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Dear distinguished guests, esteemed colleagues, participants, and friends.

It is my great pleasure to welcome you all to the second edition of the International Scientific Conference “Bridge 2023” and to introduce the book of abstracts that encapsulates the essence of this prestigious event. As the Rector of the University “Ukshin Hoti” Prizren, I am honored to host such a significant gathering of scholars, researchers, and professionals in our esteemed institution.

The Bridge Conference serves as a platform where innovative ideas converge, where interdisciplinary dialogues flourish, and where new connections are forged. This conference is not just about presenting research findings; it is about building bridges between different fields of knowledge, fostering collaborations, and contributing to the advancement of science and society as a whole.

The theme of this year's conference, "The Future of Science: Challenges and Opportunities", underscores the importance of collaborative efforts in addressing the complex challenges facing our world today. Whether we are exploring advancements in technology, sustainable development practices, or societal transformations, it is through collective knowledge and shared expertise that we can pave the way for a better tomorrow.

I extend my heartfelt gratitude to all the participants who have contributed their research, insights, and expertise to this book of abstracts. Your dedication and hard work are instrumental in driving progress and innovation in our respective fields. I would also like to express my appreciation to the organizing committee, sponsors, and partners who have worked tirelessly to make this conference a reality. Your commitment to academic excellence and knowledge dissemination is commendable.

As you delve into the pages of this book of abstracts, I encourage you to engage deeply with the diverse range of topics and perspectives presented. Let us seize this opportunity not only to learn from each other but also to inspire and be inspired by the wealth of ideas shared within these pages.

I wish you all a fruitful and enriching experience during the Bridge Conference and hope that the connections you establish and the insights you gain will serve as stepping stones towards a more sustainable and inclusive future.

Thank you, and may this conference be a resounding success!

Assoc. Prof. Dr. Mentor Alishani,

Rector of University “Ukshin Hoti” Prizren



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TRANSLATION OF LAW TERMS IN ENGLISH, MACEDONIAN AND ALBANIAN

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Abstract

This paper aims at explaining some of hands-on experience challenges I have been through when translating legal documents. The paper elucidates the complexity of law language translation across different culture, here being English Albanian. Different law language peculiarities are looked at closely with a special focus on metaphors used in law. Having in mind the challenge the translators come to when translating law language, an attempt has been done to provide translators with some techniques used in translations of metaphors. This paper has been portioned in several sections, initially focusing on translation in law pointing out some peculiarities of legal documents translation and then a focus has been awarded to legal language features. Besides legal translation and legal language, I considered a little more some other important factors that are frequently encountered in legal texts and legal language like legalese and plain language, metaphor, culture, register and ambiguity.

The lasts sections have focused on Terminology standardization and on a Three-Language Comparative Analysis and the last section has delineated the methodology used, put it differently how and where have data been collected.

Key words: complexity, legal translation, plain language, culture, ambiguity, register.

1. Introduction

This paper aims at explaining some of hands-on experience challenges I have been faced with translating legal documents. I am conscious that this paper does not suffice to explain the downright challenging complexity of legal translation, but at least I tried to ponder upon some of the issues that I have found difficult to capture at first. This paper has been portioned in several sections, initially focusing on translation in law pointing out some peculiarities of legal documents translation and then a focus has been awarded to legal language features. Besides legal translation and legal language, I considered a little more some other important factors that are frequently encountered in legal texts and legal language like legalese and plain language, metaphor, culture, register and ambiguity.

The last sections have focused on Terminology standardization and on a Three-Language Comparative Analysis and the last section has delineated the methodology used, put it differently how and where have data been collected.

2. Translation and Law

Legal translation is a type of specialist or technical translation, a translational activity that involves language of law and legal process. Legal translation produces not only linguistic but also legal impact and consequences as it is cross-cultural and inter-lingual communicative act. Legal translation may be classified into:

1. Translation for normative purpose - It produces equally authentic legal texts in bilingual and multilingual jurisdictions of domestic laws, international legal instruments and other laws. They may be drafted/translated in both or all languages. In either case, the different language texts have equal legal force and one is not superior to another irrespective of their original status.
2. Legal translation for informative purpose – It is used for descriptive functions. This contains translation of statutes, court decisions, scholarly works and other types of legal documents if the translation is intended to provide information to the target readers. These translations are different from the one of the first category where the translated law is law-binding. For instance, a statute written in Albanian translated into English for informative purpose for the benefit of foreign lawyers or other English readers is not legally enforceable

Translation of legal language is often more difficult than other types of technical translation because of the system-bound terminology, each country has its own legal terminology (based on the particular legal system of that country), which is quite different even from the legal terminology of another country with the same language like Albania, Kosovo and the Albanian language in Macedonia. There are different terms for the same law or legal issue, specially the Albanian language in North Macedonia, because of the law system of Macedonia. Law is a product of a particular society or culture and each society builds its legislation round its concepts. Having different law systems, it is very difficult to translate *после конечност на одлуката* in Albanian and English as there is no equivalent in Albanian. The closest translation of this term and notion would be, according to dictionaries, ...*vendimit përfundimtar/ultimate decision, or when we translate income – të ardhura (gross earnings) and revenue - të hyra (net earnings). Terms such these are: уверние, потврда, сертификат...*

3. Challenges in Translating Legal Texts

Law language is considered a separate language due to its characteristics. What makes law language translation more difficult is the different legal cultures and legal systems. In every particular law system, a language has been developed to meet the needs of that particular law system, resulting from a particular history and culture. In the following there are some of the most important features that a law translator should keep in mind.

3.1 Language Peculiarities

It is thought that law language is the most conservative and the oldest ESP language due to its conservatism. Mattila (2006: 98) hypothesizes that legal language is “*perhaps the oldest of all languages for special purposes*”. Law language is specific for each country or culture as it has developed historically and traditionally. Here the focus is going to be placed on style of law language. According to Maley 1994: 12-13; Trosborg 1995: 32; Williams 2005: 23-25, we can point out that there is a distinction between *language of law* and *legal language*. Legal language encompasses reference to communication of legal spheres such as courtroom discourse, law reports, academic texts on legal matters, communication between lawyer and client or between lawyers, as well as legally binding texts, on the other hand language of law refers to prescriptive texts such as laws, treaties, regulations, contracts or wills.

The style of law language has sustained some change during the last decade, drafting style manual have been updated to modernize English language of law. We should be mindful to the fact that Language of law tends to be more “nouny” than “verby”. According to Williams 2005: 97, there is an average of one finite verbal construction for every 20.2 words in legislative texts in English. In the following I have given a language construction taken out of one of my law documents:

...top quality client-oriented law services... (nouny)

... worker compensation claim... (nouny)

Nominalisation is also used in their fields of communication to make discourse more academic, more formal. Nominalisation (passive voice) is also used to attain impersonality when writing a statement, to secure all-inclusiveness, precision and compactness, in other words to prevent “freewill interpretation”.

Another feature that discerns the language of law is the use of auxiliary verbs. The modal verb *Shall* is used frequently in law texts to convey *obligation and authorisation* in the third and second person singular and plural (text usually are written in the third person singular, but still there are some exceptions). Due to its ubiquity of the modal verb *shall*, it has become an ambiguous word posing problems to the ELT students as such prescriptive (no obligations) uses of it are rarely encountered in everyday speech, which consequently hardens its acquisition. There are other features that make legislative language more marked or “different” such as:

- Use of foreign words (*either translated or adopted*),
- Synonyms - *assign – transfer; Breach – violation; Clause – provision – paragraph – article; Contract – agreement*,
- Archaic words - *to evade repetition of words or names (Hereafter (now on), Heretofore (before now))*,
- Circumlocution - an essential part of legal language which simply means “talking around”. Though their appropriate modern equivalents, drafters still cling to these “talking around expressions” to retain legalism:

Circumlocuted Expression	Modern Equivalents
Adequate number of	enough
At the time when	when

At that particular time	then
At a later date	later
As a consequence of	because
During such time as	while
For the duration of	during
In the event that	if
In close proximity to	near
Similar to	like
The reason being that	because

- Modifiers *such as the same, the said, the aforesaid, the aforementioned*- to determine nouns, but not replace them.
- Reciprocal words like *addresser and addressee, lessor and lessee*.
- Phrasal verbs like *serve upon, lay off, demo (demobilisation) call off...*
- Ordinary words with special meanings like *notice, decision...*
- Sentence length is one of the most discernible features of law language.
- Nominalisation - deverbal nouns are often used in legal documents such as *give consideration (to consider) be in opposition to (to oppose)*.
- Impersonal style - The way law employees turn language into impersonal or depersonalized style is by use of **Passive Voice and Pronouns**, aiming at the attainment of impartiality, free of human influence. Objectivity is also being attempted to be achieved by applying the omission of personal pronouns (the first and second person singular and plural), whereas third person singular mainly used when the provision is applicable for every citizen or person: *everybody, everyone, every person / no one, nobody* in prohibitions.
- Capitalization- Capital letters are frequently used in legal language to make important part more “conspicuous” like *imitation of liability and disclaimers...*
- Doublets and triplets- Historically, in Law different languages have been used by lawyers (Latin, French and English) and as a result we have the emergence of doublets and triplets like: *will and testament, fit and proper*.

3.2 Legalese and Plain Language

Though we tried to delineate law language characteristics above, still it is worth elaborating those key differences between plain language and the language known as *legalese*. It is known that there is a certain amount of words/vocabulary (2000 words) that is used in every field of language or in every jargon. Whatever field we delve in, this amount of words is recurring most of the time. In law language, *one way how these words are used is by ascribing them a different meaning from that of ordinary one*. We all know that the word *peuehue* (*peuehue* in Macedonian, *solution* in English and *zgjidhje* in Albanian) in the everyday language means to find a solution to the problem, to solve it, but what happens with these common words in law language is that they take another meaning, the legal one. So, when *peuehue* is used in law language or administrative connotation, besides *solution to a problem*, it acquires another meaning which is *Peuehue/ Decision/Aktvendikm* and it is the duty of the translator when to use which one.

Another important feature that makes legal language different from other fields is that law language does not have a universal language (it is *sui generis (unique)*), like other fields do,

example mathematics, chemistry, mechanics... because different legal system have developed different law languages to meet the demands of the system. Legalese finds its use continuously as it saves time as lawyers, attorneys, councillors; paralegals... know the complexity of the law terms they use. Using legalese, legal language or terms, allows law people precision as lawyers, judges, attorneys are supposed to know the specific and precise meaning of each of these legal terms and all things that go with them. Another reason why law people use legalese is that it allows for consistency, less probability to misunderstand each other. The reason why legalese can seem so unfamiliar to a layperson is that a phrase or a word acquires a very specific meaning in law that is completely different when used outside law. Example, the words *discovery* and *damages*, acquire a completely different meaning when used as law terms. Some terms that are used with specific meaning in law from that of everyday language use are: Affidavit, Arbitration, Bail, Caveat emptor, Discovery, Damages, Force majeure, Hearsay, Intestate, Prima facie, Tenancy-in-common, Joint tenancy.

3.3 Metaphor

A way law makes use of the language in its field is through metaphor. Besides in everyday life, metaphors are used in legalese too *in order to allow us to understand an abstract and/or unknown concept in terms of another that is concrete and/or familiar* (Richard, 2014)

Our discussion needs to focus upon metaphor and conceptual metaphor as these concepts are at the heart of the law. So, by metaphor we understand a figure of speech where an expression is used to refer to something that it does not denote literally to suggest a similarity. By conceptual metaphor we understand one idea in terms of another. Metaphor is not a matter of language or words but a matter of thought, and our conceptual system is metaphorical in nature. “The essence of metaphor is understanding and experiencing one kind of thing in terms of another” (Lakoff and Johnson, 1980: 5). Since metaphors are not a matter of language, but of thought and reason.

Metaphors represent a cognitive device which consists in giving access to an unknown domain by analogy. A conceptual domain is any coherent organization of experience” (Kovecses, 2002:4). The comparison between the two domains (source and target domain, by using specific words from the source domain) should rely on elements that both domains have in common (perceived similarities). In other words, these analogies/similarities are used to elucidate more abstract concepts in simpler, more concrete terms by comparison, like arrive at the truth, and reveal the truth... But when these metaphors are to be translated into another legal language, not necessarily they are metaphors. One example is to *take place* (*space metaphor*), meaning occurrence, but when it comes to finding its equivalent in Macedonian and Albanian...*се случува/се појавува* /*ndodh, paraqitet* (*surface metaphor*), not necessarily it is a metaphor of the same conceptual field in target language translation.

Metaphors, apart from being used in everyday language, are used in law and other fields of communication just to assist the communication among people.

3.4 Non-Equivalence

In legal translation, the complexity and difficulty of translating legal words or concepts can be attributed to two different languages and legal systems (Cao, 2007:23). The reasons for non-equivalence in legal translation may include systemic differences in law, cultural differences and linguistic differences. Legal language is a specialized language that is closely related to a country's legal system. That is to say, law and legal language are bound by system, which suggests that legal translation involves translation from one legal system into another (Cao, 2007:24). Another reason for non-equivalence is that of cultural differences. Law, expressed through legal language, embodies a specific culture. Translation of legal language is also characterized by its culture-specificity (Commercial driver's licence). Law languages differ from one another mainly due to the existence of different legal cultures and traditions, which as a consequence we have a different translation. A third challenge of non-equivalence is that of linguistic difference of legal language. An example of this is the expression “*null and void*”, meaning with no legal force. This expression, when translated into Albanian, is going to be “*nul dhe i paqenë*” and in Macedonian will be “*ништовен*”. Another case is the expression: *to make your house a home/ да ја направи/те вашата куќа дом*, but a problem occurs in Albanian language as we have only a word for *house/home* (*куќа/дом*). In Albanian, the word *shtëpi* refers to both *house/home*, so in the above case, translation of the expression would be impossible unless it is paraphrased. But, the same word, *shtëpi* contains or expresses the meanings of both words: Home sweet home – *Нема како дома* - *S'ka si shtëpia yte* - *Go home/shko në shtëpi/ Go to your house/ Shko në shtëpinë tënde....* or *I swear to god that....* The concept of god is different in different religions, though we have the equivalent of god in Albanian and Macedonian but they do not conceptualise the same referent.

3.5 Culture

As mentioned earlier, culture is considered another contributor to the non-equivalence in translation. Every law system is characterized by its culture-specificity. This cultural difference comes more into play when two culturally different law systems have to be translated for people with various cultural background. One of the most striking epistemological features of law is its lack of a common knowledge base or “universal operative referents (Pelage, 2000) Law systems have developed separately and are confined with national and linguistic boundaries. For the legal translator, this results in the problem of finding equivalents for culture-bound terms, particularly those related to concepts, procedures, institutions and personnel (Weston 1991, Harvey 2000)

Understanding texts requires a multi-disciplinary range of methods of analysis: linguistics, semiotics, social, historical, critical and cultural. Legal language depends on culture and legal culture is expressed by means of language. Legal culture pertains to customs, opinions, ways of acting and thinking depending on social forces. Despite the intention for precision and accuracy, legal discourse is oftentimes archaic, complex, and ambiguous. This complexity and ambiguity are affected by history, religion, ethics and culture of a particular country. In order the translator to understand this complexity and ambiguity, he needs to understand; besides the language, the social values, beliefs, social relationships and the social structure (Do you pay rent to your father for living in his house?) Whose house is it you live in? Mine (though it officially belongs to one's father)? How often do you do to church? *Nuk mund të afrohem me gruan* (cant be intimate)? all these due to the way we treat these issues in law in our culture.

