebanon, Saudi Arabia, and Syria - attempted, but unsuccessfully, to include in the discussion a plan related to “the termination of the Mandate over Palestine and the declaration of its independence”. The proposal was rejected, and the General Assembly, as a Solomon-like solution, formed the United Nations Special Committee on Palestine (UNSCOP) with the task of “investigating all relevant issues of the Palestine problem and proposing a solution” for the Assembly to consider at its regular session in September 1947. Representatives from Australia, Czechoslovakia, Guatemala, India, Iran, Yugoslavia, Canada, the Netherlands, Peru, Sweden, and Uruguay were elected to the Committee, which began its work on the 15th of May 1947. The members of the Committee decided to hear both sides (Jewish and Arab) and for this purpose travelled to Palestine, Lebanon, Syria, and Transjordan, as well as to the displaced persons camps in Austria and Germany. The two main proposals in the presentations were: the division of Palestine into a Jewish and an Arab state with a shared capital in Jerusalem under international administration, and a single Palestinian state with its capital in Jerusalem. The Jewish side was represented in the talks by the Jewish Agency for Israel, while the Palestinian Arabs were represented by the Arab Higher Committee (Rudolf, 1968: 228).

The Arab Higher Committee was founded in 1936 during the Arab rebellion against British rule in Palestine. It was founded in Cairo and presented itself as the central political body and the sole official representative of all Arabs in Palestine. The British outlawed it in 1937, but it continued to exist. The Arab Higher Committee practically did not participate in the work of the Committee, stating that “by refusing to consider the independence of Palestine, the UN began to pay more attention to the issue of Jewish refugees than to the issue of an independent state” (Rudolf, 1968: 228). They also considered the natural rights of Palestinian Arabs to be self-evident and recognised, and therefore not subject to examination. The Jewish leadership argued before the Committee that the issues of a Jewish state in Palestine and unlimited immigration were inextricably intertwined. During the talks, the Jews advocated for their own state in Palestine but were willing to compromise, while the Arabs refused any agreements regarding the division of the state. It is important to note that the Committee members themselves could not reach a consensus on how to solve the problem (the partition was voted for by: Canada, Czechoslovakia, Guatemala, Netherlands, Peru, Sweden and Uruguay, while a unified Arab state was voted for by: India, Iran, and Yugoslavia, but Australia was restrained), and thus the final proposals in the report to the General Assembly from the 31st of August, they were named in relation to the number of members who supported a certain proposal. The committee made two proposals: a majority proposal and a minority proposal. The majority plan involved dividing Palestine into two states with Jerusalem as the capital under special international administration, while the minority plan proposed the establishment of a single state (Rudolf, 1968: 228 - 229).

The Committee submitted its report to the General Assembly on the 3rd of September 1947. The report supported the end of the British mandate in Palestine and contained a majority proposal for a two-state partition plan with an economic union (Chapter VI) and a minority proposal for a single federal union plan with Jerusalem as its capital (Chapter VII). After the report was submitted, UN members considered the proposal, and the General Assembly on the 29th of November 1947, put the proposals to a vote: 33 member states voted in favour of partitioning Palestine, 13 for a unified state, and 10 abstained (Black, 2017: 115).

Accordingly, General Assembly Resolution 181 (UN SG Res. 181, 1947) was adopted, i.e. the Plan for the Partition of Palestine (see Map 4 in the Appendix) was drawn up. The plan included: the creation of

an Arab and a Jewish state by no later than the 1st of October 1948, and the division of Palestine into eight parts (three were assigned to the Arab state, and three to the Jewish state, the city of Jaffa, which formed an Arab enclave within Jewish territory, and the city of Jerusalem which would be administered by the UN Trusteeship Council). The plan also outlined the steps to be taken before independence. This concerned the issues of citizenship, transit, economic union, and the declaration that the provisional government of each proposed state would issue regarding access to holy places, namely religious and minority rights. By Resolution 181, the Assembly also established the United Nations Palestine Commission (composed of representatives from: Bolivia, Czechoslovakia, Denmark, Panama, and the Philippines) to implement its recommendations and requested the Security Council to take the necessary measures to implement the said Partition Plan (Rudolf, 1968: 230).

The adoption of the resolution was followed by an outbreak of violence in Palestine. As the situation worsened, the Security Council called on the UN General Assembly for a special session which met from the 16th of April to the 14th of May 1948. The Security Council on the 17th of April called for a cessation of all military and paramilitary activities in Palestine, and on the 23rd of April, established the Commission for Monitoring and Assisting in the Establishment of the Armistice. For its part, the General Assembly relieved the Palestine Committee of its responsibilities and decided to appoint a mediator responsible for promoting a peaceful solution in cooperation with the Truce Commission. On the 20th of May, Count Folke Bernadotte of Wisborg, president of the Swedish Red Cross, was chosen as the UN mediator (Rudolf, 1968: 231).

The proclamation further states that Israel will “be faithful to the principles of the UN Charter” and that it will be “ready to cooperate with the organs and representatives of the UN in implementing the General Assembly’s decision of the 29th November 1947” (Rudolf, 1968: 232).

4. CONCLUDING REMARKS

From a geopolitical perspective, the case is interesting because it is viewed from the perspective of the people, not the state. If we primarily associate the concept of geopolitics with the existence of a state (territory) and its policies, then what is characteristic of Israel’s case is that, figuratively speaking, the policy of the people led to the creation of the state. Although Jewish political organisations had considered ways to resolve the national issue since their inception, only the Balfour Declaration provided a real possibility for the establishment of that state in Palestine. The overlap of religious and political beliefs that Jerusalem represents the foundation of the Jewish state, Jewish immigration, and the possession of Palestinian territories provided a real opportunity for, during World War II, instead of seeking an undefined Jewish homeland, the seeking of a Jewish republic.

Geopolitics needs a strategy to realize its assumed goals. In the case of the “Great Game” in Southeast Asia, specifically the Middle East and particularly Palestine, a characteristic feature is the gradual “fragmentation” – both of the strategy and the territory where it is implemented. Great Britain anticipated potential areas where the influence of the Russian Empire could challenge its ability to realize its primarily economic plans, and accordingly took offensive political and military actions. As previously stated, the conflict between the two empires in this region can be traced throughout the 19th century (from the establishment of the Russo-Persian treaty in 1813, thru efforts to protect British trade interests in the 1830s, direct military conflict in the Crimean War 1853-1856, periods of political confrontation at peace congresses in Paris in 1856 and Berlin in 1878, up to the signing of the Anglo-Russian Convention in 1907), but from the second half of the same century, there was also direct British conflict with the local population (the First Anglo-Afghan War of 1838, the First (1845) and Second (1848) Anglo-Sikh Wars, as well as the Second Anglo-Afghan War of 1878, which provided the British with a pretext to continue their “interference” in the internal affairs of the Ottoman Empire (first to ensure its survival, and then, thru direct conflict, to actively participate in the division of its territory), and finally to formal presence in the region after World War I. The period of direct British rule between the two wars, and the struggle and efforts to maintain the administration after World War II, led to the need for international “de-escalation” and arbitration in the seemingly irreconcilable world of Jews and Arabs.

From the perspective of strategy, meaning the use of state power instruments by individual actors (defined as “the resources and means that the state uses to achieve its national goals” (Pavić, Berisha, and Stajković, 2025: 25), it can be observed that in Southeast Asia, Great Britain used the so-called “hard” power aspect (military engagement) was more in the area of the Persian and Indian peninsulas, while in the territory of the Ottoman Empire (the Middle East), it initially used “soft” power (diplomacy thru promoting the cultural attractiveness and values of the “Western world”), but in the First, and especially the Second, World War, it switched to using “hard” power to directly protect its interests. This doesn’t

mean the empire only used one aspect – “parallel” diplomacy – during World War I they, simultaneously, promised the territory of Palestine to both Arabs and Jews, but also sought to retain it for itself (the Treaty of Constantinople between Russia, France, and Britain, later joined by Italy; British-Arab negotiations and the Agreement on Asia Minor between Britain and France, as well as the Balfour Declaration to the leader of the World Zionist Movement).