3.6 Register

Legal profession has its own language which makes communication among legal employees more accurate and more concise. Though this “legalese” is very difficult to be understood by laypeople, still this jargon allows the members of a group to communicate quickly, clearly and efficiently. But, in every profession, jargons are used to create a mystery around the profession, a kind of differentiating the people who are inside from those that are outside the profession. This jargon is not and cannot be completely autonomous; in fact it is a subsystem of the language, a special sociolect that is different from the general standard language. Legal language or jargon uses the general language to express specific legal meaning. For example, to make a motion - expresses a general move, but in law it means to start a law suit. Due to system-bound terms differences, there are some terms that it is almost impossible to be translated like lawyer, barrister, solicitor, attorney which are translated as “*адвокат*” in Macedonian and “*avokat*” in Albanian. But there is a difference in the semantics of these terms and one should know the specific duties and activities of these professions to make a difference (Lazarevska). There are cases when we have an equivalent, but that equivalent does not necessarily represent the same concept or notion (farm/ahur (cowshed)).

3.7 Ambiguity

The best way to avoid different interpretations of your writing is to replace the ambiguous words with concrete language. For example, if a local district wants to ban heavy trucks from their highways, the legislation would be clearer if it specifically contained the words trucks over [x] tonnage rather than saying large vehicles. Though most of the special-communication aims at univocity, in legal language ambiguity is used purposefully to create uncertainties, sometimes as diplomatic tactic. In this respect, ambiguity should be retained in translation ((Posner 1988: 240-2, Jolicœur 2000). Any attempt to translate ambiguity leads to interpretation of the source language, for which the translator is not authorized to do as interpretation of law text does an official body (court, parliament...) Alimi, (Alimi, 2013) suggests that “ambiguous words should be avoided and substituted with another word which is tantamount and monosemic”. He rightfully provides that: “any time a translator faces a word that would seem or sound even a little ambiguous, with no hesitation or indolence, it is appropriate that he/she looks for and necessarily finds the adequate word for the concrete situation that eliminates possible and tiresome dilemma for the reader affiliated with different social environment” (2013, p. 21). **Personally I do not agree with the idea that the translator should replace the ambiguous word with one monosemic word because in law language polysemic words are used intentionally (most of the time), so the target text will not serve the aim of the source text, namely translator has not right to offer legal solution to legal ambiguity, it is the lawyer that should provide the polysemic word replacement if the lawyer considers it so. When possible, the translator should retain the ambiguous word in order to be as loyal as possible to the original text because that ambiguous word me be the main area of contention.** Though sometimes this is impossible as a polysemous words of a particular language may not be polysemous in the target language. While interpreting (translating) in a court session the Albanian claimant said: “*Vuaj nga ankthi*” the word “*ankth*” in Albanian is used for both *nightmare/кошмар* and *anxiety /анксиозност*. In translating

this ambiguous word, I could not keep to the ambiguity of the word due to linguistic and semantic reasons, I had to make up my mind which concept he was talking about.

4. Standardization of Terminology

In an attempt to help institutions standardize their law terminology, the Government of the Republic of North Macedonia established two language-oriented institutions: *Language Implementation Agency and Inspectorate for the Use of languages*, whose aim is to promote the use of languages and to unify the terminology used in institutions. The former institution's duty is to provide institutions with translation of legal document prior to their sending for publication to Official Gazette of the Republic of Macedonia, while the latter institution duty is to check and reinforce the use of languages in institutions in the Republic of North Macedonia.

The problem we face when translating legal document or laws into Albanian language in Macedonia is that we aim at standardising the terminology based on that used in Albania and Kosovo, but this makes things harder. Though this most of the time helps, there are times when this is impossible since the legal translation that is done in Macedonia is within the same law system, meaning it is being translated for the local population, for the citizens who use the services of these judicial institutions.

If the discipline of law shared a common system of reference like the discipline of science, medicine, and technology, legal translation would be much easier. When translating a manual for a mobile phone user, for example, the entire translator needs to know is how the device works. However, when a legal term is translated, the translator must consider carefully what meaning it denotes and what legal effect it causes in the source legal system in order to transfer the same meaning and legal effects into the target legal system. For example, let us consider the word 'marriage', which is used not only by lawyers but also by laypersons in ordinary, everyday language. In Poland, only two persons of the opposite sex can legally get married, whereas in Portugal two people of the same sex can also enter into a legal marriage. Marriage to a 13-year old girl is considered void in all European countries, while it is valid in South Sudan. Marrying a woman while already validly married to another is recognized as an offence (bigamy) in many countries, whereas, in others, especially those governed by Sharia (Muslim) law (e.g., Saudi Arabia) polygamist marriages are considered valid.

These examples illustrate how differently the concept of marriage can be understood in various legal systems. What one legal system recognizes as a valid marriage can, in another, be considered a criminal offence. Can we denote these various concepts with the same term 'marriage'? The above comparison, which is based merely on juxtaposition, not on comparative analysis, relies only on one criterion; that is, who can legally enter into marriage. Other criteria, like rights and obligations of spouses, matrimonial property regime, or divorce, should also be taken into consideration to determine the full meaning of the concept under a given legal system.

A legal translator should be able to recognize the differences between concepts in source and target cultures and to evaluate significance of the divergence or, in the words of Šarčević (2000, 236), the degree of equivalence, if any. A translator should identify whether the concepts form functional equivalents for each other or, conversely, whether they do not have comparable

counterparts in other legal systems” (Šarčević2000, 233). In order for translator to make a correct decision when choosing term in a target language to denote a concept of a source legal system, some comparison of source and target concepts, institutions and terms is required. Therefore, according to Bocquet (Bocquet 1994, 7; as cited by Šarčević2000, 237), the comparison of concepts and institutions is an obligatory step in the legal translation process.

There is an understanding among translators that translation is not about replacing one word with another, but rather that it is the meaning that is translated; thus, the translator must go beyond the language in order to provide adequate translation (Poon Wai-Yee 2005, 323). Two criteria apply when making this decision: (i) the purpose of the legal translation, and (ii) whether the translation occurs within one legal system or between two legal systems.

Translation requires comparison of both legal concepts and legal terminology. While this would in fact be the ideal situation, Obenaus (1995, 253) notes that it is unrealistic to expect a translator to be an expert in the field of law. Also, the interconnections within each legal system as well as the legal culture in general influence the meaning and practical impact of legal concepts (cf. in detail Kischel 2005: 17ff.). To transfer the legal culture of a particular law necessitates a clear understanding of the concept of cultural transfer in translation in the first place.

5. A Three-Language Comparative Analysis of Terminology

As has been said above, when translating a legal document, besides knowing the languages you are translating to and from, a translator should also bear in mind that he/she should be acquainted with /familiar with the cultural settings the that language pair he/she is working with. Another issue to bear in mind when translating in general, especially when dealing with law terminology, is that it does not suffice to find an equivalent as sometimes the particular equivalent does not contain the conceptual element that is to be found in the source language text. Another important feature that additionally complicates the transfer from a language into another is context, the same words in different contexts can be translated with different equivalents. In the following I have summarized a table of terms that I have had difficulty to translate them into Albanian and Macedonian and English, taken from the software TM, Macedonian-Albanian TM.

Table 1 Terms with different equivalents in different languages

English	Albanian	Macedonian
subscription	abonim/parapagim	претплата
finality	pakthyeshmëri, parrevokueshmëri (finalizim)	конечност (неотповиклив)
patience, maturity	durim, maturi	трпеливост
validity	vlefshmëri	валидност
prescribe	përshkruaj	препишуваат
prescription	parashkrim	старо дело

order,	porosi	порачката/порачка
order	urdhër	наредба
Electronic Communications Agency	Agjencia e Komunikimeve Eleketronike	Агенција за електронски комуникации
statement	deklarim	изјава
declaration	deklaratë	декларација
invalid	pengesë, vështirësi, invaliditet	попреченост, неважечки
closer family member	anëtar i familjes më të ngushtë	член на потесно семејство
law article	neniligjit	член 9 од закон за...

The term *subscription* is conceptually not valid for Albanian languages. In Albania, it is translated as subscription-*abonim*, subscribe-*abonohu / pajtohu*. While in Kosovo, the same term is translated with a meaning closest to the Macedonian version, *subscription-parapagesë (преплата)*, as this encompasses the concept, we have for getting prepaid service. Order of Albanian Dentist, this title is equivalent to Macedonian Dental Chamber here in Macedonia. But when we translate it into Albanian, we do keep fidelity to the SL, because it is translation within one system, so we do not translate it as Order of Albanian Dentist but as Dental Chamber.... In economy, its meaning changes. In law, it has acquired another meaning: law and order – *sundim i i së drejtës – владење на правото*. In Albania, Electronic and Postal Communications Authority- as we mentioned above, though we have an equivalent, still it does not reflect the same concept: in Albanian, it involves postal services too, while in Macedonia, it does not. The word *invalid* has several meanings, the first meaning is disabled and the second meaning is expired. When translated the former meaning in Albanian, we may use the word as it is, *invalid* or *me aftësi të kufizuara*, but when we translate the second meaning into Albanian, in no way we can use the word *invalid*, it has to be used as *i pavleshshëm* (expiry of a document). The word member and article in English are translated with the same word in Macedonian language: *member- член and law article- член на закон*. But this is not the case with Albanian language: *member- anëtar and article-nen*. Concerning the word declaration and statement, in Macedonian *изјава* and *декларација*, while in Albanian we have them as *statement-deklaratë (изјава)* and *declaration-deklaratë (декларација)*.

Another important translation aspect I want to point out is that whenever there is a software in use for translation, the above-mentioned differences will not be given there. This is the reason why translators, besides knowing the language, they have to know the law system and a country's culture.

6. The Methodology

The selection of these words has been taken from 700 documents that I have translated at the Inspectorate for the Use of Languages and some other institutions. The language pair that is used in Republic of North Macedonia is Macedonian-Albanian-English. There are a lot of words that a translator may find not easy to make a choice for, but here have been listed just a few of them.

In the table below, the frequency of use has been shown based on the documents that have so far been translated. These 700 documents that I have translated in English-Albanian and Macedonian have served as a corpus on which I have grounded my frequency calculations. To more specific, these documents have been translated via software Trados and Wordfast. Every translation that is done through this software is stored there in their TM (Translation Memories). It is from these memories that I have collected the data regarding the frequency of term use. The Times of Use at the end of the table has been done based on Macedonian language as this language is main source language most of the time. So, I have downloaded the TM-s from this software and I have seen how many times each term has occurred in these 700 documents translated so far for the needs of Inspectorate for the Use of Languages. This analysis has been done from the Macedonian-Albanian Translation Memory. Of paramount importance is that the number of TM terms changes every day with new documents translated, so the last time the TM was retrieved was on 01.02.2022.

Table 2 Frequency of use of words

English	Albanian	Macedonian	Times of use
statement	deklarim	изјава (5
declaration	deklaratë	декларација	6
maturity	durim, maturi	зрелост,	7
prescribe	përshkruaj	препишуваат	10
validity	vlefshmëri	валидност	15
order,	porosi	порачката/порачка	15
subscription	abonim	претплата	24
finality	pakthyeshmëri, parrevokueshmëri (finalizim)	конечност (неотповиклив)	25
invalid	pengesë, vështirësi, invaliditet	попреченост, неважечки	25
prescription	parashkrim	стародело	35
order	urdhër	наредба	55
Electronic Communications Agency	Agjencia e Komunikimeve Elektronike	Агенција за електронски комуникации	60
closer family member	anëtar (i familjesmëtë ngushtë)	член (на потесно семејство)	63
law article	neniligjit	член 9 од закон за...	596

The words ranked above are based on the criteria of their legal meaning. As it can be seen, the most used word in legal documents is article, probably due to the fact that whenever a decision is written, it must refer the law articles it is based on. The least frequent one is the word statement and declaration, which is due to its economical use.

7. Conclusion

As can be seen from above, translation, especially law translation, is an activity that requires not just linguistic knowledge. What poses challenges for the translators, besides those linguistic ones, there other issues or challenges that translators have to be conscious of in order to carry out their task properly.

Factors that hamper law translation are of various fields, but the most frequent and the most important are that of culture, metaphors, ambiguity, false-friends, register and the law language peculiarities.

The last thing that makes law translation specific is system-bound terms, which means every law system is unique and is the duty of the translator to overcome these differences so that the reader understand what he is suppose to do.

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Paper

The transition of thought in the post-dogmatic era

Abstract

The aim of the research is the modest contribution to the solution of the crisis of thought/education in the post-totalitarian society. The movement of thought, language, society and history are conceived as transitive movements.

Integration is understood, first of all, intellectual realization as a mental transition. It is done when thinking and values are in the Euro-Western standard. The alternative is the construction of critical thinking through the integration of religious, scientific and philosophical truths in the process of civic education.

The speed and transformative advantages of gen AI precede the construction of integral critical thinking, rationalism and logical pragmatism, rather than ideological dogma.

The mission of postmodern thought focuses on the construction of postmodern epistemology dominated by Western rationalism and instrumentalism.

The study method is hybrid: quantitative, qualitative, and analytical and synthetic. The study method is hybrid: quantitative, qualitative, analytical and synthetic.

Key terms: integration, post ideological, education, rationality, religion, values.

Introduction

The aim of the research is the modest contribution to the philosophy of thought and education in the post modern era and finding alternatives for formation and education in the transitional period from the totalitarian society to the open society of Euro-western values.

The term "post-dogmatic era" means the period of time that begins with the fall of the Berlin Wall (1990) and continues to this day.

The collapse of the communist system was an event of great dimensions that shook the whole society and resembled a natural disaster unforeseen by the human mind.

It was followed by the great shock of the mind and the impossibility to find the necessary orientation in the construction of the new society, in the realization of freedom and well-being through the state of law and modern democracy.

The new perspective is made possible through the balance of human being with the qualitative, objective, integrative global changes that reached their peak after the collapse of totalitarian socialism.

In the field of education, the biggest challenge is the transition from ideological education to reflective and critical education. It can be faced by understanding the movement of thought as transitive, as moving in a straight line and step by step.

The modern thought went through a long and deep transition during the European Renaissance in the period from c. XIV to c. XVIII. Systematization of changes and transformations, of thought: rationalism + empiricism + skepticism = R. Descartes + F. Bacon + D. Humme, configured two systems of thinking: Western critical philosophical thought and Eastern ideological political thought.

At the end of the century XVIII, I. Kant introduced modern philosophical thought to the path of critical thought, finalizing the critical mental revolution, which had begun with Ockham's razor (c. XIV) synthesized in the expression: "the simplest explanation is usually the best". (Ball, Philip 2016).

However, the new historical phase was neither followed nor preceded by any progress in the construction of the model of society preceded by rationality, the Kantian imperative (morality and law) and the differentiation between knowledge and wisdom to be realized equally alternately with the integration of fields of knowledge, morality, religion and politics.

The philosophers of the West, on the one hand, faced the demand for new progress in the thought of Western civilization.

On the other hand, they had to face the ideological struggle between the capitalist system and the state socialist system. In the former socialist countries, with Eastern Europe and the USSR as the epicenter, ideology became dominant and philosophy was annihilated.

In the west, during the 1930s of c. XX, the crisis of European man deepened further. Meanwhile, in the countries of the East, the crisis appeared as a moral dogma "the young revolutionary man". The concept "new man" was borrowed from the religious sermons of the 16th century in the countries of the East: China and India.

The differentiation between Western and Eastern systems of thought reached its peak during the Cold War (1947-1990). This period has been called the "age of ideologies" and the bloodiest wars of modern times. The struggle between the two systems was the substrate of the war.

Peace as the oldest ontological value of society was violently moved from the field of thought culture to the field of ideology and politics.

Postmodernism is a way of thinking that is characterized by skepticism about narrative discourse, about the extreme certainty of modernism in the rational and logical sense, and skepticism about the role of ideology in maintaining political power.