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CRIMINAL LAW AND CRIMINOLOGY ASPECTS OF VIOLENCE AT SPORTS EVENTS

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Abstract: Violence at sporting events is a serious social problem at the global level. The paper points to violence as an illegal behavior in today's modern civilized society, as well as to a specific form of violence based on the place and time of execution, to violence in sports. Sports halls and stadiums often become the scene of opposing sports clubs and fan groups, which leads to the progression and expansion of violence at sports events. Violence in sports then takes the form of criminality. The criminological aspect of the work refers to the etiological factors and causes that lead to the violent behavior of athletes and fans at sports events. The Criminal Code of the Republic of Serbia criminalizes violent behavior at a sports event or public gathering. This criminal act protects public order and peace, the safety of spectators (fans) and players. The paper contains an overview and analysis of criminal law decisions and provisions that regulate protection against violent behavior at sports events or public gatherings in the Republic of Serbia. In the paper, the author presented the state and trend of violent behavior at sports events or public gatherings in relation to reported, accused and convicted persons in the last five-year period. In accordance with the analyzed legal regulations and judicial practice, in the final deliberations, *de lege ferenda* proposals were given in order to prevent and suppress violence in sports and violent behavior at sports events and public gatherings.

Keywords: *violence, sports events, prevention and suppression, criminal law and criminological aspects.*

Field: Social Sciences

1. INTRODUCTORY CONSIDERATIONS

Violence implies illegal behavior in today's modern civilized society. Violence can be defined as a type of aggressive behavior in which a violent person hurts another person with the intention of harming them, hurting them, and causing them suffering and pain. Therefore, in order for it to be violence, it is necessary that there is a violent person (the perpetrator) on one side and a victim (the injured party) on the other side, whereby the violent person, with the intention of putting the victim under their control and supervision, hurts them, causes them fear, suffering and pain. As for the types of violence, it can be psychological, physical, verbal, direct, indirect, individual, group or mass. It is necessary to point out the distinction between the terms "violence" and "aggression", because aggressive behavior does not always lead to violence. If aggression can be controlled, it can, ultimately, be suppressed. However, in impulsive people, in many cases, aggression, which arises as a result of frustration, can lead to violence, therefore it can be concluded that by reducing and controlling aggressive behavior, violence would also be reduced. The concept of violence is very broad, especially considering that it can be used in any human activity as a part of everyday life, and it can also be an integral part of different types and forms of crime (Božić, Đukić, Jovanovski, 2020: 510). Violence today represents a very serious social problem, which, in order to reduce and largely suppress it, requires a comprehensive interdisciplinary approach. Given that violence is a comprehensive social phenomenon, both politically, culturally and ethically, by the nature of things, the study of violence is addressed by a number of scientific disciplines and fields, such as criminal law, misdemeanor law, criminology, psychology, sociology, philosophy, ethics and others. When we talk about violence in sports, we find various definitions in the literature from the fields of law, criminology, psychology, sociology, philosophy and other scientific disciplines. Violence and sport, in their interrelationship, refer to behaviors that lead to harmful events, behaviors that are contrary to legal regulations, behaviors that are unrelated to competitive goals, as well as behaviors that involve the use of physical force, which results in causing harm.

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2. VIOLENCE IN SPORTS

With the popularization and commercialization of sports in the 20th century, violence in sports and at sports events has become a serious social problem on a global level (Article 2, par. 1 Law on the Prevention of Violence and Misbehavior at Sports Events). Sports events mean sports competitions and sports events. Violence in sports represents a specific form of violence, precisely because of the specific location of the act of violence, the specific nature of its perpetrators, and the large (often massive) number of active and passive actors present. From just a few threats and insults, violence on sports fields and stands can escalate to serious physical injuries, group and mass fights between spectators and fans, fans of opposing clubs, but also between athletes and their coaches, all of which can lead to fatal consequences.

We would like to point out the distinction between the terms "spectator" and "fan." A spectator is a person present in the audience at a sports stand, hall, or other place where a sports match or other sporting event is taking place. In a large number of cases, it supports a sports club whose activities and results it follows. The fan is also part of the audience, he also supports and follows the activities and results of the sports club, however, he is a passionate fan, which he publicly shows with his behavior. His behavior in the audience is striking due to his clothing and the highlighting of fan symbols, so that his fan affiliation is clear to everyone.

In the literature, we find a large number of definitions related to sports violence. The term sports violence refers to any unlawful behavior that causes physical or psychological harm to another person, which is directly or indirectly related to sports events, performances or gatherings. Nowadays, sports and related events bring athletes, their coaches, and clubs extremely high profits. Supporters and fans of sports clubs in their country identify with their country and national team, which in relation to the opposing national team, in both, causes aggression, intolerance and anger, which already has some form of aggressive behavior underlying it that can result in violence and savagery. Violence and savagery can occur at any time during a sporting event, before, during or after the end of the sports game.

As a form of violence, violence in sports is specific because of the place where the use of physical force or coercion may occur. Thus, violence in sports can occur in sports stands, sports fields, sports halls, that is, in places where sports events are held and held, but also in places that are located outside the venue of sports games, but are the cause of events and confrontations related to sports events. Disagreements, insults, verbal and physical attacks can occur between athletes - players, sports coaches, sports referees, spectators, fans, family members of the player, persons who have a certain influence on the player, and even skilled criminals and embedded terrorists. A violent fan refers to a specific type of fan group that is considered very aggressive, as they use sports competitions to present their violent affirmation at and through them, so that sports stadiums and city streets are ideal spaces for them to release their pent-up energy (Jovanovski, Božić, Atanasov, 2019: 512). The most common forms of violence are: "individual physical attacks on other fans or bystanders, group fights between opposing fan groups, bringing and throwing pyrotechnic devices and other objects into the field or audience." (Milojević et al, 2013: 13). The Law on the Prevention of Violence and Inappropriate Behavior at Sports Events (Article 4) states taxatively that violence and inappropriate behavior at sports events are considered to be: „physical attack on participants in a sports event, or physical confrontation between participants in a sports event; throwing objects on the sports field or in the auditorium; attempting to bring or bringing into a sports facility or displaying in a sports facility signs that offend national, racial, religious or other feelings or otherwise incite hatred or intolerance that may lead to physical conflicts; damaging a sports facility, equipment, devices and installations at a sports facility where a sports event is held; causing disorder or destroying property when arriving at or leaving a sports event or in a sports facility, disrupting the course of a sports event, endangering the safety of participants in a sports event or third parties; unauthorized entry into the sports field, or into the official premises and official passages of the sports facility or into the part of the auditorium of the sports facility intended for opposing fans; attempted entry, or entry into the sports facility, possession or use of alcohol or other intoxicants; attempting to bring, or bringing into a sports facility or using pyrotechnic devices and other objects and means that may endanger the safety of participants in a sports event or disrupt its course; possession of pyrotechnic devices, objects and means that may endanger safety when arriving at or leaving a sports event; setting fire to fans' props or other objects; masking of the face to conceal identity in the event of any form of violence, using clothing or other objects". Sport and sports events represent the "image and opportunity" of a certain society, community and its individual. In accordance with the above, we can conclude that one of the causes of violent behavior lies in the upbringing and culture of the society to which the individual belongs, the circumstances and conditions in which he grew up, as well as in the personal characteristics,

attitudes, opinions and beliefs of a particular individual. Therefore, despite good criminal law solutions and prescribed repressive measures, violence at sporting events and public gatherings was, is and will be an expected negative phenomenon. Eventually, adequate preventive measures can be taken in order to prevent violent behavior and to improve the existing repressive measures in order to suppress violence in sports, because this type of violence can hardly be eradicated.