This philosophy is characterized by self-reference, epistemological relativism, moral relativism, pluralism, irony, eclecticism.

Philosophers consider knowledge and value systems conditioned by society and their construction as economic, political, historical and cultural elite discourses.

Postmodernism relies on Kantian critical theory, especially the key terms, universalist ideas of objective reality, morality, truth, human nature, reason, language, and social progress.

The unimaginable speed and quality of technological changes in the field of information continues to precede the pace of building critical thinking and rationalism and logical pragmatism instead of ideology and dogma.

The mission of postmodern thought focuses on the construction of postmodern epistemology dominated by Western rationalism and instrumentalism. He refers to American scholars, who from the end of the c. XIX changed the rules of the game for science, literature and the arts (Lyotard 1984: p. xxiii).

Meanwhile, the post-communist transition (1990-2023) continues to deepen the crisis of critical thinking due to the Western model itself.

First, post modernism and the philosophy of rationalism and logical pragmatism is very skeptical towards reforming education and the school system.

Secondly, the countries of Eastern Europe are in the post-ideology phase and under the pressure of the cultural shock of the communist collapse.

Under the inertia of the shock, the intellectual, mental and spiritual transition of the first generation of post-communist society continues to be slow and not visionary for the future, compared to Western standards.

Thirdly, the western and eastern education models are under the pressure of social media and giant companies of free market production of goods and suffer the gap in the construction of values during the formation, education and mastery of the new generation.

The fourth and no less important cause is corruption and organized crime, which left a direct relationship with the obstacles to reforming the justice system.

1. Transitive movement of thought

Thought is born and built through language, which articulates it by communicating to others and at the same time to oneself. The speech process is the movement of thought that describes a continuous and uninterrupted line. In school, the movement of thought and language is developed through learning situations, and as communication between students, teachers and virtual intelligence tools and electronic tools.

"The art of thinking includes the process of setting in motion the faculties and models of reasoning, making deductions in order to make the right decisions on which the whole activity is built" (P. Vogu, 2010).

In the context of the thought process, the terms "being", "thought" and "transition" are linked: or the transitive movement or the shock of thinking.

The logical connection of these key terms is presented in the following image:

Field of knowledge = Philosophy of Thought + Transitology as a philosophical interdisciplinary
Respecting this dialectical objective connection is one of the basic premises to find the right methods of development (construction) of thought. So the question has been answered: "How can a person construct thought?"

Communication between language and thinking is carried out according to logical laws. When we say that thought reflects reality, we mean the reflection through the dialectical logic of objective things. This philosophical journey has avoided starting from the ideological premise, which has the substance of the question "What should man think?" The premise of the new system of thought is: how to think?

2. Anti-communism ideology and the transitional cultures

The term "transitional culture" or the hybrid culture, means new cultures created not as a result of inheritance, but as a result of rapid changes and the creation of an environment. This is a normal

process because the unfamiliar environment can generate a variety of new and temporary reactions, behaviors, attitudes and feelings.

With the fall of the communist system, the anti-communist spirit, accumulated for many years and turned into class hatred, exploded.

But in Albania there were no violent explosions and bloodshed. After the release from the sentences, the former political prisoners did not show revenge tendencies.

The former communist party (PPSh) distanced itself and departed from Marxist-Leninist ideology, from the top Politic Byro, (leadership) as well as the cult of the dictator and began the path of European social democratic reforms. The new polity influenced to the equilibria of society towards democracy and the rule of law.

The first political opposition party was created by students, but very soon its leadership politicized by the political action into extreme and made anti-communism the leading ideology.

As a result, with the slogan "uproot the communism" the entire material base built over 50 years was destroyed. This policy was named as "shock therapy" of society. The lack of a justice system was followed by corruption and organized crime.

2. A. Egoism and vulgar hedonism in the post-totalitarian transition

The first perception of the post-communist future was materialistic, vulgar economics. He had as a substrate the thirst for material conditions that improved the living of the individual, who would now live in "Albania like all of Europe". This was also the slogan of the student movement.

The perception was a violent reaction against the principle of communist ideological morality: "One for all", it was a violent departure from the collective organization of society.

In the political sense, the perception was the liberation of the individual and his liberation from the violence of the totalitarian system. It appeared as individual selfishness to provide everything that was missing, it was an order to escape from poverty and get rich as soon as possible. It was the justification of every action and behavior focused only on personal gain.

The latter justified every idea, conviction, belief and thought. The thirst for enrichment becomes a normal state for the entire society in transition: from an extremely poor society to a society where wealth and human dignity are identified as universal values.

Poverty in the totalitarian socialist system reached its peak. Albanians lacked everything. Daily food, bread and water were missing. They were on the verge of general starvation. Everyday clothes, even intimate ones, were missing. Singles could not have a family celebration (wedding). The man was "afraid to die", because the family did not allow a basic rite of mourning and burial. The poorest stratum were the youth and children. Nor could comparison be made with peers in Western capitalist countries.

The boy or girl who "followed bourgeois fashion" was punished by opinion and by the laws of the totalitarian state. To follow fashion means to listen to foreign music, especially Italian music, to style your hair in a messy (Chinese style), or to wear long hair, to wear tight pants, short [mini] dresses, or very long dresses.

Growing a beard was a pretext for severe punishment and you could end up in prison, convicted of agitation and propaganda.

The transition was accompanied by an all-round spiritual explosion in the field of culture, behavior, external appearance as well as the way of eating. The singles began to eat more and better. Meat was the most lacking food until then and much in demand during the years of

transition. Restaurants and places were opened everywhere that cooked meat non-stop and people ate and drank alcohol to quench their thirst for many years.

The new way of life was revenge against the system that had sown and cultivated poverty and hunger. Many young men and women changed their appearance, became deformed by increasing their body weight. Street dog kennels, which had been missing, were added to the streets of Albanian villages and cities. Now, they had plenty of food, because food waste was also plentiful and everywhere. Massive pollution of the environment by garbage began. National and secondary roads, city and suburban areas were filled with paper and plastic bags, the main packaging of any food. The dream of a car was the dream of Albanian youth. Albanian emigrants, right before leaving for employment in Western Europe, began to buy flat cars.

Albanian development during the 30 years of transition moved according to paradoxes: wages and living standards are very low (lower than in any other Balkan countries) and most young people use luxury cars. Most of the Albanians were homeless because they were poor and started building houses and villas with high construction and maintenance costs! It is understood that the phenomenon is a product of traffic and many illegal actions that accompanied the transition.

Social and political isolation had successfully cultivated selfishness and self-centeredness. For this reason, moral egoism was cultivated, which reached the proportions of primitive nationalism and even idiotic racism. Through official propaganda, the Albanian was valued by the official policy as a special species. He could not even be like the bourgeois and revisionist neighbors!

"When the Albanian speaks, even a stone catches fire". The popular proverb was quoted by the dictator as an argument to intimidate his enemies at home and abroad.

In the centuries-old past, ascetic philosophy was systematically cultivated in the Albanian mind. The Albanian individual has been subjected to the alternative of living poor, but honest and proud. The individual was before the value of preserving theoretical principles and not before pragmatic and utilitarian actions.

The Albanian socialist system combined Spartan education with moral sacrifice and political heroism. Propaganda misused patriotism by uniting nationalism.

Hedonism can turn from a strong and temporary temptation into a destructive and irreparable factor. Temporary happiness is too dangerous for a very close future. The future and the present have negligible temporal and spatial distance intervals. The individual must be prepared to be of service to others. He can do nothing alone. The time of bourgeois individualism of the past is over. After the fall of the totalitarian system, this education is not only devalued, but a dangerous alternative for the life of the individual and society.

Integration is presented as overcoming differentiation, isolation and fragmentation. The individual is really part of the collective. The collective good and bad cannot be separated from the individual one. This effect can only be achieved if the individual has feelings and moral convictions of love, kindness and universal harmony.

The transition also proves the second difficulty, which is the transition from individual consciousness to community consciousness. The totalitarian system had destroyed the community and built the collective.

The void of community will continue throughout the transition, because if the collective is a union of individuals, the community is a union of values.

3. The basic philosophy in the formation of the new mental system

To think philosophically is to understand the world philosophically. Philosophy is one of the instruments of human knowledge. It is not knowledge to beautify man. In the historical (temporal)

context, philosophical thinking or the philosophical understanding of the world comes, naturally, after mythological or infantile (childish) thinking and after religious thinking.

Philosophical thought, although it develops in time after mythological thought, is not continuous. Therefore mythology is considered as pre-philosophy.

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The word "philosophy" means Western philosophy, which was founded in ancient Greece and spread to Europe, England and America. The ideas of Hinduism, Taoism, Daoism, Confucianism and Buddhism are also part of the philosophical corpus. The philosophical ideas of Asia and Africa have not been overlooked.

Philosophical thinking is the process of knowledge and philosophical understanding of the world by man. By thinking philosophically we understand the world philosophically.

Philosophical thinking starts from the idea or the concept and not the thing.

Philosophical knowledge is realized through genuine philosophical concepts (filtered concepts or philosophical ideas), through experience or experience of human life, as well as through intuition. Philosophical thought is built through reading philosophical books, through travel and knowledge of human life (culture), and through other activities that enrich our daily life.

However, without systematic reading of books you cannot have and cannot build a good philosophical thought.

Man when he thinks philosophically has reached the highest level of consciousness. This means that the philosophical knowledge of the world is not only intellectual acquisition, but also spiritual, moral, aesthetic acquisition. It is a multidimensional integrated process.

Philosophical thinking is realized when one reaches maturity. The child cannot think philosophically.

Adolescence is the time of basic human formation. This is also the time of his schooling in the primary and lower education system.

In secondary school, the student enters the maturity phase. Precisely, at this level, philosophical thinking begins to be built.

The basis of philosophical thinking is abstraction through generalization. This means that philosophical thinking begins with ideas, concepts.

Philosophy is awareness of reality and the society in which we live. To think philosophically is to give answers to difficult questions about the understanding of life. Philosophy allows and enables man to achieve peace of mind. Although philosophies may differ from person to person, everyone benefits equally.

Philosophy can help deal with similar questions asked by different religions and beliefs. These questions may include, but are not limited to, morality, the meaning of life and death, and the complexity of the universe.

A broad theme includes the philosophical model of ancient Greek thought. Ancient Greece is considered the homeland of philosophy. Ancient Greek philosophical thought with rationalism, Roman law and religious belief are the three pillars of European civilization. European citizens as members of the European family have built their identity on these pillars.

3. A. The transition from the ideological society to the society of values

One of the fundamental aspects of the crisis of thought is the transition from knowledge to wisdom. Wisdom is a human value that integrates theoretical and practical sense with values, according to the "golden ratio" model and the wisdom.

Human values are the ideas, thoughts, principles, standards, beliefs, behaviors, beliefs and guidelines that people follow in their daily lives. Thought is the essence of human values. But although values are thought, thought does not create them.

The concept "value" has three basic dimensions:

First, it shows the quantity, quality, merit, price by being expressed in numbers. And in this case "value" has the same meaning as "scale" or "level" [scale, eng. groundeur, Fr.].

Secondly, "value" takes on meaning when it refers to an object, institution, individual, etc. In this case, we can build judgments about the value of the family, the value of the community, the value of a banknote, etc.

Thirdly, "value" has the meaning of principle, principle as a concept that expresses the connections between people. It is expressed through judgments about the values of the artistic work, through aesthetic categories such as: the beautiful, the majestic, the dramatic, the ordinary, etc.

Values are the foundation on which people's lives are built. They determine the position of each individual in the local and global community. Most of the laws and legislation of any democratic system are built on the basis of human values.

Principles are part of human values. This means that one person may have individual opinions, but they are not binding on the other. Also, the individual may have individual principles, but the principles must be agreed upon by society. The principle is the foundation on which the value/s and the measures for their social integrity are based. Values cannot be individual and solitary. They are manifested by the individual in society and are a reference for him.

The individual cannot measure himself by his principles, convictions, and personal beliefs. He is a social being, because he carries and displays, is oriented and guided by the values of the society where he lives. Values cannot be equated with human virtues. Virtues are moral categories, because such is their content.

The term "virtue" denotes a moral category. The name comes from the Latin word "virtue" with the root "vir" and indicates the high moral standard that man achieves through behavior. The content of values is very broad and, therefore, we speak of human value system. Values cannot be innate and inherited. They are formed by human birth. By the age of 6-7, values are imprinted (stamped) on the child. In adolescence they are modeled and then socialized (M. Massey, 1997).

Oriented value(s) are the social values that are most distinct from other values of an individual, social group, class, community, and/or nation. Being more mature, more organized, and more functional than other values, they not only distinguish the bearer from others, but also orient him in all his activity and life. These values are the vocation of the individual.

The concept of "oriented values" also corresponds to the concept of "non-oriented values", which, being present in every individual, communicate with each other and are in a complementary relationship. Oriented values and non-oriented values are the two main pillars/spaces of identity. They serve as ways and methods of intercommunication of the bearer with himself, with others and with the world as a whole.

Values oriented were used as a key term by Florence Kluckhohn in the 1950s. In the USA it was used as a method/methodology for the integration of multicultural social groups. In the era of

global integration, this term takes on new dimensions and competes with the concept/philosophy of separating values from non-values.

The general concept of oriented and unoriented values is included in many disciplines such as psychology, sociology, and even biology and medicine.

Albanian values have their original features from their content, form and appearance, as well as being a reserve to set in motion and speed up the pace of their integration, more than in the case of other peoples, as well as they will complete the loss of historical time. In the literature on Albanianology, there is plenty of room for contribution, in the field of Albanian values. Ideology and its role in Albanian society in the historical context occupy a prominent place in the search.

3. B. Philosophical truth-ontological value

The truth is both a philosophical category and a human ontological value. In all cases, the word "ontology" refers to the word "being", but in our case it is about the human being. When we say "intrinsic value" we mean the fact that a person is not born with knowledge, values, behaviors and attitudes. All these are built during life.

Truth, in philosophy, is expressed by affirmative judgments which agree with the facts or show what the reality is where we are. Philosophical judgments that express truth are constructed by strictly applying logical categories, laws and principles. Truth is the goal of philosophical inquiry through rational, critical, and reflective thinking.

This standard makes philosophical truth believable. Any deviation from the above parameters is a step towards falsity. This means that philosophical truth is the opposite of falsity.

"Falsitet" in the Albanian language has the meaning of error. In the moral sense, this word is "lie". Albanians have a long tradition of asserting and defending the truth and hating lies and liars. Such a thing is proven in their material and spiritual culture. Albanians swear by the truth: "I swear for the lives of the children"; "put my hand in the fire, for what I say".

4. Philosophical truth and scientific truth

Philosophy and science are two fields (disciplines) of knowledge. We can say that philosophical knowledge and scientific knowledge are different from each other. Philosophy is the first knowledge and became the basis of science, once known as natural philosophy.

In the educational system, the field of knowledge should not be unified with the subject. Often these two concepts are combined, especially in school literature. And this is because the English word "subject" [substrate] is translated into the Albanian language as "lëndë". It has even become a tradition for "subject" to be equated with the term "content". Even to this day, the word "subject" is written in the official documents instead of the word "content" of the document.

Plato is the first philosopher who made philosophical knowledge a separate discipline or discipline in its own right. He systematized all pre-Socratic knowledge into a proper theoretical discipline. Even scientific knowledge is theoretical knowledge, but, unlike philosophical ones, it is based and built on provable facts, on tests and experiments.

Philosophy is built on refined ideas. Even Aristotle's substantial ideas, as we will read further on, are theoretical ideas. They produce philosophy (philosophical thought) through rationality, argument, reflection. Non-substantial concepts produce ideology, through the belief and application of unquestioned dogmas.

Through knowledge, research and philosophical studies and scientific studies are built. Therefore, the terms "philosophy" and "science" also mean the terms "philosophical study" and "scientific

study". The field of philosophy and the field of science are connected and communicating with each other. They use ideas, concepts, judgments, reasoning, questions and analysis. The main difference lies in the way they know the world, how they discover the truth in their field.

Through knowing the world they build knowledge. Science is concerned with natural phenomena, while philosophy tries to understand the nature of man, the human being or matter [human being] and consciousness and the relationship that exists between the two concepts.

"Science" comes from a Latin word [scientia], while "philosophy" is derived from Phi [Φ]. "Phi" is the symbol of the "golden ratio" and shows the connection between philosophy and science, as argued by Aristotle.

The Greek word "sophia" [sophiā/σοφία] in the English language is translated as "wisdom" which means "theoretical knowledge" which also has value in its content.

It is drawn from an enlightened, almost divine mind, and is grasped more by intuition than by formal logic, or the logic of ordinary people. Such were the Seven Wise Men [Greek: οἱ ἑπτὰ σοφοί] This title given by classical Greek tradition to seven philosophers, statesmen, and law-givers of the 7–6th c. BCE.

A common feature between the two sciences lies in the fact that they both try to explain situations and find answers. Philosophy does this by using logical arguments, while science uses empirical data. Philosophy's explanations are based on arguments and principles, while science tries to explain based on data, results, experiments, observable facts, and objective evidence.

Scientific knowledge is used for cases that require empirical evaluation, while philosophy is used for situations where measurements and observations cannot be applied. Science also takes answers and proves them to be objectively right or wrong.

Objective questions are also included in philosophy and it gives answers to them just like science. There may be objective questions that, although included in philosophy, can only be answered by science.

In this case, philosophy serves as an illuminator of the path of the search for truth. This means that it serves as a methodology and/or a method. In addition to finding answers, philosophy also involves generating questions. Meanwhile, science is only engaged in answering questions.

Philosophy builds knowledge through thinking; science does the same by observing. Science is also a defined study, in contrast to philosophy, which can be applied to many broad areas of the discipline.

5. Integration of religion in education

Knowledge about religions is integral part of knowledge of the history of humanity and civilizations. This process is completely different from believing in and following a specific religion. Even countries where one religion clearly predominates should learn about the origins of all religions, rather than favoring one or encouraging proselytism (conversion).

In the recommendation of the Council of Europe on religion and democracy, it is written: "There is a religious aspect to many of the problems facing contemporary society, such as: intolerable fundamentalist movements and acts of terrorism, racism, xenophobia and ethnic conflicts".

In the recommendation, it is found that knowledge about religions is increasingly lacking in the family environment. The same situation is in Albania, where most young people have significant gaps in this field of education.

In the democratic system "politics and religion must be kept separate". However, democracy and religion should not be mutually exclusive. They should be valuable partners in the process of education and formation of rational thought. By addressing social problems, public authorities can

eliminate many of the situations that can lead to religious extremism. Religious authorities should do the same.

School is an important component of education, of forming a critical spirit in future citizens and of intercultural dialogue. Students, by learning about the history and philosophy of the main religions with content and objectivity and respecting the values of the European Convention on Human Rights, will effectively fight bigotry. Understanding the history of political conflicts in the name of religion is essential.

In our time, social media occupies a large place in the process of educating the youth, while it does not provide sufficient information control. Users, especially school students, read and view inappropriate and illegal information on the Internet, experience situations that negatively affect the process of their formation and mental education.

Students, in their families and communities, are in constant contact with religious facts and experience them mentally and spiritually from childhood. Different holidays and ceremonies, rites and customs in the family and beyond, books, movies and many other works of culture and art, electronic media, especially different portals, etc. are some of the students' independent communication stations with religious realities and facts. The school, as the only professional institution of education in a democratic society, cannot remain outside of this objective development. It can neither root nor stop religion.

The requirement that religious knowledge be considered an organic part of education is based on the content of our school's curriculum. Learning knowledge about religion is not religious education. It is an organic part of education and secular education at school.

Belief in a religion is different from observation, from critical analysis of religious fact, and from rationalism. The content of this empirical knowledge is based on religious facts, which are present in everyday life.

The method of developing the educational teaching process for religious topics is the scientific method based on the philosophy and methodology of the sciences of education.

Compared to other environments, the public school (classroom) is the safest space for informing students about religion, especially compared to the Internet: Facebook, Twitter, Skype, WhatsApp, Snapchat, etc.

The teaching-educational process is developed by teachers and not by clergy. The teacher is the most professional, the most confident, the most responsible and the most trusted educator for learning knowledge about religion and beliefs.

The teacher builds learning situations and directs the system of techniques for investigating religious facts and phenomena, so that students build new knowledge. Together with the students, he/she corrects or integrates the new knowledge with the previous ones and the students build and enrich personal and social values.

In the Albanian case, the basis of the change is the original historical tradition of religious coexistence. Also, there are the specifics of the Albanian society in the past and in our days, the regional features, as well as the experience of successful Western social and educational systems.

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LANGUAGE GAMES IN THE INTERACTIVE AND THE SUPPLEMENTARY LEARNING OF THE ALBANIAN LANGUAGE IN THE ALBANIAN DIASPORA.

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ABSTRACT

In the last decades, regarding the supplementary learning of the Albanian Language and Culture in the Albanian Diaspora, a series of reforms have been implemented which have given it the appearance of a contemporary curriculum.

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The approach of technology in the curriculum as a didactic innovation for teaching has the competence of creating a unique virtual environment and observing the functionality of digital games in the teaching and learning process in a specific field such as the supplementary learning of the Albanian Language and Albanian Culture in the Albanian Diaspora.

The methodology of this work is based on the literature of the Ministry of Education and Sports, as in the *Curriculum of the Supplementary Learning of the Albanian Language and Culture in the Albanian Diaspora (2018)* *National Education Strategy-Albania (2021-2026)* *Education Strategy- Kosovo (2022-2026)* but also in many years of personal experience in the field of teaching in education.

Our work aims, through the model of a curricular project in the supplementary learning of Albanian Language and Culture in the Albanian Diaspora, to ensure inclusion according to age groups, according to schoolcurriculum levels I-III, IV-VI, the third level VII-IX and address the integration of language components such as reading, writing, listening and speaking with the acquisition of key competencies and those of the Albanian Culture subject, making the connection with the subject fields with the social, cultural, educational, ethnic and spiritual values of the homeland.

Lesson modeling relies on learning competencies where interactivity through language games such as Discussion Network techniques , Expert Groups/ Guided Imagination/ Discussion / Wall Exhibits/ Video Conferencing / Storytelling/ Author's Chair 'Concept Map ' , 'Mind map' . Technique ' Sketching a story', 'INSERT, Know, Want to Know, Learned'. The pentagram etc. make possible the formation of linguistic competences and the culture of their origin

Keywords; supplementary education, mother tongue, albanian diaspora , curriculum

Today, Europe and the whole world are oriented towards multilingual coexistence and multiculturalism. Language is the primary element of culture and society, which helps us to understand the social, cultural and ideological aspects of its use. Cultural changes in the relationships between individuals are directly reflected in the language, transforming it.

The language and culture of the origin not only does not prevent , but also facilitates the integration in society, referring to this fact, significant elements in this context are the policies in education for the supplementary learning of the language of origin in the Albanian Diaspora.

We know that in the last two centuries various factors, mainly economic and political, caused the emigration of Albanians around the world. Of course in the modern, demographic world

migrations are mainly normal processes for free human movement in the world, enriching the intercultural mosaic of society as a claimed universal right. Referring to this fact, the unification of the curricula in Albania and Kosovo was carried out for the supplementary learning of the language of origin in the country of the diaspora, where the preservation and cultivation of the identity of origin (especially among children of compulsory education)is of crucial importance.They need a systematic and sustainable cultural care where the school of teaching about the language and culture of origin would play an irreplaceable role. The protection of this right by the law "On the pre-university education system in the Republic of Albania" no. 69, dated 21.06.2012 (Article 11. Chapter I), but also as a right to the EC, referring to September 26 - European Day of Languages (Council of Europe) and February 21 - International Mother tongue Day (UNESCO).

In the last decades, regarding the supplementary learning of the Albanian Language and Culture in the Albanian Diaspora, a series of reforms have been implemented which have given it the appearance of a contemporary curriculum. Today we can say that this curriculum has become comparable to many other contemporary European and regional experiences.

Referring to the common curriculum of the two countries Albania and Kosovo, learning in the language of origin pursues two main goals: On the one hand, students should be supported in the language and culture of their origin . On the other hand, teaching in the language of origin should also contribute to the orientation and integration of students in the school system and in the society of the country of immigration. (*Curriculum* 2018). In this sense, teaching in the native language plays an important role in the path towards a balanced bilingual and bicultural identity. At the same time, it helps many to recognize linguistics as an important resource for society.

In this perspective, we have treated the role of curricula and teaching in the language of origin (ML) in the shaping of the individual and wider society, which has given us the opportunity to view the language, the process of education and training as the life-giving colors of a mosaic that is completed daily.

The new context, in which the teacher and student relationships are established in the curriculum of the Supplementary Learning of the Albanian Language and Culture in the Albanian Diaspora, comes as an innovation in the field of teaching. Teaching has undergone changes from time to time both in structure and content, bringing not only didactic innovations, but also leaving traces in our lives, and even more so in students, teachers and all other actors who are involved in this process , bringing not only a new face to the curricula, but also to the role of the teacher.

The approach of technology to the curriculum as a didactic innovation for teaching has the competence of creating a unique virtual environment and observing the usefulness of digital games in the teaching and learning process in a specific field such as the supplementary learning of the Albanian Language and Culture in the Diaspora Emigration.

But the greatest potential of new information technologies in education lies not only in what we will contribute to teaching and learning methods, but also in the fact that they are transforming the language of communication. Virtual learning has its own challenges in language development at the same time and the responsibilities of teaching the language of origin in Albanian diaspora.

The American professor Nagib Callaos says that obviously, the mother tongue is what connects the academic world to society, can you imagine a doctor who does not manage his mother tongue or that of his patients? Can you imagine an architect who mismanages the mother tongue of his customers? Can you imagine a professor who does not manage his native language well, but feels happy writing papers in another language. Tahiri & Hadaj (2022).

In our approach, we have brought teaching models with the common motto that learning the Albanian language and culture in the Albanian diaspora should offer pupils and students a unique experience in terms of social values, catchable in terms of cultural and beautiful messages, for the future of Albanian citizenship in the European framework and beyond.

Using technology as a challenge, in the didactic modeling of a learning structure, we embody the three main goals of the curriculum such as: School and national identity, School and integration, School and return to the homeland. The organization of the lesson takes into account; curriculum levels I-III, IV-VI, third level VII-IX

The topics covered in this lesson modeling are; *My identity and Albanians in space and time*. (from the language and verses of poets, to objects of cultural heritage)

The paper brings integrated curriculum areas where the activities have also "crossed" the boundaries of the respective subjects. Activities can also be used as projects that last a certain period of time.

In this lesson, reflection will be dealt with in details and with practical examples to carry out creative activities such as the sequence of the film "Plisi" prepared and realized for this diary structure. While watching and listening to the film, we make it possible for children to develop language components such as listening, speaking, reading, writing and cross-curricular integration. The use during the learning process of the sequences of a film adapted to the topic and the competencies that we want to develop. What we will do during this lesson, definitely develops language and communication skills in students in a fun way. (Tahiri 2022).

Emphasis will be placed on: Learning the Albanian Language and Culture in the Albanian Diaspora, valued as the basis of intellectual, emotional and social development for students;

The influence of technology in the language learning process in an effective and innovative way; Didactic technology innovations , where creativity and the interaction of strategies and techniques increase the quality of teaching and learning .

Through this lesson we make it possible for the student to benefit; the knowledge, skills, values and attitudes for each language competence of the language of origin such as reading, writing, listening and speaking; social cultural educational, ethnic and spiritual values of the homeland; acquiring the key competencies and those of the subject. (Albanian Language and Albanian Culture)

Model Teaching is integrated with the magic of language (Albanian words) in the preservation and cultivation of national values. Avoiding the traditional and bringing didactic innovation, where the lesson can start differently. The filmic image and the song as an element of the power of the word are helpful indicators in the learning of the mother tongue, but also of the country's identity, history and geography. The song is the power of the word, but the word is the bridge of the heart and the mind, and it cannot be otherwise when the teacher puts the music of the recently broadcasted film in the background and brings the verses of the song with interpretation and writing , where the whole learning process takes a another rhythm that unknowingly connects all the components of the integrated program for learning the language of origin in the diaspora.

History, culture, language and traditions are the testament of a nation. The return to tradition, is it a need for identity, or a tendency for an autochthonous look? Each answer would be part of the question we raised at the beginning. As plisi is an integral part of Albanians with an ancient history, from Pelazgo-Illyrian times to the present day, as if to sign our autobiography. Along with our language and traditions, Plis is characteristic of the Albanian national identity, which the Albanians have preserved with jealousy and pride. Kraja, N (2022)

We have all had the chance to meet foreign tourists who come to our country and leave with a wrinkle on their head, or cases where Albanian immigrants have been living abroad for years, in various organizations, ceremonies or celebrations, in formal costumes with jacket, trousers and white tie shirt have added a Plis. (kind of Fez)



2. Interactivity through language games.

The teacher builds a summary text herself (the example we defeated) on the topic she will develop, referring to scientific research and publicist Anastasi, Gj.(2013). "The white hood that we Albanians call qelesheor plis is made of well-trodden sheep's wool and washed several times with soap. The craftsmen who were engaged in their work were called cellworkers. There are many legends about the plis, regarding its antiquity and origin since the time of the Pelazgo Illyrians. In the Albanian lands, we find the plis, orqeleshen, with its distinctive characteristics, adapting to the many historical events that have left deep traces in our culture. The white qelesheor plisi is considered as our traditional qelesheseen from this point of view, it comes out almost like a "living being", which shares the joys and sorrows with the people who carry it. Plis, among many other symbols, has accompanied our ancestors throughout their glorious history, which has come down to our days. The symbolic characteristic of the plis is that it must always be kept white, like honor, expressing the moral purity and honesty of our people. Plisi expresses national pride, endurance, non-submission to numerous invaders. The Albanian cell is a distinctive sign of cultural heritage that Albanians have preserved with fanaticism and loyalty from generation to generation. Anastasi, Gj (.2013)

Learning topic: White Fez or Plis

The motherland, the homeland are only one nation from Presheva to Preveza... (from the language and verses of poets, to objects of cultural heritage)

The suggested time for this learning topic may be several hours.

The areas that are integrated, in addition to the cross-curricular combination of language and reading, make the connection with other areas such as history, geography, Albanian cultural heritage, figurative education, which make the latter more conceivable for a concrete, as well as emotional. Students are previously familiar with the topic to be developed.

Some didactic games for the realization of the subject competencies and language components.

listening is a process where the student activates attention and understanding to go towards the learning process. The language games used for this component make it possible to: Develop active listening in students, liking and interest in what they hear. Distinguishing different types of texts or situations, distinguishing the quality of the speaker's voice such as: intonation, rhythm, emphasis and volume of the voice. They enable critical and creative thinking. Attentive listening enables collaboration and exchange of ideas.

Didactic game: The students form a circle, the teacher takes visual sequences from the movie "Plisi". The students choose a word based on the sequences they saw from the movie. The first explains what this word makes him feel. When it's his friend's turn, he also explains what the last name in the speaker's speech means to him, and this is how each participant continues. example,

The word that was chosen from the film sequence is: PLISI

First student: Plisi makes me think about *the cultural heritage of Albanians*

Second student: *The cultural heritage of Albanians* makes me think of the Motherland

The third student : *The homeland* is the land, the language, which our ancestors left *us*

The fourth student continues on building a text.