3. VIOLENCE IN SPORTS AS A FORM OF CRIME

The task of criminal law involves the protection of society from criminality in such a way that criminal law prescribes and applies criminal sanctions against the perpetrators of criminal acts (Božić, Tančić, 2022: 22). Organized crime represents (or as some use the term "crime") the most dangerous and serious form of association of several persons with the intention of committing criminal acts (Breneselović, 2009: 542-548). The concept of organized crime first saw the light of day in 1951, when the term was mentioned in the Report of the US Senate Committee, chaired by Senator E. Kafanner (Skorupan, 2003: 687). Given that organized crime appears in many different forms, there is no single definition of its concept (Božić, 2016: 286). One of the first definitions of organized crime in our region, which was adopted in the late 1990s by criminologists, criminalists, judges, prosecutors, and professors of criminal law, defines organized crime as systematically planned, prepared, and by dividing roles intentionally committed criminal offenses by persons associated in an organized criminal group with continuous criminal activity with characteristics of violence, intimidation, corruption, regardless of national state borders, for the purpose of gaining financial gain or social power (Božić, 2012: 29).

The Criminal Code of the Republic of Serbia contains a large number of incriminations that may be related to organized crime (Criminal Code, "Official Gazette of the RS", no. 85/05, 88/05-corrected, 107/05-corrected, 72/09, 111/09, 121/12, 104/13, 108/14, 94/16, 35/19, 94/24) (Božić, 2023: 69). Violent crime includes those acts in which the victim is attacked or threatened with an attack in order to achieve a specific goal. Elizabeth Englander defines violence as aggressive behavior undertaken with the intention of harming another person, with intent, as a form of guilt, being a necessary subjective element of the nature of a criminal act, because if there is no intention, it will be a matter of chance (Englander, 2003: 2). Violence in sports, in a large number of cases, manifests itself as a form of organized crime, given that violent behavior at sporting events and public gatherings is, for the most part, very well planned and conceived in advance. Extreme forms of violence with fatal consequences have often occurred at sporting events. The French magazine "L'Equipe" conducted a study in 1997 in which, up to that time, 1,300 violent acts with fatal consequences had been recorded at football matches around the world (Bodin, Robene, Heas, 2004: 23).

Unfortunately, sports fields, stadiums and halls have been and remain places of violent clashes between passionate fans and their violent organized groups. Crazed and furious fans, expecting the victory of their sports club, forget about the rules of behavior in the sports stands, which become places of savagery. Sports competition venues a priori convey an image of vandalism and violence to the public, unconsciously inviting violence. Namely, if we look at the very place where the sports match should be played, at the very appearance of the stands and stadium, at the high wire fences, at the presence of armed police officers with batons and aggressive police dogs, nothing else can be expected.

Very rarely is violent behavior at such mass events spontaneous and unexpected. Sometimes, the manifestation of violence is not causally related to a sporting event as a type of sports match, nor to its result, nor to the behavior of the players. Two questions arise: should we accept violence at sporting events as a "normal" occurrence, since there is almost no significant sporting event that does not involve some form of violence, and whether society can only protect itself and resist "aggressive, violent beings" through repressive measures. The answer to this question is given by England, which has managed to solve violent behavior at sporting events through a strict punitive policy by sanctioning violence in sports with high fines and prison sentences.

4. CRIMINOLOGICAL ASPECTS OF VIOLENCE IN SPORTS

When we talk about violence in sports, as well as when violence in sports occurs, we ask ourselves why it happened, what are the causes of violence. The causes are, unfortunately, numerous and very often directly or indirectly correlated with each other. The criminal behavior of a delinquent is related to his personal traits, but also to social factors. In some criminal acts, the perpetrator is more influenced by his social milieu and environment, in others, the perpetrator's personal traits and character prevail, while in still others, the intensity of both factors is equal. Only a cumulative number of the mentioned factors can

lead to criminal behavior, one factor alone is not enough. In explaining the causes of violence at sporting events, Otašević states that an individual in a crowd feels much more powerful, and due to the hidden anonymity, their sense of personal responsibility weakens, which is why individuals in a crowd can do things that they might never do individually (Otašević, 2010: 520). Some theorists believe that violence on sports fields occurs due to the presence of excess aggression in people, which must be expressed in some way, and they see the solution to the problem only in a harsh punitive policy. Psychologists thus find the causes of violence in sports in the degree of aggressiveness of fans, while on the other hand, sociologists discover the causes of violence through theories of collective behavior. The levels of violence at sporting events can vary, from milder forms and intensity of violence, to more serious forms of violence, all the way to vandalism and serious criminal forms of violence.

Biological, psychological and sociological theories are the three theories that deal with violence in sports. Biological theories assume that the commission of criminal acts is associated with certain biological traits of the perpetrator, primarily with physical constitution and genetic factors (Ignjatović, 2023: 68). Criminologists are divided in their opinions regarding the connection between committing criminal acts and physical constitution. The first believe that committing a crime is a consequence of degenerative features of the body constitution, so that murderers are more often thin people, fraudsters are more often tall people, thieves and burglars are mostly shorter people, while rapists are short and fat people. Another group of criminologists believes that a person's physical constitution is connected in some way with his criminal behavior (Hooton, 1939). In his research, William Sheldon pointed to three basic types of human body constitution: ectomorphic, endomorphic, and mesomorphic. Ectomorphic types are tall and thin people who have strong self-control and the ability to control their own reactions, speed of reaction, and are more prone to self-isolation. The endomorphic type is represented by shorter and heavier people who are very sociable, slow to react, and quite emotionally stable. The third, mesomorphic type, includes athletically built people who have a drive for physical activity and aggression, often get into risky situations, and have no feeling for others (Sheldon, 1940). Konrad Lorenz, as a representative of biological theory, believes that all people are born with a certain level of aggression, aggression that is expressed through sports. According to psychological theory, criminal behavior is determined by the psychological traits of a particular person, so aggressive behavior comes as a result of present frustration due to, for example, poor results achieved in a sports game, a referee's decision, a player's behavior, or disappointment from the audience. According to sociological theory, we find the causes of crime in social conditions. Gabriel Tarde states that committing a crime is essentially imitation. Some authors understand imitation as creating a reality that is as true as possible, while others see imitation as a search for the inner essence of reality (Božić, 2018: 70). Aggressive behavior is learned through imitation, with the help of rewards and punishments. One of the most important representatives of sociological theory, Franz von Liszt, holds the view that crime is most influenced by social causes, although the special characteristics of each individual perpetrator should not be ignored, as they are equally important, both inherited and acquired. Eric Dunning states that the combination of violence, extremist ideologies, as well as the factor of the social status of delinquents is very pronounced in sports (Dunning, 1999: 43). The initial hypothesis that violent behavior at sporting events originates mainly from hooligans of lower social status has been partially refuted by modern research, as the results have shown that the stated hypothesis is basically correct, but that the violent and hooligan style of behavior is to a large extent an individual choice of perpetrators who are of middle or even higher social status. The delinquent adopts a violent and hooligan style of behavior (socially unacceptable, antisocial behavior) and identifies with the fan group, with which he replaces his previous social and family community.