Speaking, clear and beautiful articulation, the process is related to thinking and learning

Didactic game; The author's chair; children work in small groups then each group will create a multimedia presentation using pictures, videos and written information about the homeland. Children should describe their country of origin, using beautiful words and expressions. Elements such as geography, culture, gastronomy, historical events, and national symbols may be included. The preparation of the presentations about the homeland comes from a group representative who will answer the questions, the rest of the class will play the role of journalists and so on for the other groups by changing roles .

Reading is the ability to understand the string of printed or written signs. This process is related to recognizing letters and combining them into words, pronouncing and explaining aloud what is written.

Didactic game; Vocabulary cheat

A very challenging game that forces children to think about the meaning of a word. Choose the word Plisi or Fez, write the meaning of the word on a piece of paper. I ask the students to write what they think the definition of that word is. I collect the sheets and read them one by one (while the class has to consider the meaning and vote). Students receive a point each time their definition

receives a vote and also if they have written the correct definition. The student with the highest number of points wins.

Writing is a personal but also very functional process where the student writes to communicate his ideas to others through words and sentences on paper.

Free writing, imaginary journey to the lands of the first, describe an imaginary journey by choosing one of the topics listed below

"The homeland is like a body, where each of us is a part of it" "Your small homeland, that small divine one, immortal like a tear."

Let's versify, talk and write about Mother Earth. Students construct short poems

We make it possible for students to describe the memories and impressions they have received from tourist visits made to their parents' homeland, such as in Albania, Kosovo and the Albanian villages in Macedonia and Montenegro.

Didactic game; Concept map

Key words Plisi, qeleshe, kësule, etc. words according to synonym names in the Albanian territories, each group deals with the same topics, put an idea and write below it under the ideas.

In history and geography – (research methods).

Homeland story game: Based on the photos, create a story without losing its meaning. Students are in the form of a circle. They will build a simple story about the homeland according to the photos. The first student has a ball in his hands. The game starts with the speech of the student holding the ball, then passes the ball to another student to continue the story. Each student should add a part of their story using appropriate words and expressions to describe the homeland.

Map of the homeland: We put a map on the table and put some "plis traces" through different cities and places of the homeland. Students must find the clues and give them an explanation about the history, culture, or significance of the particular place.

My favorite place: We assign a student so that the others ask what is his favorite place in the homeland. The assigned student should give reasons why they prefer that place and provide interesting information about it.

Example:

Shkodra, 2500 years old, is known as a city with ancient cultural traditions. By studying the various historical, artistic, folklore works, popular creativity, you can learn a lot about the Shkodra culture, the ancient customs and traditions that the people of Shkodra faithfully preserve even today. The works made by Shkodra artisans are also very popular in foreign markets where they are exhibited.

Geography of the homeland : We bring some postcards with a view of the homeland where we write on them the names of cities, mountains, lakes, rivers, etc. We put the separated cards on the table. Students have to place the cards on the map in the correct place, using their knowledge of geography.

Quiz on the history of the homeland: We prepare various questions about the history of the country and put them in some historical castles. Students get the questions inside the castle and they will give the correct answer. Questions about historical events, famous personalities, cultural places, traditional clothing, symbols, etc. can be used

Then the teacher on a poster asks the students to name the following figures and show the importance they have for the Albanian nation.

In figurative education - (gallery tour).

Portrait of the motherland: Students sit in a circle . The teacher invites the first player to tell the legend of 'Plis in its Homeland', then the second one invents its continuation, when the legend is over, the teacher invites the students to make its drawing. Each student can represent characteristic elements through drawing, using the plis symbol, natural scenes, or cultural images.

Identifying national symbols: Children learn about the national symbols of their country of origin, such as the flag, national anthem etc. Then they can use these symbols to create their own cards or posters. Papers are advertised in classroom.

To develop fun activities, traditional Albanian games , reflecting on the culture and folklore heritage of the country, encouraging students to feel patriotism.

'Duel of songs' , we name the game; *One Flag, one Plis, one Nation* . Each group should sing a song based on the words given. The groups have the task of creating several songs within a certain time limit without repeating them (the first songs heard), then the teacher points out the next group and so on. You cannot sing the same song twice. The group that sings the most wins the game . Teachers give their criticism by objectively evaluating the work done. At the end, a summary of all the works is made in a brochure.

Learning the mother tongue and the culture of origin at school develops language interaction by supporting the establishment of the right balance of intercultural competence, a very important asset for the cultural profile of contemporary person.

Learning the Albanian language and Albanian culture in the albanian diaspora should offer pupils and students a unique experience in terms of social values and beautiful and tangible cultural messages for the future of Albanian citizenship in the European framework and beyond .

And concluding, I want to emphasize that; "Everyone is in debt to the motherland, the respectand devotion to the Albanian language must be eternal, as an obligation to ourselves, our children everywhere in the world, as an obligation to the nation, the earth, and to God."

CONCLUSIONS AND RECOMMENDATIONS

The change that took place on a large scale especially during the last ten years, due to demographic movements, requires the creation of an environment and a positive attitude towards the variety of cultures. Today, Europe and the whole world are oriented towards multilingual, coexistence and multiculturalism.

Today we can say that the curriculum of the Supplementary Learning of the Albanian Language and Culture in the Albanian Diaspora between the two states Albania and Kosovo has become comparable to many other contemporary European and regional experiences, but it must be constantly in coherence with the programs of this subject with European countries and with the changes that are made in these programs.

Teaching models should come out with the common motto that learning the Albanian language and Albanian culture in diaspora should offer students a unique experience in terms of social values, but also beautiful and understandable in terms of messages, cultural for the future of Albanian citizenship in the European framework and beyond.

Sustainable institutional care is dictated by the policies of the host countries, which, unfortunately, despite the recommendations of a multitude of affirmative and promising international conventions and references or the finding of relevant sciences such as sociolinguistics, or psycholinguistics, that learning the mother tongue is the basis of education and healthy development of the child's

language, still do not have a solution, neither approachable nor compatible to their need to cultivate the language and culture of origin.

The professional development of teachers should include training programs and studies that make the teacher more sensitive and connect him/herto the competences and mechanisms to realize that the learning goals are related to the acceptance and respect for the diversity. Respect for and accept different individuals in our multicultural school.

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1. Introduction

This study aims to analyze the intricate dynamics characterizing the relationship involving the United States and Russia, with a particular emphasis on elucidating potential trajectories for the future. Over the past three decades, successive U.S. administrations have consistently adhered to a coherent policy framework in their engagements with Russia.

The Cold War period was distinguished by intense global competition between the two nations, resulting in an arms race and the looming threat of nuclear conflict. Nevertheless, the collapse of the Soviet Union and the subsequent end of the Cold War engendered optimism for the prospect of a cooperative relationship between the United States and Russia. Following the USSR's dissolution, Russia underwent substantial economic and political transformations, initially positioning itself as a prospective Western ally.

While the post-Cold War era initially witnessed significant strides in U.S.-Russia relations, the 1990s also bore witness to periods of heightened tensions and occasional failures in establishing a durable partnership. Subsequently, the interaction between the two nations has been characterized by dialogues and cooperation, juxtaposed with episodes of mutual accusations and sporadic imposition of sanctions.

This paper will meticulously examine the evolving dynamics between the U.S. and Russia, focusing on pivotal moments in their diplomatic history. The contemporary relevance of this topic is underlined by recent events such as the conflict in Ukraine and Russia's nuclear threats. Given the substantial influence wielded by both the United States and Russia in global affairs, a nuanced understanding and rigorous exploration of this enduring topic remains imperative.

The study will elucidate the reasons behind the elusive nature of a consistent U.S. policy towards Russia, observing a cyclical pattern of improvement and deterioration. Each new administration typically manifests dissatisfaction with the state of relations, pledges enhancement, initiates policy reviews, and endeavors to reset diplomatic ties to foster a cooperative partnership. While optimism may prevail for a certain duration, obstacles inevitably surface, gradually shifting the prevailing sentiment from optimism to pessimism by the administration's conclusion.

Furthermore, the paper will explore prospective scenarios for U.S.-Russia relations, especially considering the consequences of the conflict in Ukraine.

The hypotheses posited in this study contend that:

- The enduring adversarial nature of U.S.-Russian relations, rooted in deep-seated disparities in interests, values, and geopolitical strategies, will likely persist in the foreseeable future.
- The potential for a shift towards amicable relations remains constrained due to historical dynamics and contemporary challenges.

The research questions are as follows:

- Given internal changes in Russia, the impact of the Ukrainian conflict, China's growing influence, and the real danger posed by non-strategic Russian nuclear weapons, how can the U.S effectively manage the lasting adversarial aspects of their relationship with Russia?

- Furthermore, what diplomatic strategies and collaborative measures can be deployed to forestall the escalation of conflicts and cultivate stability in the evolving geopolitical landscape?

Although the future trajectory of this relationship remains unpredictable, it is anticipated that effecting significant changes will prove challenging. Nevertheless, even in the face of potential uncertainties, it appears improbable that the foundational nature of the U.S.-Russia relationship will undergo substantial transformation. This assertion is grounded in the enduring constancy of Russia's perceived image and the persistent potential for collaborative endeavors where shared interests converge.

2. Literature Review

The literature on U.S.-Russian relations spans various perspectives and crucial events shaping their dynamics. Exploring a range of scholarly perspectives and recent events, we aim to gain insights into the current state of U.S.-Russian relations and envisage future trajectories.

The discussion by Putin regarding the historical connection between Russians and Ukrainians (Putin, 2021) offers a backdrop for interpreting current geopolitical occurrences. Tensions rise as Russian troops amass near the Belarus-Ukraine border (McLaughlin, Pinson, & Talmazan, 2022), emphasizing the delicate nature of the geopolitical landscape.

Diplomatic efforts are crucial in managing tensions, as seen in U.S. and Russian officials engaging in talks in Geneva (Al Jazeera, 2022). The Biden administration's imposition of sanctions on Donetsk and Luhansk regions signifies the use of economic tools in response to geopolitical events (Wiley, 2022). Providing military aid to Ukraine, the Biden administration's decision represents a strategic move with potential ramifications (Holland & Stone, 2022).

These policy choices draw criticism from Russia and its allies at the United Nations (Pamuk & Chiacu, 2022). The U.S., advocating for measures to eliminate illicit trade with Russia, showcases broader strategies aimed at limiting Russia's influence through economic channels (Hubbard, 2023).

Masters' analysis (2022) on the NATO flashpoint explores its evolving role in Russia-Ukraine relations, while historical documents, such as the Munich Conference speech in 2007 by the President of Russia (President of Russia, 2007), provide a retrospective layer to the enduring nature of U.S.-Russian relations. Pifer's examination (2021) of the proposed accords involving Russia, NATO, and the U.S. provides valuable insights into the complex diplomatic procedures.

The anticipation of future scenarios is explored in Sokolsky and Rumer's analysis (2020) on U.S.-Russian relations in 2030. The Scowcroft Center's vision for 2033 (Scowcroft Center for Strategy and Security, 2023) offers a speculative yet informed perspective.

Russia's attacks on Ukraine and subsequent claims at the UN (PBS NewsHour, 2022; Al Jazeera, 2022), adds developments to the overarching narrative. Scholarly analyses by Kimball (2022) on nuclear options for Russia in Ukraine and Chu's (2023) contemplation of Russia's threat to use nuclear weapons contribute valuable insights into potential escalations and their ramifications.

Within a wider geopolitical framework, the viewpoint of the RAND Corporation concerning strategies to prevent prolonged conflict and the direction of U.S. policies within the context of the Russia-Ukraine dispute (Charap & Priebe, 2023) offers a strategic perspective. The House of Lords Library's investigation into Russia's potential utilization of nuclear arms (House of Lords Library, 2022) adds depth to the literature with a legislative and security-focused perspective.

3. Methodology

The methodology employed in this study is designed to prioritize the fundamental attributes of objectivity, reliability and precision.

To achieve this, a wide array of sources has been consulted, encompassing various publications by both domestic and international scholars, academic research papers, and reports from national and international institutions. In particular, the study relies on a varied selection of literature released from the period following the Cold War up to the current times. In addition to exploring the works of classic authors in the realm of global diplomacy and international affairs, such as Hans Morgenthau, Henry Kissinger, and Zbigniew Brzezinski, the research critically engages with a series of contemporary authors of significance. This includes figures like Charles Krauthammer, Robert Kagan, Richard Haass, Fareed Zakaria, William Wohlforth, Stephen Walt, John Mearsheimer, John Ikenberry, among others.

In addition to the aforementioned literature, official documents published by state institutions related to American and Russian foreign policy have been judiciously utilized. Furthermore, recent articles from leading U.S. journals on American foreign policy and international relations, such as *Foreign Affairs*, *The American Interest*, *The National Interest*, *Foreign Policy*, and *The Washington*, have been thoughtfully incorporated. Another valuable source involves the integration of studies conducted by research centers focusing on foreign policy and security, such as Carnegie Endowment for International Peace, Atlantic Council, McCain Institute, etc.

All these sources collectively contribute to addressing the research questions and hypotheses raised in this paper through an in-depth analysis of U.S.-Russia relations. This is facilitated by examining primary sources, including official documents such as bilateral treaties and the official websites of institutions like the U.S. Department of State, presidential communications, collaborations and sanctions.

4. U.S.-Russia Relations in Light of the Ukrainian Crisis

The significance of the United States-Russia relationship has been prominently underscored by the escalating tensions surrounding Ukraine. President Putin perceives Ukraine as an existential and critical priority for Russia, citing its connection to national identity, citizenship, and profound strategic and geopolitical interests (Putin, 2021). In contrast, President Biden considers Ukraine a distraction from more pressing priorities elsewhere.

By the end of 2021, Putin had raised concerns, questioning Ukraine's sovereignty, refusing to engage with President Zelensky, and deploying 100,000 troops near Ukraine, hinting at a potential new Russian invasion (McLaughlin, Pinson & Talmazan, 2022). The situation escalated in 2021-2022 with Russian troops along the Ukrainian border, driven by Russia's security concerns over NATO expansion. In November 2021, Putin warned against NATO's involvement in Ukraine, particularly highlighting concerns about deploying long-range missiles that could reach cities in Russia. However, disregarding these warnings, the U.S. dismissed Putin's request for assurances that NATO wouldn't extend its presence into Ukraine, which escalated tensions. The crisis unfolded in a phone call and subsequent meeting in Geneva on 10 January 2022 (Al Jazeera, 2022), between Biden and Putin, where discussions revolved around Ukraine and Russia's concerns about NATO's posture in Eastern Europe. As the crisis deepened, Biden faced a delicate balancing act.

He aimed to prevent the worst outcome of a Russian military intervention in Ukraine, counter Moscow's perception of U.S. weakness, and limit U.S. involvement in Eastern Europe to focus on other priorities. However, the challenge grew as Russia continued military exercises near Ukraine. By February 2022, as alerts of an impending Russian invasion grew louder, Biden condemned Russia's acknowledgment of Donetsk and Luhansk (Wiley, 2022), implemented sanctions, and anticipated a robust and rapid reaction in the event of a Russian incursion into Ukraine. Against these cautions, Russia initiated a comprehensive invasion at the end of February 2022, eliciting global condemnation.

The international community responded with immediate sanctions against Russia, highlighting the heightened risks. Biden affirmed U.S. commitment to Ukraine, delivering military aid (Holland & Stone, 2022) and rejecting the idea of a no-fly zone. The U.S.-Russia relationship faced severe strain, with Russia threatening to withdraw from arms control treaties and freeze diplomatic relations (Pamuk & Chiacu, 2022).

In March 2022, the situation escalated further, with the U.S. condemning Russia for attacking Ukraine's largest nuclear energy facility. Biden expressed concerns about Russia's actions and warned of potential consequences. By September 2022, tensions persisted, with Putin warning of Russia's nuclear capabilities in response to perceived threats.

The U.S. continued to support Ukraine monetarily, militarily, and with humanitarian aid.

In February 2023, the U.S. increased its diplomatic push to urge other nations, such as Turkey and the United Arab Emirates (UAE), to halt trade that supports Russia and evade Western sanctions. Despite their NATO affiliation and strong relations with the U.S., Turkey and the UAE pushed back against Western insistence to enforce sanctions on Russia (Hubbard, 2023). The U.S.-Russia relationship remained strained, marked by threats and counter-threats. While the U.S. supported Ukraine, Russia sought alternatives to Western sanctions, highlighting the complex diplomatic landscape.

5. Russia's Claims Against the U.S. and NATO: Demands and Tensions

Russia, in anticipation of its invasion of Ukraine, presented two primary demands to the United States and NATO. These demands revolve around issues of security concessions and a commitment to refraining from further expansion of the alliance towards the east. According to Russia, these requests are a consequence of the perceived breach by the U.S. and NATO of promises made in the early 1990s, wherein NATO assured it would not extend its reach into the former Soviet bloc. Responding, NATO demonstrates openness to initiate fresh diplomatic dialogues with Russia, especially concerning arms control. Nonetheless, the alliance maintains its reluctance to permanently shut off the possibility of accepting new member states.

Russia's stance is based on the claim that there was an assertion that the U.S. made promises to the Soviet Union about NATO's eastward expansion after the Berlin Wall's collapse. Supporters of this perspective frequently refer to the statement made by U.S. Secretary of State James A. Baker in February 1990, wherein he declared that there would be no expansion of NATO forces even an inch to the east (Masters, 2022). They contend that the United States and NATO consistently violated this spoken pledge throughout the years, exploiting the chaotic post-Soviet era in Russia and enlarging the Western alliance on multiple occasions, encroaching upon Russia's borders, notably in the context of the Baltic states.

In opposition to this perspective, many analysts from the Western sphere and former U.S. representatives engaged in these discussions dispute the depiction of this condition. During the early years of the 1990s, their argument centers on the "Two Plus Four" diplomacy, which included East and West Germany, along with the U.S., France, the Soviet Union, and the United Kingdom. The main focus was on discussing the destiny of Germany and determining whether the forthcoming unified nation would align with NATO. They emphasize that at no point was the expansion of NATO towards the east explicitly discussed during this period. This perspective is reinforced by a 2014 interview with Mikhail Gorbachev, who stated, "The issue of 'NATO expansion' was not discussed at all" (ibid) .

The roots of the current situation trace back to the Clinton administration in the mid-1990s, during discussions between the U.S. and then-Russian President Boris Yeltsin. The proposal involved establishing a new security framework in Europe post-Cold War, aiming to integrate Russia into the shaping and strengthening of the new post-Soviet democracies. Resulting from this effort, the Partnership for Peace (PfP) emerged in 1994, presenting an inclusive program accessible to former members of the Warsaw Pact and nations beyond Europe. However, over the years and with the rise of Vladimir Putin, Russia increasingly opposed NATO expansion in the 2000s.

The origins of the present circumstances can be traced back to the mid-1990s during negotiations between the Clinton administration and then-Russian President Boris Yeltsin. The proposition involved the establishment of a fresh security framework in post-Cold War Europe, with the objective of incorporating Russia into the formation and fortification of the emerging post-Soviet democracies. This proposal materialized in the creation of the Partnership for Peace (PfP) in 1994, an all-encompassing initiative accessible to former members of the Warsaw Pact and non-European nations. However, as Vladimir Putin ascended to power, Russia increasingly opposed NATO expansion during the 2000s. Putin's dissatisfaction with NATO's actions in Eastern Europe became more apparent, culminating in a notable speech in Munich in 2007 where he stated,

"It is clear that NATO's expansion has no relation to the modernization of the alliance or ensuring security in Europe. On the contrary, it represents a serious provocation that reduces the level of mutual trust"
(President of Russia, 2007).

Tensions heightened following NATO's Bucharest Summit in 2008, during which the alliance signaled its willingness to include Georgia and Ukraine, leading to Russia's military intervention in Georgia. Six years thereafter, when Ukraine was on the verge of forming an economic alliance with the European Union, Russia intervened in Ukraine, incorporating Crimea into its territory. The recent demands from Russia involve two draft agreements seeking explicit and legally binding security guarantees from both the U.S. and NATO. The proposed U.S. treaty consists of eight articles (Pifer, 2021), including stringent limitations on U.S. political and military activities and a specific call for NATO to cease its eastward expansion, particularly denying future membership to former Soviet states like Ukraine. The NATO treaty (ibid), comprising nine articles, calls for dramatic military concessions from the alliance, such as dividing NATO's presence between Western and Eastern Europe, limiting military deployments in Eastern Europe, and preventing further NATO expansion, including Ukraine.

While certain analysts perceive specific Russian requests, like putting a stop to future NATO expansion, as non-negotiable, others voice apprehensions that Moscow's broad demands could constitute a purposeful overextension. This could be designed for rejection by Western entities and

possibly act as a justification for Russia to intensify military actions in a broader scope within Ukraine.

6. Prospects for U.S.-Russia Relations: A Trajectory Analysis

In the coming decade, it is probable that there will be a persistently antagonistic dynamic between Russia and the United States, stemming from fundamental disparities in interests and values. The course of relations between the two nations will be shaped by elements like internal turbulence in Russia, possible reforms, the uncertainties following Putin's leadership, and reactions to the ascent of China's power.²

The persistence of the existing state of affairs in U.S.-Russia relations is a probable scenario, with both nations remaining strategic competitors. Internal upheavals in Russia, similar to those in the 1990s, could weaken its global position, presenting challenges for both the U.S. and the West. Another potential scenario involves a future Russian leader initiating substantial reforms, limiting Russia's global ambitions and impacting its domestic policy-making.

The post-Putin era could introduce uncertainty and instability, with potential successors inheriting challenges and negative attributes. Additionally, Russia may face dilemmas in responding to China's growing influence, particularly in contested spheres of interest.

The effectiveness of U.S. actions in influencing Russian policy hinges on the vision of future U.S. administrations. Key questions revolve around Washington's ability to avoid situations jeopardizing Russian interests, such as supporting movements against Putin. Despite Washington's efforts to downplay Russian interests, its ability to influence Moscow's policies is constrained.

The U.S. is currently pursuing a foreign policy strategy that reduces the significance of rules in international conduct. This strategy could encourage collaboration among major powers and the peaceful coexistence of diverse sets of values. It is essential to closely observe the viewpoints of upcoming leaders in Russia.

However, considering the intricate dynamics characterizing the connection between the U.S. and Russia, the question arises: *How can these nations effectively navigate their complex interactions and address broader contextual factors to foster stability?*

Considering the intricacies of their relationship and broader contextual factors, the paramount focus should be on steering clear of potential conflicts in the Euro-Atlantic region involving the U.S. and Russia and actively working to minimize the risks of unintended conflict and escalation. Additionally, a comprehensive restructuring of strategic stability is imperative, responding to the waning impact of measures for controlling arms and the swift evolution of new military technologies.

Collaborative efforts should be undertaken to prevent other nations from acquiring nuclear weapons. Ensuring peace and stability in the Middle East, with a particular emphasis on the Persian Gulf, is essential. Simultaneously, measures should be implemented to thwart China's bid for

² For more, see: Sokolsky, R., & Rumer, E. (2020, June 15). U.S.-Russian Relations in 2030. Carnegie Endowment for International Peace. <https://carnegieendowment.org/2020/06/15/u.s.-russian-relations-in-2030-pub-82056>

See also: Scowcroft Center for Strategy and Security. (2023, January 9). Welcome to 2033: What the world could look like in ten years, according to more than 160 experts. Atlantic Council. <https://www.atlanticcouncil.org/content-series/atlantic-council-strategy-paper-series/welcome-to-2033/#us>

dominance in the Asia-Pacific region, and effective management is needed for the competitive dynamics in the realm of cyberspace.

While discouraging a complete restoration of communication, it is crucial to maintain a high-level strategic dialogue to convey U.S. commitment and alleviate mutual distrust. Achieving genuine accommodation demands that both nations take into account the interests of one another. In the majority of situations, the U.S. and Russia are inclined to uphold a relationship marked by adversity, but practical measures could lay the foundation for improved cooperation.

7. Credibility and Implications of the Russian Nuclear Threat in the Ukrainian Context

In the hypothetical scenario of President Putin contemplating the use of nuclear weapons against any country intervening in Ukraine, he issued a stark warning of consequences “unprecedented in your entire history” (PBS News Hour, 2022). This cautionary statement materialized a week later, accompanied by the announcement of a distinct operational status for Russia’s nuclear forces during wartime (ibid). During October 2022, Moscow alleged that Kyiv was orchestrating a plot to detonate a "dirty bomb" (Al Jazeera, 2022, B) in Ukraine, portraying it as a contrived operation. This escalated concerns among U.S. officials regarding the potential use of nuclear weapons by Russia, especially non-strategic nuclear weapons (NSNW), in response to setbacks faced by its forces.

While Russia denies these allegations, reports suggest that senior Russian commanders have discussed the NSNW option. Some analysts dismiss the likelihood of NSNW use, arguing that Russia understands the self-destructive nature of such actions³. They also highlight the absence of high-value military targets and the potential risks NSNW pose to Russian troops in Ukraine. Nevertheless, these arguments fail to consider essential elements that render the utilization of nuclear weapons by Russia a plausible and consequential emergency, shaping the course of the conflict.

Firstly, there is compelling evidence that the Kremlin regards this conflict as almost existential, assigning a unique status to Ukraine within Russia’s foreign policy priorities. Even prior to the 2022 war, Russia displayed a willingness to invest considerable resources in pursuing its objectives in Ukraine, as demonstrated by the incorporation of Crimea in 2014 and the takeover of eastern Ukrainian territories. Both actions incurred substantial costs due to the imposition of Western sanctions.

Putin’s choice to initiate a comprehensive invasion in February 2022, even in the face of explicit alerts about a higher cost compared to 2014, underscores a readiness to resort to drastic measures. The mobilization of 300,000 Russians in September 2022 (Fortune, 2022) disrupted an internal

³ See: Kimball, D. G. (2022, October). No Viable ‘Nuclear Option’ for Russia in Ukraine. Arms Control Association. <https://www.armscontrol.org/act/2022-10/focus/no-viable-nuclear-option-russia-ukraine>; Chu, Z. (2023, September 13). Will Russia act on its threat to use nuclear weapons? ThinkChina. <https://www.thinkchina.sg/will-russia-act-its-threat-use-nuclear-weapons/>; Charap, S., & Priebe, M. (2023, January). Avoiding a Long War: U.S. Policy and the Trajectory of the Russia-Ukraine Conflict. RAND Corporation. <https://www.rand.org/pubs/perspectives/PEA2510-1.html>; House of Lords Library. (2022, November 24). War in Ukraine: Could Russia use nuclear weapons? <https://lordslibrary.parliament.uk/war-in-ukraine-could-russia-use-nuclear-weapons/>

social order built by Putin over 25 years, signaling a high level of determination. Postponing mobilization until the military deadline was intended to sidestep domestic political expenses and apprehensions of potential disturbances stemming from a decline in public approval.

Secondly, with Russia's conventional capabilities depleted in Ukraine, non-nuclear escalatory options are limited. If widespread losses ensue, desperation might set in among top Kremlin decision-makers, prompting Moscow to employ nuclear weapons, particularly non-strategic nuclear weapons (NSNW), in order to avert a catastrophic defeat.

Thirdly, strategists in Russia underscore the effectiveness of non-strategic nuclear weapons (NSNW) in attaining both operational and tactical goals. Moscow's arsenal of NSNW delivery systems, encompassing artillery, short-range ballistic missiles, and cruise missiles, may find application in Ukraine. While the military effectiveness of NSNW in Ukraine is debatable, it is a credible emergency given known Russian planning and capabilities.

Although the precise likelihood of Russian nuclear use cannot be determined, the risk is significantly higher than in peacetime. The utilization of Russian nuclear weapons in Ukraine would carry significant repercussions for the U.S., triggering a commitment to retaliate. However, the exact nature of this response remains unspecified, potentially leading to a NATO-Russia conflict.

Therefore, the use of NSNW by Russia in Ukraine might precipitate a direct confrontation between the U.S. and Russia, potentially resulting in a strategic nuclear interchange. Even if challenges related to escalation are addressed, such deployment would carry extensive implications for the U.S., eroding norms against non-nuclear use and potentially fracturing transatlantic unity. The Biden administration should prioritize averting the utilization of Russian nuclear weapons, given its significant implications.

Conclusion

In delineating the potential trajectories of U.S.-Russian relations, this analysis emphasizes the intricate nature of the relationship and its implications for global stability. Several key insights emerge from the examination of historical dynamics and contemporary challenges, guiding our understanding and anticipations for the future.

-Foremost, it is imperative to acknowledge and anticipate the enduring adversarial dynamics characterizing U.S.-Russian relations. Rooted in deep-seated disparities in interests, values, and geopolitical strategies, the likelihood of a shift towards amicable relations remains constrained.

-The paper underscores the significance of internal developments within Russia as a pivotal variable. Analogous to the transformative period of the 1990s, potential internal reforms or post-Putin uncertainties introduce an element of unpredictability, necessitating a adaptable strategic approach.

-As we contemplate the future, the ascendance of China introduces an additional layer of complexity. Strategic calculations must not only account for the U.S.-Russia dynamic but also incorporate considerations of China's thriving influence and its consequential impact on global and regional dynamics.

-Amidst these uncertainties, a central imperative emerges the critical need to reevaluate and restructure strategic stability. Traditional arms control measures, beset by diminishing impact, warrant a comprehensive reassessment. Collaborative efforts should focus on preventing inadvertent conflicts and restraining the proliferation of nuclear weapons.

-The realm of cyberspace assumes heightened importance in U.S.-Russia interactions. Managing competitive dynamics, averting cyber threats, and ensuring regional stability in both the Euro-Atlantic and Asia-Pacific regions demand proactive collaboration and strategic foresight.

-Despite the adversarial nature of the relationship, sustaining a high-level diplomatic dialogue is paramount. Authentic accommodation, grounded in a nuanced understanding of mutual interests and concerns, serves as a linchpin for navigating complexities. Such dialogue, though challenging, is indispensable for fostering stability and averting unintended escalations.

- The pressing need to avert the deployment of Russian nuclear weapons, particularly within the context of the Ukrainian conflict, is a central concern. The credible threat of non-strategic nuclear weapons demands heightened diplomatic attention to avert the potentially catastrophic consequences of a U.S.-Russia conflict.

In conclusion, envisioning the future trajectories of U.S.-Russian relations mandates a proactive, adaptable, and diplomatically astute approach. Acknowledging the persistent adversarial nature, navigating internal and global shifts, and prioritizing collaborative measures are essential tenets of this approach. The path forward requires a delicate balance of strategic pragmatism, sustained diplomatic engagement, and a resolute commitment to preventing the escalation of conflicts in the evolving geopolitical landscape. As we navigate this intricate terrain, a measured and informed strategy becomes paramount for the promotion of global stability.

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THE CONSTITUTIONAL GUARANTEE OF AMPARO IN LATIN AMERICA, THE RIGHT WAY TO PROTECT THE INDIVIDUAL RIGHTS?