In practice, we most often encounter the following forms of violence in sports: verbal or physical attacks on fans or persons who happen to be at the scene of an escalation of violence, group physical attacks between opposing sports clubs, physical attacks on a national basis, destruction and smashing, vehicles with license plates of the country from which the opposing sports club comes, damage to property of a sports facility, the use of pyrotechnics that are dangerous to the lives of spectators, fans and athletes during a sports event, as well as the introduction and consumption of alcoholic beverages and narcotic drugs during sports events. All of the above forms of violence at sporting events and public gatherings can lead to serious crimes such as serious bodily harm, murder or aggravated murder. It is not even possible to determine in numerical terms how many possible types of violence there are at sports events, because with the development of society, the modus operandi of violence has simply become unpredictable. The number of causes leading to violence has also increased, and they depend on the cultural, economic and political development of a particular country. It is very important that new forms of violence are recognized in a timely manner, so that repressive measures aimed at suppressing and preventing violence are successful.

The criminological aspect of violence in sports is important for defining the causes that lead to this form of violence and for taking adequate preventive measures to prevent and suppress violent behavior. Although the Law on the Prevention of Violence and Inappropriate Behavior at Sports Events obliges sports federations, sports associations, sports organizations, and sports clubs to take preventive measures to reduce the risk of possible violent and inappropriate behavior by spectators, we continue to witness various forms of violence at sports events. Preventive measures prescribed by law are as follows: encouraging fans and their clubs to behave in a good and appropriate manner, informing their fans through meetings, printed newsletters, coordinating activities with their fans' clubs during organized visits to sporting events, activities in adopting measures by event organizers for those sporting events considered high-risk, encouraging positive behavior and actions of players and officials before, during and after the sporting event. However, the increasing escalation of violence at sporting events and public gatherings is still influenced by the insufficient implementation of preventive and repressive measures in the fight against this form of violence and crime. As follows from case law, this criminal offense is most often punished with conditional prison sentences, security measures such as a ban on attending certain sporting events for a period of one year, and excessively lenient fines. This is confirmed by the judgment of the Supreme Court of Cassation of the Republic of Serbia:

„By the judgment of the High Court in Novi Sad K-161/17 of 10.05.2018. the defendant AA was found guilty of committing the criminal offense of violent behavior at a sports event or public gathering under Article 344a par. 1 CC and was given a suspended sentence of 10 (ten) months in prison, which will not be executed if the defendant does not commit a new criminal offense within 3 (three) years after the verdict becomes final, and he was also given a fine of 10,000.00 (ten thousand) dinars.... By the same verdict, a security measure was imposed on the defendant, banning him from attending sports events, namely all official football matches between OFK “...” from ... and FK “...” from ... for the duration of 1 year, counting from the date of finality of the verdict...” (Judgment of the Supreme Court of Cassation of the RS, no. Kzz 1242/2018 of November 14, 2018.)

Same as: *“By the judgment of the High Court in Belgrade, K. No. 240/17 of 05.03.2018, the defendant AA was found guilty of the criminal offense of violent behavior at a sports event or public gathering under Article 344a, par.1 CC and he was given a suspended sentence by determining a prison sentence of three months and at the same time determining that it will not be executed if the defendant does not commit a new criminal offense within one year after the verdict becomes final and was sentenced to a fine of 10,000.00 (ten thousand) dinars... Based on Article 344a, par. 6, in conjunction with Article 89b CC, the defendant was banned from attending sports events-matches of the RK “BB” for a period of 1 year, counting from the date the verdict becomes final...”*

(Judgment of the Supreme Court of Cassation of the Republic of Serbia, no. Kzz 1244/2018 of November 15, 2018.)

The aforementioned criminal sanctions can hardly achieve the purpose of punishment. Namely, in the fight against preventing and suppressing violence at sporting events, a stricter punitive policy by the courts is necessary.

5. CRIMINAL LAW PROTECTION AGAINST VIOLENT BEHAVIOR AT A SPORTING EVENT OR PUBLIC MEETING

With the European Convention on Spectator Violence and Misbehaviour at Sports Events and in particular at Football Matches (Law on Ratification of the EU Convention on Spectators Violence and Misbehavior at Sports Events and in particular at Football Matches, “Official Gazette of SFRY - IA”, No. 9/90), as one of the most important sources of international law in this area, it should be noted, in addition to the Criminal Code and the Law on the Prevention of Violence and Inappropriate Behavior at Sports Events, the Law on Private Security (“Official Gazette of RS”, no. 104/13, 42/15 and 87/18) and the Law on Public Order and Peace (“Official Gazette of RS”, no. 6/16 and 24/18), as an important part of the national legislative framework of the Republic of Serbia regarding this criminal law matter. The purpose of adopting the convention is to prevent violence and inappropriate behavior by spectators, to ensure the safety of spectators during sporting events, and to establish supervision over the prevention of violence (Božić, Đukić, Jovanovski, 2020: 513). It should be noted that the aforementioned international convention refers only to violence and inappropriate behavior of spectators at sporting events, especially at football matches, and thus narrows the circle of possible perpetrators of criminal acts of violence and inappropriate behavior at sporting events in relation to the incrimination of violence and misconduct in the Criminal Code of the Republic of Serbia in terms of possible perpetrators (“who”...delictum communium), as well as the definition of possible perpetrators under the Law on the Prevention of Violence and

Inappropriate Behavior at Sports Events ("all persons present at a sports event"). The Criminal Code, in Chapter XXXI - Criminal Offenses against Public Order and Peace, prescribes the criminal offense of violent behavior at a sports event or public gathering (Article 344a CC). This criminal offense represents a special form of the criminal offense of violent behavior (Article 344 CC). The legislator justified introducing this incrimination into the Criminal Code of the Republic of Serbia, given the specific place and time of the commission of the criminal offense of violent behavior at sports events or public gatherings, the nature of the perpetrator, as well as the specific expected intensity of violence and possible serious consequences. The place of commission of this criminal offense is considered to be a sporting event, while according to the Law on the Prevention of Violence and Inappropriate Behavior at Sports Events, sports competitions and sports manifestations are considered sports events. The criminal offense of violent behavior at sporting events or public gatherings protects public order and peace, the safety of spectators (fans) and players. The time of the sports event is considered to be the time interval from two hours before the start of the sports event to two hours after its end, and in the case of sports events of increased risk, the time of the sports event is considered to be the time interval from four hours before the start of the sports event to four hours after its end (Article 2, par. 3 Law on the Prevention of Violence and Misbehavior at Sports Events). The perpetrator of this criminal offense is "anyone who physically attacks or physically fights with participants in a sports event or public gathering, commits violence or damages property of greater value when arriving at or leaving a sports event or public gathering, brings into a sports facility or throws onto the sports field, among spectators or participants in a public gathering, objects, pyrotechnics or other explosive, flammable or harmful substances that may cause bodily injury or endanger the health of participants in a sports event or public gathering, enters the sports field or part of the audience intended for opposing fans without authorization and causes violence, damages the sports facility, its equipment, devices and installations, or, through his/her behavior or slogans at a sports event or public gathering, incites national, racial, religious or other hatred or intolerance based on some discriminatory basis resulting in violence or physical confrontation with the participants" (Article 344a, par.1, CC). The action of the criminal act of violent behavior at sports events or public gatherings is alternatively determined (physically attacks, physically assaults, commits violence, damages property, brings in or throws objects, pyrotechnics or other explosive, flammable or harmful substances, enters the opponent's field without authorization, incites national, racial, religious or other hatred or intolerance, etc.) For the existence of a criminal offense, it is not necessary that the defendant's actions caused a riot. The same answer is given by case law:

"According to the Supreme Court of Cassation, in the act of committing the basic form of the criminal offense of violent behavior at a sports event or public gathering under Article 344a, par. 1 CC which was charged to the defendant and for which he was found guilty in this specific case, namely physical assault on a participant in a sports event, as one of the alternatively envisaged acts of committing the criminal offense, for the existence of a criminal offense, it is not necessary that the defendant's actions caused a riot, as the defendant's defense attorney incorrectly states in the request, it is sufficient that the defendant physically attacked a participant in a sporting event, where physical attack implies an aggressive action directed at the body of a passive subject that does not always include direct physical contact, e.g. a swing of an arm or leg or throwing an object at a passive subject."