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ABSTRACT

After a long period of military dictatorships in Latin America in the 1970s and 1980s, various political forces met at a juridical-political table and found in the Constitution and law not only the instrument to achieve coexistence, but also the form for designing solutions to different problems that negatively characterize these realities.

The new constitutional texts, as well as their legislative development, have served to overcome internal political conflicts and to create a political-legal environment that matches their economic and social development.

The majority of Latin American countries have updated the guarantee, the recourse of Amparo, whose origin belongs to countries such as Mexico, Brazil, Colombia, and Chile, among the procedural legal mechanisms or instruments guaranteeing the protection of fundamental human rights.

Based on the Amparo judgment, we have a system of indirect constitutional control, given that the control of this institute is the protection of individual constitutional rights and guarantees against any attacks or violations by public officials. Individual rights must be respected in order for the constitution to be supreme.

Key words: constitution, Amparo Mexico, indirect control

Introduction

The public laws of Latin American nations have seen substantial changes in recent years, and some patterns indicate changes that have ensured the continent's return to democratic normalcy and fostered the right conditions for social and economic development. In this sense, other nations have been compelled to update their legal systems, particularly the Constitution, as a result of the numerous constitutional changes that have occurred in Latin America in recent years, particularly with regard to the protection of human rights and constitutional guarantees.

Legislative reforms accompany constitutional amendments in Latin America, particularly in the areas of criminal, procedural, and constitutional guarantees to provide access to justice and constitutional justice. Amparo is one of the most significant of these patterns, along with the supremacy of the constitution, the control over constitutionality, the strengthening or addition of new guarantees, and the development of jurisdictional instruments for the protection of fundamental rights.

The constitutional framework of Latin America and Europe

In spite of the influences originating from public law in the United States and Western Europe, it can be confirmed with the new constitutional reforms that the Latin American constitutional control system has managed to acquire a content of legal originality, institutional completion, and organic and functional inclusion, which undoubtedly gives it a legal identity of its own.

The influence of the United States of America is undeniable, being that since the 1800s, a distributed control system of constitutional justice was established. European influence is related to the creation of Constitutional Courts and specialized and centralized constitutional bodies.

The system is characterized by the supremacy of the constitution and the use of the centralized system and at the same time, in accordance with it, the model of widespread constitutional control.

The system is completed with a series of legal and political mechanisms or instruments, such as the popular action and the action of the interested parties directly before the Supreme Court and the Constitutional Court. In both cases, these procedures produce the general declaration as unconstitutional of the principles in question and for this reason they have a general effect *erga omnes*.

The recourse of Amparo, as a fundamental jurisdictional guarantee of fundamental rights and freedoms, is one of the most favorable means to guarantee the supremacy of the constitution over any principles, acts or actions of public or private authority that violates or threatens the rights of the individual.

Among the procedural legal mechanisms and instruments guaranteeing the protection of the fundamental rights of the individual, which ensure a direct democratic control over the exercise of power by governments, public administration, legislators or judges, most of the Latin American countries have updated with the recent constitutional reforms of guarantees, recourses and actions of Amparo, Seguranca, Tutela and Protezione, whose origin belongs to the constitutionalism of Mexico, Brazil, Colombia and Chile.

The Amparo Institute has a long tradition. He has been present in the first constitutions of the Mexican states, as for example in the constitution of the State of Apatzingan in 1814 and Yucatan in 1840 and of course in the first Federal Constitution of the United States of Mexico in 1857 for reached further in the Mexican Constitution of 1917 still applicable nowadays.

The amparo judgement, which originated in Mexico and later extended throughout Latin America, has served as a legal weapon to shield citizens' fundamental rights against government actions that infringe upon them. Additionally, amparo is a powerful tool for defending the Constitution against unauthorized use of authority by public servants.

By protecting the person and his rights, amparo has guaranteed the effectiveness of the constitution, responding efficiently to the finality of the jurisdictional control of the constitution.

The current constitutional texts of Latin America make it clear that the establishment of a special typology of distributed control over the constitutionality of principles—which requires the judge conducting an amparo trial to apply the Constitution and, consequently, not to apply any other principles or acts that it deems to be in conflict with the rights of individuals and the Constitution—was made possible by the creation of control over the constitutional legitimacy of norms and acts and through the individual recourse of amparo. This action is only applicable in the particular instance of *inter partes*.

With the amparo judgment, we have a system of constitutional control that is initially indirect, taking into account the fact that the purpose is to protect individual constitutional rights and guarantees against any violation by the public authority. On the other hand, by protecting the rights of the individual, the supremacy of the Constitution is also guaranteed.

Amparo represents one of the most efficient procedural mechanisms for the jurisdictional protection of fundamental rights in Latin America, but also in European countries such as Germany, Spain, Austria and Portugal.

The Spanish Constitution provides in its article 53 that all citizens can protect their fundamental rights and public freedoms recognized by the constitution, through recourse before ordinary courts, according to a procedure which is based on the principles of preference and reduction, having the possibility to submit an appeal before the Constitutional Court.

Currently, the Mexican amparo includes five main application sectors: the protection and realization of the right of habeas corpus; amparo to ensure the supremacy of the constitution; amparo as a recourse for illegal decisions; advocate against administrative acts and decisions and advocate for the protection of the agrarian society.

Amparo perception

Amparo is described in several concepts by the authors of the law:

1. Amparo is a legal process which starts to restore the rights provided in the constitution which have been affected by the public authority
2. Amparo is a politically charged organization whose goal is to protect the guarantees found in the constitution by means of the legal system.
3. Amparo is a harmonious process for resolving conflicts between the public authority and individuals
4. Amparo is a priori a constitutional control
5. Amparo is a judicially based mechanism of protection for individual guarantees and the constitution.

In any event, the judge has broad authority to restore the infringed right, and the amparo procedures are brief and straightforward.

Conclusions

The first difference that can be identified is that in most Western European countries, given the centralized model of constitutional control, the protection of fundamental rights is indirect, through a centralized body such as the Constitutional Court.

Another difference is the fact that in Europe, without exceptions, there is no direct popular action of the unconstitutionality of the principles, and as a result, citizens cannot go directly to the constitutional courts for issues of non-compliance with the constitution.

In Latin America, the recourse of Amparo is usual, while in Europe only in Austria, Germany, Portugal, Spain and Switzerland it is foreseen in the constitution.

In Latin America, the recourse of amparo has as its object general normative acts, court decisions or jurisdictional acts, administrative acts, the conduct of the public administration. In this sense, it can be affirmed that the recourse of amparo practically has no limits.

In Latin America, Amparo is a real judgement that can have all three levels of trial. In Europe, where there is a trial for the protection of fundamental rights, it takes place in a single session before the constitutional court.

Unlike what happens procedurally in Latin America, in most of Europe fundamental rights are not subjective positions, but values on which the choices made by the legislator are measured in the constitutional court. Therefore, I firmly believe that centralized control over a law's transmissibility cannot effectively safeguard fundamental rights, as it merely prevents the law from objectively violating the constitution—not the execution of the law.

In a centralized constitutional control system, there is a true and effective protection of fundamental rights only if the system is accompanied by an individual constitutional recourse. If there is only centralized control, the protection is only indirect, and above all difficult to reach, if we take into consideration the time and costs of the constitutional trial according to traditional procedures.

Therefore, it is essential that people in general have the right to go directly to court, including the constitutional court, if their fundamental rights are violated or threatened by the actions or inactions of public and private authorities. This is because we want the mediator to be the ultimate

arbitrator, not only as a means of ensuring the efficient use of resources, but also as a guarantee for the protection of individual rights.

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Risk Management in the Intensive Poultry Industry in Kosovo

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Abstract.

The intensive poultry production industry is a developed sector in Kosovo, and it is necessary to inform farmers of the risks they face. In this paper, we will identify and analyze the five main categories of risks faced by this industry: production risk, market risk, financing risk, legal risk and human resources risk. The purpose of the study is to inform farmers, researchers and other interest groups about the level of risks in this industry, focusing attention on their aggressiveness. The study methodology includes descriptive analysis, qualitative analysis through the risk matrix and quantitative analysis, using variation analysis. This hybrid of methods will provide a detailed overview of the risks and their impact on the poultry production industry in Kosovo. Finally, some important recommendations are for each main risk. For example, to reduce production risk, farmers can invest in advanced technologies. To address market risk, they may seek extended sales contracts or develop new sales channels. To manage financial risk, they can seek different financial sources and design their budgets carefully. Also, to handle the legal risk, they must be informed about the laws and regulations related to this sector and follow the legal practices. To manage HR risks, they can invest in employee training and develop employee motivation strategies.

Keywords: Production risk, market risk, financial risk, legal risk, human resources risk.

1. Introduction

Managing risks in agriculture, livestock, and poultry is important but challenging. To tackle these challenges, researchers have used different analysis methods. One of the most popular approaches is the “Big Five“ framework, which identifies the five main types of risks: production, market, financial, legal, and human resources. This framework helps to understand and manage the various risks that can arise in these businesses (Martin & McLeay, 1998; Harwood et al., 1999; Meuwissen et al., 2001; Flaten et al., 2005; Angelucci & Conforti, 2010; Kahan, 2013; Carne et al., 2013; Girdziute et al., 2014; Wauters et al., 2014; Wauters et al., 2015; Ullah et al., 2016; Glemarec, 2017; Jankelova et al., 2017; Chand et al., 2018; Iqbal et al., 2018; Lane et al., 2018; Lobos et al., 2018; Karadas & Birinci., 2018; Komarek et al., 2020; Murrja et al., 2019; Thompson et al., 2019; Murrja & Braha, 2021; Murrja et al., 2021; Murrja et al., 2022; Hassan et al., 2023; Murrja, 2023; Murrja et al., 2023; Ndem & Osondu, 2018; Ndregjoni et al., 2023; USDA-ERS). The study will focus on managing these five risks in the intensive poultry industry in Kosovo.

The intensive poultry industry is an important sector of agriculture in Kosovo, which is characterized by the production of eggs and poultry meat. MAFRD (2016) reports that domestic production satisfies 99% of the egg consumption requirements and 7% of the meat consumption needs. Farmers in this sector face a wide range of risks, including environmental conditions, poultry health, market flows, human resources and financial aspects of their operations (Murrja et al., 2022; Murrja, 2023; Ndregjoni et al., 2023).

One of the main risks that poultry faces is production risk. These include poultry health problems, infections, farm conditions and environmental factors affecting production. Managing this risk involves careful monitoring of poultry health, good farming practices and a preventative approach to potential diseases.

Market risk is another challenge for poultry farmers in Kosovo. Changes in demand and supply, price fluctuations and competition in the poultry products market are some of the elements that affect this risk. Farmers must be prepared to adapt their trading strategies to these changes and look for ways to secure short-term and secure contracts with potential buyers.

Financial risk is another risk that affects the poultry industry. Cost of production, financing operations and debt management are the challenges that farmers have to deal with. To reduce this risk, they must develop sustainable financial planning and clearly understand their cost and revenue structure.

Legal risks are also important for poultry farmers. Government laws and regulations, including those on bird health and the environment, are important to comply with. Farmers must be informed and prepared to meet legal requirements and manage the potential risks of legal penalties.

When managing the intensive poultry industry, it is important to consider human resource risks. Farmers must invest in workforce development and provide suitable working conditions for their employees to ensure skilled and engaged workers.

To effectively manage the main risks in agriculture, farmers must take a three-dimensional approach according to Murrja and Ndregjoni (2022). The first step is to use a classification system

to identify and categorise risks. Then, they should implement an appropriate management process, utilising the best practices and modern technology. Finally, the risk framework should be established, encompassing risk architecture, strategy, and protocol to ensure comprehensive risk mitigation.

Government subsidies play a crucial role in the poultry industry of Kosovo. These policies have helped to boost domestic production and support small-scale farmers (Murrja, 2023; Ndrejoni et al., 2023). However, these policies must be sustainable and continue to foster the growth of the industry.

The study of this sector is still in its early stages in Kosovo, which presents an opportunity for researchers to delve deeper not only into this sector but also into other sectors of agricultural production.

2 Literature Review

Poultry farms face numerous risks that can greatly affect their financial stability. To gain a better understanding of these risks, conducted a literature review on risk management in the poultry industry. Our analysis focused on important studies that explored the different risks associated with poultry farms in the United States, the Netherlands, and Nigeria.

A study conducted by Akanni (2007), explored the effects of microfinance on chicken farming in Nigeria. The study revealed that farmers mostly rely on personal and cooperative funding, and face economic difficulties due to limited access to investment capital. This lack of financial support hinders the growth of poultry farms, as many financial institutions perceive poultry production as a risky investment.

Another study by Obike et al. (2017), analyzed risk management techniques and predictors of production in poultry farms in Nigeria. The results of this study show that various factors, including financial, human, production, marketing and technology factors, hinder production growth in the poultry sector. Poultry farmers must be prepared to face these challenges and use financial management and disease prevention techniques to reduce the effects of risks.

Another aspect of risk in the poultry industry is related to unfavourable yield variation due to various factors such as bad weather, disease outbreaks and the high cost of medications and vaccines. Various studies have identified these factors as production risks and have suggested that investments in financial management techniques and appropriate farming practices can help mitigate these risks (Salman, 2014; Adeyonu et al., 2021).

In the study of Kabir et al. (2021), the impact of the COVID-19 pandemic on the boiler industry in the United States of America is investigated. The results show that this crisis has led to an oversupply of boilers and has had a negative financial impact on the boiler industry. This is an example of an unexpected risk that has affected the financial stability of boiler farmers.

Financial risk is a crucial factor that affects the financial stability of farmers, especially those who operate on contracts. According to researchers, one of the most significant threats to the financial stability of a contract farmer is production disruption. This scenario may lead to situations where they are unable to service their debts (MacDonald, 2011). This highlights the importance of carefully considering and managing financial risk in the poultry industry.

Contract farming can be a risky business, especially when there are interruptions in production. During such times, a contract farmer's income can drop drastically while expenses continue to remain high. This situation creates immense financial pressure and can lead to significant problems in covering the cost of operations and contract services. Therefore, it is essential to manage marketing risks effectively to ensure the sustainability of contract farms.

Other researchers, such as [Perkins et al. \(2020\)](#), have investigated the difficulties and trade-offs in the egg production sector in the Netherlands. They have identified that financial risk is a significant barrier to farm innovation. The high cost of investments and large financial expenses are often an obstacle for farmers who want to use new technologies and practices in egg production.

In another context, a study by [Sorgdrager et al. \(2018\)](#), has shown that the use of fipronil in egg production has had significant financial impacts on the egg industry in the Netherlands. The Dutch Food and Consumer Safety Authority (NFCSA) restricted over 200 farms from transporting eggs and manure off their farm after the contamination was discovered. This has caused a significant financial impact on the sector.

[Allen et al. \(2020\)](#) examined the impact of an avian influenza outbreak on a commercial broiler operation in the United States, highlighting the financial consequences of disease risks in the poultry sector. The study demonstrates that disease outbreaks can have significant financial implications, particularly for inexperienced or novice farmers.

From the above, we pose the following research questions:

RQ1: What is the number of risks in intensive poultry production farms?

RQ2: What is the number of risks for each main risk?

RQ3: How aggressive is the risk for each main risk?