(Judgment of the Supreme Court of Cassation of the Republic of Serbia, no. Kzz 985/2019, dated October 2, 2019).

In order for it to be a criminal act of violent behavior at sports events or public gatherings, it is necessary that the perpetrator of this criminal act has the status of a participant in a sports event, and participants of a sports event, in accordance with Article 2, par. 5 of the Act on the Prevention of Violence and Misbehavior at Sports Events, are considered to be all persons who are present at the said event (spectators, fans, players, judges and others). The same is confirmed by case law: *"Therefore, the perpetrator of the criminal offense under Article 344a, par. 1 CC committed in the manner determined by the first-instance verdict (physical attack on a participant in a sports event) can be anyone who commits that act against any person present or participant in that event at a sports event, regardless of the capacity in which they are present."* In accordance with the above, the Supreme Court of Cassation finds that players and referees as participants in a sporting event can be both active and passive subjects of this criminal offense, because the legal description of the nature of the criminal offense in Article 344a, par.1 CC implies that they are also considered persons present at the sporting event. (Judgment of the Supreme Court of Cassation of the RS, No. Kzz 947/2021 of October 14, 2021). The form of guilt required for the execution of this criminal act is intent (*dolus directus* or *dolus eventualis*). The basic form of the criminal offense of violent behavior at sporting events or public gatherings is punishable by a cumulative sentence, a prison sentence of one to five years and a fine.

The legislator has also prescribed several qualified forms for the criminal offense of violent behavior at sports events or public gatherings. The first qualified form will be if the aforementioned criminal offense is committed by a group (Article 344a, par. 2, CC). A "group" represents at least three persons who are connected for the purpose of permanently or occasionally committing criminal offences, which does not necessarily have defined roles for its members, continuity of membership or a developed structure (Article 112, par. 22, CC). The threatened penalty for this first qualified form of violent behavior at sports events or public gatherings is a prison sentence of two to eight years. Another qualified form refers to the ringleader of a group who commits a crime of violent behavior at sports events or public gatherings, for which the legislator has prescribed a prison sentence of three to twelve years (Article 344a, par. 3, CC). The same punishment is prescribed for the third qualified form of this criminal offense, in which a disorder occurred in which a person was seriously injured or property of greater value was damaged (Article 344a, par. 4, CC). This is an act qualified by a more serious consequence (serious bodily injury or damage to property of greater value). Given that infliction of minor physical injury is not a legal feature of a criminal offense, so that the occurrence of the said consequence is not necessary to realize the essence of a criminal offense, the legal feature of a criminal offense is only serious bodily injury, which is prescribed in the qualified form of this criminal offense. We find the same answer in case law: „*To bearing in mind the cited legal provision of Article 344a, par. 1 CC (basic form) from which it follows that inflicting light bodily harm is not a legal characteristic of the criminal offense under Article 344a, par. 1 of the CC (the occurrence of the stated consequence is not necessary in order to the existence of a beings of a criminal offense from Article 344a of the CC) for which the defendant was found guilty. At the same time, it should be borne in mind that even in the qualified forms of the criminal offense from Article 344a par.1 CC, light physical injury is not provided as a legal feature of the criminal offense, but only serious physical injury, namely in par. 4 of Article 344a of the CC (qualified form).*” (Judgment of the Supreme Court of Cassation of the RS, no.Kzz 1259/2019 of December 5, 2019).

This third qualified form raises the question of the justification for such a strictly prescribed punishment, a prison sentence ranging from three to twelve years, given that the perpetrator of violent behavior at a sporting event or public gathering is required to have the intent to cause disorder, but not *dolus directus* in relation to the resulting consequence, i.e. serious bodily injury or damage to property of greater value. The perpetrator of the criminal offense of violent behavior at sports events or public gatherings, both for the basic form of the offense and for the three specified qualified forms, must be imposed a security measure of prohibition from attending certain sports events, which is carried out in such a way that the perpetrator of a criminal offense is obliged to report in person to an official in the regional police department or police station, in the area where the perpetrator happened to be, immediately before the start of certain (specified) sports events (Article 89b, par. 2 and Article 344a, par. 6, CC). The perpetrator of the criminal offense is obliged to stay in the premises of the police administration or the police station during the sports event, with the provision that the duration of this security measure cannot be shorter than one nor longer than five years, counting from the day the decision becomes legally binding (Article 89b, par. 3, CC).

In accordance with Article 2, par. 2 of the Act on the Prevention of Violence and Misbehavior at Sports Events, the organizer of the sports event is "sports association, sports society, sports organization - club, other legal or physical entity that is permanently or occasionally engaged in the organization of sports events, that is, that has taken over the organization of a certain sports event, or the performance of certain tasks in the organization of a sports event." A special form of criminal offense, violent behavior at sports events or public gatherings, as a *delictum proprium*, prescribes the liability of an official or responsible person who, when organizing a sports event or public gathering, fails to take security measures to prevent or eliminate disorder.

In order for this form of criminal offense to exist, it is necessary that security measures were not taken, that there is a causal nexus (that the failure to take the aforementioned measures resulted in disorder) and that a more serious consequence occurred (that the life or body of a larger number of people or property of greater value was endangered), (Article 344, par. 5, CC). The organizer of a sporting event is legally obliged to "establish an appropriate security service or engage a legal entity or entrepreneur to perform physical security and maintain order at the sporting event" (Article 8, Law on the Prevention of Violence and Misbehavior at Sports Events). The security service is obliged to prohibit persons who are visibly intoxicated or under the influence of narcotics from accessing the venue where the sports event is being held. Persons whose behavior indicates that they are prone to violent or inappropriate behavior should also receive a ban on access. The security service is obliged to separate the fans by separating visiting fans from home fans, to guide them through special entrances and exits to a special part of the auditorium intended for them, to monitor and prevent the entry and sale of alcoholic beverages in the area

where the sports event is taking place, as well as to prevent the entry of objects that can be used in violent confrontations (bottles, sticks, pyrotechnics), to prevent the entry of objects that spectators can use to disrupt the course of a sports game (banners that incite hatred and intolerance based on belonging to a certain race or nation, mirrors, lasers), (Article 8a).

The Law on Liability of Legal Persons for Criminal Offenses prescribes the liability of a legal person based on the guilt of the responsible person. According to the model of derivative liability of legal entities, the liability of a natural person is imputed to the legal entity (Božić, Josipović, 2020: 373). According to the law, for this special form of criminal act, violent behavior at sports events or public gatherings is threatened with a cumulative penalty, a prison sentence of three months to three years and a fine. In accordance with the analysis of the basic form of the criminal offense of violent behavior at sports events or public gatherings and its qualified forms, certain gaps were observed. One qualified form refers to the situation if the basic form of the criminal offense was committed by a group. A justified question is raised, why the execution of violent behavior at sports events or public gatherings by an organized criminal group, "a group of three or more persons, which exists for a certain period of time and acts in agreement with the aim of committing one or more criminal offenses for which a prison sentence of four years or a heavier sentence is prescribed, for the direct or indirect acquisition of financial or other benefits" is not criminalized (Article 112, par. 35, CC). Likewise, by analyzing the provisions of the Criminal Code, it is concluded that *de lege ferenda* it is necessary to prescribe two more qualified forms of the criminal offense of violent behavior at sports events or public gatherings. One qualified form should apply to situations when a riot occurs in which a person is intentionally caused serious bodily harm or property of greater value is damaged. Another qualified form should regulate violence at sporting events or public gatherings that resulted in the death of one or more persons.

6. ANALYSIS OF THE STATE AND MOVEMENT OF VIOLENCE AT SPORTS EVENTS

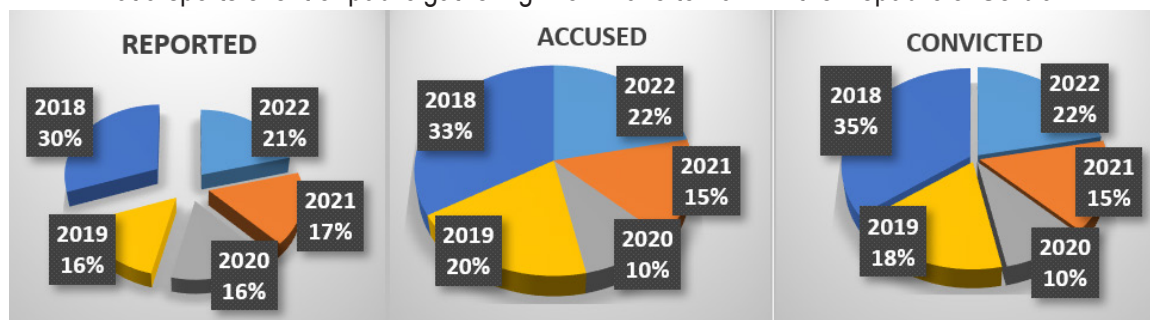
In Table 1, we have presented the numerical situation related to the reported, accused and convicted number of adults for the criminal offense "Violent behavior at a sports event or public gathering" in the five-year period from 2018 to 2022 in the RS. The largest number of people reported for violent behavior at a sporting event or public gathering was recorded in 2018 (143 people). In the same year, compared to the observed five-year period, there were the most accused persons (103), as well as the most convicted (94). Compared to the remaining four years of the observed period, 2018 recorded almost twice the number of reported cases (143) compared to the reported cases in the following year 2019 (75), which at first glance represents a positive step forward in combating violent behavior at sports events and public gatherings. The question arises, is this really so? Or certain violence is not even reported at all, and consequently it cannot be prosecuted nor can it be socially condemned.

Table 1. Reported, accused and convicted adults for the criminal offense of "Violent behavior at a sports event or public gathering" from 2018 to 2022

Article 344a of the Criminal Code - Violent behavior at a sports event or public gathering			
Year	Reported	Accused	Convicted
2022	99	67	59
2021	78	47	41
2020	77	30	26
2019	75	62	50
2018	143	103	94

Source: Official data from the Republic Statistical Office

Chart 1,2,3. Reported, Accused and Convicted adults for the criminal offense of "Violent behavior at a sports event or public gathering" from 2018 to 2022 in the Republic of Serbia



Source: Official data from the Republic Statistical Office

Jurisprudence shows that the sanctions imposed for violence at sports events are too mild, while there are cases where punishments are imposed below the legal minimum. As for the sentences imposed, suspended sentences or fines predominate in convictions for violent behavior at sports matches. In addition to light sentences, those accused of violent behavior at sports events or public gatherings also have to wait a long time for a court decision, as criminal proceedings take a long time. The year 2020 recorded the lowest number of those accused of violence at sports events (30), as well as the lowest number of convicted persons (26). Although the number of people reported for a criminal offense in the aforementioned year (77) is almost identical to that in 2019 (75), we believe that the aforementioned situation cannot be attributed to isolation and the reduction of social life due to the outbreak of the coronavirus and the declaration of the Covid-19 pandemic. In 2021, the number of people reported for violent behavior at sports matches was similar to the previous two years (78), however, the number of accused and convicted people increased significantly compared to the previous two years. In the last year of the observed period and available data, 2022, there was an increase in the number of people reported for violence on sports fields (99), but also an increase in the number of accused (67) and convicted persons (59).

7. CONCLUDING CONSIDERATIONS

Sport should imply a healthy lifestyle, synonymous with enjoyment of sporting activities, sporting events, a healthy and positive competitive spirit, socializing, and the desire to achieve top results in both individual and team sports. However, unfortunately, in a large number of cases, sporting events are accompanied by violent behavior by spectators, fans, players, coaches and other persons present on sports fields, stands or sports halls, as well as in other places where sporting events take place. Violent behavior is a form of aggressive behavior and is certainly the result of several related factors: social, educational, cultural, inherited, ideological, sociological, and psychological. It is undeniable that the causes of violence at sports events and public gatherings are woven through the hatred, passion and intolerance of fans towards the rivals of the opposing club, which escalate during the sports event due to poor results achieved by the club they support, the lack of or unprofessional security at the sports event, the bringing in and consumption of alcoholic beverages and narcotics in sports halls, on sports fields and stands, before, during and after the sports event.

It is necessary to monitor all new and possible forms of violence and violent behavior in sports in order to sanction all potential perpetrators of this form of criminal behavior (spectators, fans, players, coaches, and others present at sports events), which would achieve the purpose of punishment, but also individual and special prevention. It is important to point out that fans cannot be viewed as a homogeneous whole because fans do not lose their individuality simply by belonging to a certain group. They can only share their identity with the group, but retain their individuality, therefore it is necessary to distinguish between fans within the group who are ready for violence and those who are not ready for violent behavior. Preventive measures are key in preventing violent behavior at sports events and public gatherings, especially through work with fan groups (lectures and education) in order to improve communication between fans and their leaders. Although the penalties prescribed by law are satisfactory, we encounter the problem of imposing very lenient criminal sanctions. Thus, for the criminal offense of violent behavior at sports events or public gatherings, suspended prison sentences, low fines, and security measures of banning from attending sports events for a short period, within the specific legal minimum of one year, are generally imposed.

It is necessary, *de lege ferenda*, to tighten the penal policy of the courts for criminal acts of violent behavior at sporting events by increasing the amount of fines, as well as by imposing unconditional prison sentences for more serious forms of violence. In addition to more serious forms of violent behavior, it is proposed to the legislator *de lege ferenda* to criminalize qualified forms of violent behavior at sports events or public gatherings related to an organized criminal group, as well as qualified forms of violence and violent behavior at sports events that result in the death of one or more persons.

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CHALLENGES OF IMPLEMENTING BALANCED SCORECARD IN THE SUDANESE ISLAMIC BANKS

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Abstract: The origin of modern Islamic banks back dates to the 1960s in Egypt, where Mit Ghamr saving bank pioneered Sharia compliant financing replacing interest with Islamic formulas and mechanisms, then it subsequently spread to other Arab countries, including Sudan. Sudan's banking sector has indeed adopted Islamic banking principles in all its transactions, This happened over several stages due to political and religious factors that preceded the secession of South Sudan in 2011. After secession of south Sudan, all banking activities in the Sudan are conducted in accordance with Sharia law (Islamic law). Consistent with prior research on modern management accounting methods in Islamic banks, this study evaluates the implementation of Balance Score Card (BSC) in Sudanese banks, through identifying the challenges of implementing (BSC) from the a perspective of banks' employees. The researcher is likely to choose the descriptive research method because it helps to capture the current state of affairs, allowing the researcher to describe what exists and identify patterns or trends. In order to answer the research question, the selection of secondary data was biased on relevant, accessibility, and availability of systematically organized datasets suitable for the study, a questionnaire was designed and distributed to 10 branches for different banks working in Gadarif state located in Eastern Sudan, which were selected from about 35 branches for different banks working in the state, the selection was based on practical experience and the existence of relevant well-organized data for the study. Meanwhile, there are 10 employees were chosen randomly from any bank. Accordingly, 100 questionnaires were distributed to 100 employees, 93 valid questionnaires were retrieved for analysis. The study identifies 18 key challenges in implementation BSC in Islamic banks in Sudan. The highlighted challenges may include: Ineffective binding between the dimensions limits the cards' effectiveness in directing organizational behavior toward achieving the strategy, Excessive number of indicators lead to difficulty in analysis, Weak information systems lead to poor formulation of metrics' indicators, Employee resistance to change makes it difficult to implement the BSC, The difficulty of continuously evaluating the performance of non-financial indicators hinders the implementation of the BSC, The implementation of the BSC requires the exhaustion of additional financial resources, and Failure to link evaluation to rewards and motivation renders the BSC ineffective as a management tool. Finally the study suggested some recommendations such as: The banks can prioritize the challenges based on their impact and develop strategies to address them, this could involve allocating resources providing training and improving infrastructure to support BSC implementation. On the other hand, regulatory bodies can provide guidance and support to Sudanese Islamic banks to help them overcome the challenges and implement BSC effectively.

Keywords: Social Sciences, Balance Scorecards, BSC implementation, Challenges.

Field: Social Sciences

1. INTRODUCTION

The changing conditions and circumstances imposed by developments in knowledge and science, and the modernity of renewable technology increased the need for more accurate and comprehensive tools to evaluate the performance in banking sectors, because the efficiency of traditional tools used in evaluating banking performance are unable to face the challenges of modern methods. As Kuma (2015) argued "the traditional performance management appears to be inadequate in how to measure all-round performance to meet the banking needs of strategic development", also Jochem & Landgraf, (2010) stated: "Traditional performance measurement does not reflect performance in the new economy, in which non-financial measures appear more significant". This require banks' management to monitor and adapt to developments, to continuously improve their inputs and processes, and to achieve a competitive advantage and outperform peer banks. This makes bank's performance reflective of their ability to achieve results that align with established plans and objectives, utilizing the resources at their disposal optimally. Therefore the evaluation tool must be comprehensive for all activities and aspects of the bank and include a set of financial and non-financial measures and indicators. This is exactly what was introduced by Robert Kaplan and David Norton in early 1990s, called Balance Score Card (BSC) as a performance measurement framework that balances financial and non-financial metrics. This tool

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has own the attention of researchers and managers since it appear. Nowadays, the private and public sector organizations throughout the world exercise BSC as change and strategic management system. Improvement tool is growing among African organizations and in specific African countries for instance there seems to be a real need for Balance score card in; Egypt, South Africa, Kenya, Burkina Faso, Zimbabwe etc. (De Waal, 2007). This study tries to stand on the situation in the Sudan through identify the challenges of implementation the balanced score Card in banking sector. The Sudanese banking sector adopts Islamic banking in all its transactions, as it stated by Jamea & Fadalla (2025) "The Sudanese banking system consists of 37 banks adopt the Islamic banking system". Islamic banks originated in Egypt in the 1960s and spread to other countries like; Saudi Arabia, UAE, the Sudan, and Jordan (Roy, 1991). These banks operate without interest which distinguishing them from conventional banks (Nomran et al, 2018). Therefore, applying the BSC in Islamic banks can enhance efficiency in resource utilization, this consistent with Qushtom (2020), "it's possible that Islamic banks invest effective strategic planning tools enable them to use their resources in the best way". To the researcher, the studies on BSC have been extensive globally, but applications and research in developing or crisis affected countries like Sudan are scarce, hence this study contributed positively in felling the knowledge gap in the Sudan.

2. CONCEPTUAL FRAME WORK OF BALANCE SCORE CARD

Kaplan and Norton (1996, 2001) pioneered the BSC a multidimensional framework designed to integrate financial and non-financial performance metrics. The BSC was initially developed as a measurement tool and later incorporated into strategic management system that enhances communication and organizational alignment. In 1996 Kapan and Norton worked to align the BSC with the company's strategy by introducing for interdependent perspectives for translating strategic objectives into actionable target. This process included:

- A. Clarify vision and strategy.
- B. Communicate strategic objectives across department.
- C. Link strategy to operational planning and targets, and
- D. Facilitate continues feedback and learning.

By 2001 they expanded the BSC role through five core principles to embed strategy into organizational culture:

- Implementing the strategy into tangible actions.
- Aligning all business units with strategic objectives.
- Empowering employees to implement the strategy daily.
- Treating strategy as a dynamic and iterative process.
- Driving transformation through leadership.

Through these advancement the BSC has gone beyond its original purpose as a performance system and has become a strategic tool that transforms long-term goals into interconnection metrics that guide implementation and goals achievement.

Following the studies in this field, Woretaw and Ayalew (2021), emphasize that the BSC serves as a critical management tool for aligning organizational missions, goals, and strategies across business units and functional areas within a unified performance measurement framework. This framework categorizes metrics into four perspectives, each one evaluating a specific dimension of organizational success:

- Financial perspective: evaluates the organization's effectiveness in meeting shareholder expectations and generating economic value.
- Customer perspective: evaluates customers' perceptions of the company's products, services, and market position.
- Internal process perspective: measures the efficiency and effectiveness of core operational process critical to delivering value.
- Innovational & learning perspective: tracks the organization's capacity for growth, adaptation, and continuous improvement and development.

By integrating these perspectives the BSC provides a holistic view of performance, ensuring strategic objectives are measurable and actionable. (Woretaw & Ayalew, 2021)

Additionally, numerous studies have explored the implementation of BSC in various organizations. For example, a study by Ittner et al. (2003) found that BSC implementation was associated with improved financial performance in US companies. Other research has also examined the impact of BSC on organizational performance, a study by Crabtree and DeBusk (2008) found that BSC implementation improved organizational performance and employee engagement in a US hospital.

Despite its advantages, implementing BSC presents significant hurdles Woretaw & Ayalew (2021)

identified key barriers in Ethiopian public sector organizations including:

- Weak top- management commitment.
- Misconceptions about the BSC purpose, prioritizing measurement over strategic alignment.
- Premature cascading of objective.

Further studies highlight other challenges; Neely et al. (2007), emphasized the need for cultural transformation to support BSC integration, also, Bourne et al. (2000) noted the resource intensive nature of implementation requiring substantial time and organizational investment.

These findings collectively underscore the dual nature of the BSC, while its drives performance, its success depends on contextual adaptability strategic alignment.

3. RESEARCH METHODOLOGY

The researcher is likely to choose the descriptive research method because it helps to capture the current state of affairs, allowing the researcher to describe what exists and identify patterns or trends. In order to answer the research question, the selection of secondary data was based on relevance, accessibility, and the availability of systematically organized datasets suitable for the study. and primary data collect through questionnaire distributed to 10 branches for different banks working in Gadarif state located in Eastern Sudan, which were selected from about 35 branches for different banks working in the state, the choice was guided by experience and the availability of relevant, structured data, providing strong foundation for the study. On the other hand there are 10 employees were selected randomly from any bank. Accordingly, 100 questionnaires were distributed to 100 employees, 93 questionnaires returned and ready to analyze.

3.1. METHODS AND DATA ANALYSIS

To analyze the collected data the SPSS statistical package has been used. The researcher validated the result by examining evidence from the source to determine the accuracy of the findings. To ensure the validity of the questionnaire, content validity was established. This involved expert reviews and pre-testing to confirm that the items accurately measured the intended constructs. The statistical analysis of the study sample' answer was conducted the following methods:

A. Cronbach' alpha coefficient to test the validity and reliability of the questionnaire questions used in dada collection.

B. Frequencies and percentages to describe the study members and determine the percentage of their responses to the questionnaire statements.

C. Arithmetic mean ranking of the study member' responses to the questionnaire statements according to the degree of agreement.

The reliability of the questionnaire questions was tested using Cronbach's Alpha coefficient. The scale is considered good and appropriate if its value exceeds 60%. In this study the Cronbach's alpha coefficient for the questionnaire statements is (0.80), which is greater than (0.60). This indicate the questionnaire's high internal consistency ensure the reliability of the responses, enabling us to trust the data for achieving study objective and analyzing results.

The validity coefficient of the questionnaire items used to collect data was determined by calculating the square root of the reliability coefficient. In this study the degree of validity of the questionnaire is (0.89), which is a very large value, which means that the questionnaire is valid in measuring what it was designed.

The following table describes the appropriate weight to the importance of each questionnaire statement, the details are as below:

Table (1): Weight and weighted mean of the study scale

The scale	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Weight	1	2	3	4	5
Weighted mean	1 - 1.79	1.80 - 2.59	2.60 - 3.39	3.40 - 4.19	4.20 - 5

Source: Abdelfattah (2008), Introduction to descriptive and inferential statistic, using SPSS

The figures in table (1) demonstrate that the length of the period used is the result of dividing (5/4), i.e. (0.80). The length of the period was calculated on the basis that the numbers: 3, 2, 1 were separated by two spaces.

4. EMPIRICAL STUDY

This section examines the views and attitudes of the employees in the Sudanese' Islamic banks, regarding their opinions on the challenges of implementing the balance score cards in the Islamic banking in the Sudan, the following table suggested 18 challenges to be considered in the implementation of BSC in the Sudanese Islamic banks

[Table (2): Challenges of implementing BSC in the Sudanese Islamic banks

Challenges	Mean	SD	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
			F	%	F	%	F	%	F	%	F	%
			Financial metrics are sufficient to evaluate performance.	4.03	0.90	27	29	54	58.1	0	0	12
Difficulty in formulating the bank's strategic objectives.	3.41	1.27	24	25.8	30	32.3	0	0	39	41.9	0	0
Difficulty in setting metrics for the bank's strategic objectives	3.77	1.16	30	32.3	36	38.7	3	3.2	24	25.8	0	0
Difficulty in allocating financial resources to monitor non-financial objectives.	3.83	1.05	30	32.3	33	35.5	15	16.1	15	16.1	0	0
Classification of operational metrics for qualitative data may reduce bank profits.	3.96	1.06	33	35.5	42	45.2	0	0	18	19.4	0	0
Overemphasis on financial objectives marginalizes non-financial objectives.	3.77	1.16	30	32.3	36	38.7	3	3.2	24	25.8	0	0
The difficulty of continuously evaluating the performance of non-financial indicators hinders the implementation of the BSC.	4.19	0.96	42	45.5	39	41.9	0	0	12	12.9	0	0
Failure to link evaluation to rewards and motivation renders the BSC ineffective as a management tool.	4.00	0.67	18	19.4	60	64.5	12	12.9	3	3.2	0	0
Ineffective binding between the dimensions limit the cards effectiveness in directing organizational behavior toward achieving the strategy.	4.51	0.80	63	67.7	18	19.4	9	9.7	3	3.2	0	0
Excessive number of indicators lead to difficulty in analysis	4.41	0.61	45	48.4	42	45.2	6	6.5	0	0	0	0
Lack of leadership support hinders the implementation of BSC.	4.12	0.79	36	38.7	33	35.5	24	25.8	0	0	0	0
Weak information systems lead to poor formulation of metrics' indicators	4.41	0.83	54	58.1	30	32.3	3	3.2	6	6.5	0	0
The novelty of the BSC concept hinders its implementation.	3.80	0.93	24	25.8	36	38.7	24	25.8	9	9.7	0	0
BSC implementation requires costly process engineering procedures.	3.64	1.12	24	25.8	36	38.7	9	9.7	24	25.8	0	0
Employee experience with financial metrics does not motivate the measurement of non-financial objectives.	3.93	1.08	24	25.8	57	61.3	3	3.2	9	9.7	0	0
The implementation of BSC requires the exhaustion of financial resources.	4.06	1.11	42	45.2	30	32.3	9	9.7	9	9.7	3	3.2
Difficulty in determining dimension weights hinders BSC implementation.	3.90	0.73	15	16.1	60	64.5	12	12.9	6	6.5	0	0
Employee resistance to change makes it difficult to implement the BSC.	4.29	0.81	45	48.4	33	35.5	12	12.9	3	3.2	0	0

Source: Prepared by the researcher (2025)

Table (2) and the descriptive analysis reveals strong agreement among respondents regarding all challenges of implementing BSC in Islamic banks in the Sudan. This is clear from the Mean values (ranked between 3.41- 4.51) and the standard deviation (ranked between 0.61 - 1.27), also from the agreement percentage frequencies (78.3%) and the general trend of the average answers was to agree with the questionnaire statements, with an arithmetic mean of 3.76 and a standard deviation of 0.443.

The highest Means (4.51), (4.41), (4.41) and (4.29) are given to the challenges: Ineffective binding between the dimensions limits the cards' effectiveness in directing organizational behavior toward achieving the strategy, Excessive number of indicators leads to difficulty in analysis, Weak information systems lead to poor formulation of metrics' indicators, and Employee resistance to change makes it difficult to implement the BSC, respectively. The lower Means (3.41) and (3.64), comparing to other challenges was given to the challenges difficulty in formulating the bank's strategic objectives, and the implementation of the BSC is linked to the process engineering procedures that require high costs, because some respondents give disagree answer to these variables comparing to other variables. Other variables were also accepted by the respondents.

The consequences of highest Means are very important because without effective binding between the dimensions, the organization may struggle to achieve its strategic goals, also resources may be misallocated as different dimensions may prioritize competing objectives. On the other hand, too many indicators can lead to analysis paralysis and making it challenging to identify key trends, and prioritize actions, which can lead to inefficient use of resources and poor decision making. Also, weak information systems can significantly impact the development of effective metrics indicators in several ways such as; in complete or inconsistent data lead to poorly formulation metrics, which hinder the development of meaningful metrics, weak information systems may not provide the necessary tools or capabilities for effective data analysis. Moreover, employee's resistance to change can hinder the implementing of BSC, because of familiarity with current performance measurement system making it hard to adopt to new approaches in addition to the concerns about the extra effort required to implement and maintain the BSC.

5. CONCLUSION AND RECOMMENDATIONS

The study reveals a significant consensus among respondents that all the challenges listed have considerable impact on the absence of implementing of Balance Scorecard (BSC) in Sudanese Islamic Banks. This consensus suggests that the respondents who are likely stakeholders in the banking industry, share common understanding of the obstacles hindering the adoption of BSC in these banks. This finding have several implications for Sudanese Islamic Banks, regulatory bodies, and policymakers. The banks can prioritize the challenges based on their impact and develop strategies to address them, this could involve; develop a clear strategy map that illustrates the relationships between dimensions, use metrics that capture the interdependencies between dimensions, regularly review and adjust the BSC framework to ensure effective binding between dimensions, also, limits the number of indicators to the most critical ones, regularly review and refine indicators to ensure they remain relevant. Moreover, Islamic bank need to implement modern reliable and scalable information systems, establish data governance policies, procedures and standards. Additionally, to overcome employees' resistance, Islamic banks need; a clear communication about BSC purpose, benefits and implementation process, provide comprehensive training and ongoing support to build confidence, engage employees in the implementation process, demonstrate strong leadership support and commitment to the BSC initiative, and proactively address employees concerns, providing reassurance and solutions.

On the other hand, regulatory bodies can provide guidance and support to Sudanese Islamic banks to help them overcome the challenges and implement BSC effectively. This involve; define clear objectives that align with their mission, vision, and overall business strategy, this include identifying key performance indicators that comply with Shariah principles and regulatory requirements. Also, regulatory bodies can providing training, resources, and incentives to encourage adoption in this sector and other economic sectors in the country. Investigating the effects of BSC implantation on Sudanese Islamic banks' performance could be a valuable area of future research.

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