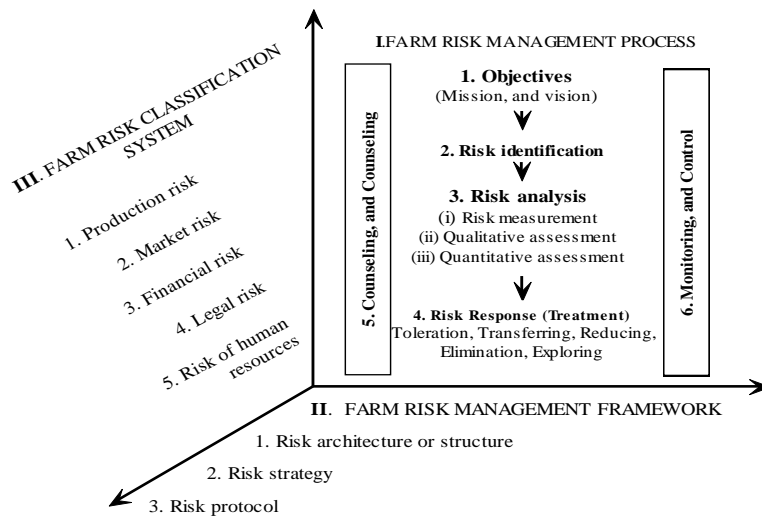
RQ4: What is the standard deviation of financial loss and dispersion for each main risk?

In 2022-2023, reproduction risk, market risk, financial risk, legal risk and human resources risk in the intensive poultry industry were researched and studied ([Murrja et al., 2022](#); [Murrja, 2023](#); [Ndregjoni et al., 2023](#)). From these individual studies, we expanded the study into the risk management plan. In conclusion, risk management in the poultry industry is a complex challenge involving various economic factors, the work environment, and various other factors. Managing risks through investments in financial management techniques, business diversification, and following good agricultural practices can help reduce the negative impact of risk events.

3 Materials and Methods

Figure 1 presents the conceptual framework of the methodology, which consists of three main components for risk management. These components are the on-farm risk classification system, the on-farm risk management process, and the risk framework for intensive poultry production farms ([Murrja & Ndregjoni, 2022](#)).

Figure 1: Conceptual framework of the study



Source: [Murrja & Ndrejoni \(2022\)](#).

The on-farm risk management process is based horizontally on the risk management framework for the intensive poultry industry and vertically on the five main sources of the risk classification system. The farm's objective is to invest in modern technology and increase profits. The risk management process consists of six stages, based on the 8R & 4T process from Hopkin, the ISO 31000 standard and the Risk Management Institute/IRM ([Hopkin, 2018](#)). In the third stage, the qualitative measurement and evaluation was done according to the generic definitions in [Tables A6 and A7](#). Additionally, a risk matrix has been developed and presented in Figure 2 for a better understanding of the risks involved.

Statistically speaking, there are three main types of analysis.

3.1 Descriptive analysis

Analyzing data obtained from surveys involves several steps, with the first one being the use of numerical data. This data is then interpreted and presented through tables (refer to [Tables A1, A2, A3, A4, A5](#)) and accompanying figures (refer to [Figures 3, 4, 5, 6, 7, 8, 9](#)) to provide a clear explanation of the results. This step is crucial in ensuring that the data is properly understood and analyzed.

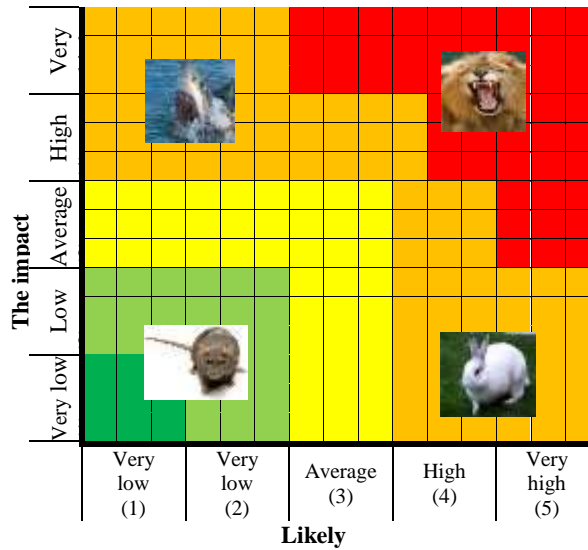
3.2 Qualitative analysis

Risk analysis is an iterative process with three main phases: risk identification, assessment and communication. This analysis aims to provide information on the sources and levels of risk and the potential impacts of the risk. It also aims to communicate the level or aggressiveness of the risk to farmers and other interest groups. In addition, qualitative analysis helps in weighting risk levels and identifying issues that require decision-making to reduce risk.

3.3 Development of a qualitative risk matrix

The qualitative risk matrix is a tool that presents the levels of risk in a business in a visual way. There are two types of qualitative risk matrix: one that uses a scale of 1-5 to show risk levels ranging from very low to very high, and another that compares the risk's aggressiveness to characteristics of animals like rats, rabbits, sharks, and lions. This tool is useful for presenting risk levels to farmers and other interest groups ([Astles et al., 2006](#); [Hopkin, 2018](#); [Murrja et al., 2022](#); [Murrja, 2023](#); [Murrja & Ndrejoni, 2022](#); [Ndrejoni et al., 2023](#)).

Figure 2: Qualitative risk matrix



Source: Murrja et al. (2022), Murrja (2023), Murrja et al. (2023), Ndrejoni et al. (2023).

3.4 Quantitative analysis

Statistical and quantitative analysis is important to draw conclusions and make decisions. It helps uncover trends that may not be apparent at first glance at the data. To evaluate the importance of risk events on the farm, an analysis of variation was used (Marku et al., 2013; Marku & Murrja, 2018; Murrja et al., 2022; Murrja, 2023; Ndrejoni et al., 2023).

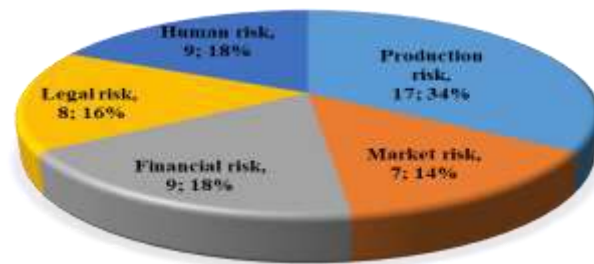
Table 3 outlines the six stages of risk management for farmers. The fourth stage involves recommending management techniques in response to identified risks. In the fifth stage, farmers are advised to consult with experts. Finally, in the sixth stage, the farmers should monitor and control their operations to identify any deficiencies and improve them in the future.

4. Analysis, Results and Discussion

The main objective of the intensive poultry industry in Kosovo is to invest in technology and obtain the highest possible profits. Through the listing and risks according to the dynamics of the events that occurred, 50 risk events were identified. Descriptive analysis is presented in Figures 3-9.

4.1 Qualitative Descriptive Analysis

Figure 3: Risk by five main sources



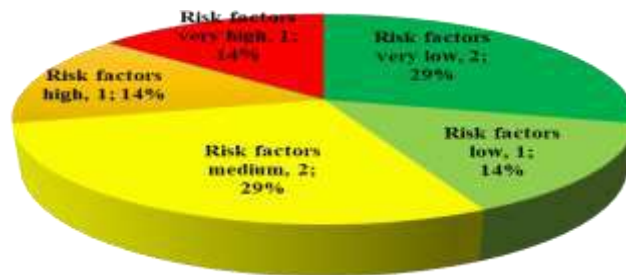
Source: Tables A1-A5.

Figure 4: Aggressiveness of production risk



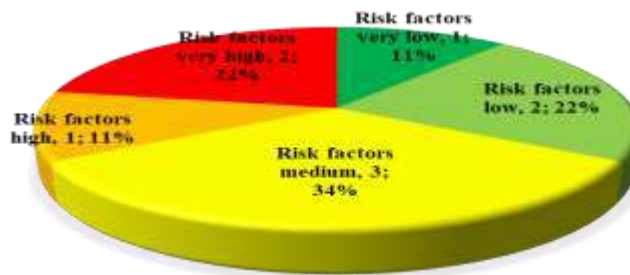
Source: According to the Risk Matrix by [Murrja et al. \(2022\)](#).

Figure 5: Aggressiveness of market risk



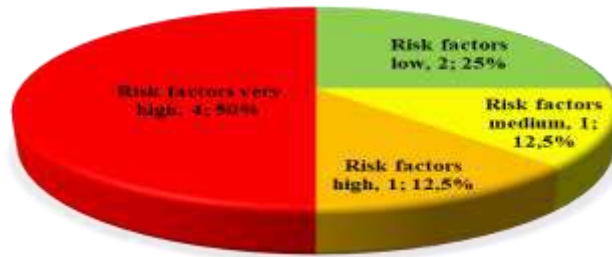
Source: According to the Risk Matrix by [Murrja, Ndrejoni, Maloku, Prendi \(2022\)](#).

Figure 6: Aggressiveness of financial risk



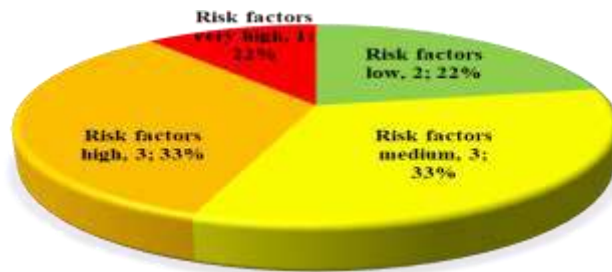
Source: According to the Risk Matrix by [Murrja, Ndrejoni, Kapaj, Maloku, Kapaj \(2022\)](#).

Figure 7: Aggressiveness of legal risk



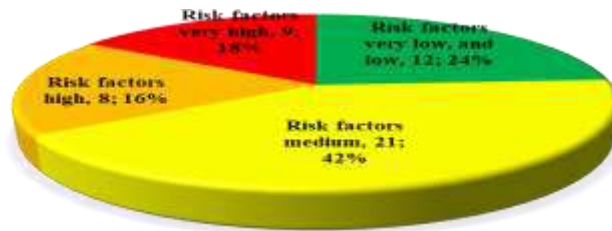
Source: According to the Risk Matrix by Murrja (2023).

Figure 8: Risk aggressiveness of human resources





Source: According to the Risk Matrix by Ndrejoni, Murrja, Prendi (2023).



Figure 9: Total risk aggressiveness



4.2 Development of the qualitative risk matrix

Figure 10: Risk Matrix Analysis

Consequences	Very high (13-15)		Rp4	Rm1			
				Rf2			
	High (10-12)		Rp6Rf4			Rf3 RL1R	
			RL3			RL7	

				Rh1	Rh8 RL6	
Average (7-9)	Rh6	Rp7	Rp11Rp13 Rf5Rf1			
	Rp9Rp12Rp14 Rf6		Rh5			
		Rp3Rp5Rp8Rp15	Rh4 Rm3Rp16		Rh7Rm6Rp1	
Low (4-6)		Rm4 Rf8			Rm5	
	RL5Rf9		RL4			
Very Low (1-3)		Rh2 RL2				
	Rm2Rm7 Rf7	Rh9	Rp10			
	Rp2 Rp17					
Production risks on intensive growth poultry farms in Kosovo	Very low	Low	Average	High	Very high	
	1	2	3	4	5	
	Probability					

4.3 Statistical analysis of variation

Table 3: Analysis of variance

Sources of risk	Deviation stadrad in € (D)	Dispersion in % (D ²)
Production risk	13,526	82.35
Market risk	21,30	71.4
Financial risk	46,990	33
Legal risk	9,608	75
Human resources risk	24,139	89
Total risk	21,113	39,4

After the statistical analysis, it is found that the production risk has a high level of variation, reaching 82.35%, but a low level of standard deviation (€13,526) compared to other risks. In contrast, the financial risk has a lower level of variation, only 33%, but the standard deviation is very high, €46,990. Market risk and human resources risk account for 71.4% and 89% of the variation, respectively, with standard deviations of claims at €21,302 and €24,139. However, despite legal risk being perceived as the highest, the variation analysis shows a 75% variation level, but a lower standard deviation compared to other risks (€9,608).

5. Conclusion and Recommendation

After conducting a comparative analysis of the qualitative and quantitative risks involved in intensive poultry production in Kosovo, we have arrived at certain conclusions and recommendations.

5.1 Conclusion

Farmers exhibit a heightened perception of risk, which can lead to excessive caution in their decision-making. However, such risk perception is not always commensurate with the actual harm that may arise. As a result, farmers must exercise discretion in identifying and managing risks on their farms. This requires a comprehensive understanding of the risk factors that may threaten their operations and a proactive approach to mitigating these risks. In doing so, farmers can optimize their resources and maximize their yields, while minimising the negative impacts of risk on their business.

The overall risk is characterized by a range of values, extending from a low level of variation of 39% to a high level of standard deviation of €21,113. It is important to note that the total risk is a comprehensive measure that factors in all possible sources of uncertainty and variability within a given context. As such, it represents a valuable tool for decision-making, allowing stakeholders to assess the potential impact of various risk factors and develop effective risk management strategies.

5.2 Recommendation

1. **Suggestion at the government level:** The central government should adopt legal provisions in the future to consolidate the agricultural insurance market. This step will help the farmer in mitigating transferable risks.
2. **Investment in technology:** Farmers should consider investing in modern technology to increase efficiency and reduce production risks.
3. **Drafting a marketing plan:** It is important to design a marketing plan that relates to the farm's objectives. Also, market research and analysis should be used to expand the market in the region.
4. **Monitoring of finances:** Farmers should monitor financial reports, including market turnover reports, and control unnecessary expenses. They may consider employing family members off the farm and joining more advanced structures.
5. **Consultation with experts:** Cooperation with experts in the field, such as veterinarians, zootechnicians, economists and lawyers, is important. Knowledge and application of legal provisions are essential.
6. **Development of human skills:** Training of family members and employees is essential, as is their motivation at work and stress management.

These recommendations will help improve risk management and increase the sustainability of the poultry production sector in Kosovo.

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Appendix A

Table A1: Production risk events

Risk code	Production risk event	(P)	(C)	(RF)	Damage value (€)
(1)	(2)	(3)	(4)	(5)=3*4	(6)
Rp1	Weather with high temperatures up to 35 ⁰ C (heat and drought)	5	7	35	1,688
Rp2	Weather with high temperatures up to -20 ⁰ C (snow and frost)	5	1	5	188
Rp3	Fire (human negligence, electrical fault, electrical system)	2	7	14	1,075
Rp4	Lightning	2	15	30	53,750
Rp5	Pests (insects and parasites)	2	7	14	1,650
Rp6	Poultry diseases	2	12	24	18,300
Rp7	Covid-19 pandemics	2	9	18	6,125
Rp8	Production bio-chemical damage	2	7	14	1,325
Rp9	Production damage from human resource incompetence	2	7	14	1,675
Rp10	Uncertainty in the use of medications	3	2	6	263
Rp11	Worforce poor health, age and wellbeing	3	8	24	5,375
Rp12	Production theft from the inside of the farm	2	7	14	3,125
Rp13	Poor quality of the production (nutrients) factors	3	8	24	3,550
Rp14	Damage of the production growth and storage process	2	8	16	3,450
Rp15	Breakdown in the use of machinery and equipment	2	7	14	1,425
Rp16	Breakdown due to electricity power outage	3	7	21	1,975

Rp17	Damage of production during transportation	2	1	2	125
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Source: Murrja, Ndreca et al. (2022).

Table A2: Market risk events

Risk code	Market risk event	(P)	(C)	(RF)	Damage value
(1)	(2)	(3)	(4)	(5)=3*4	(6)
R _{m1}	Price fluctuation (price declining).	3	14	42	48,500
R _{m2}	Non-compliance with market standards (packing, packaging).	1	1	1	500
R _{m3}	Competition.	3	8	24	5,700
R _{m4}	Variations in consumer preferences.	2	3	6	1,200
R _{m5}	Reduction of consumer revenue.	4	6	24	3,000
R _{m6}	Embargo on Serbian and Bosnia-Hercergovina goods (application of 100% tax to them).	5	14	60	42,000
R _{m7}	Inaccuracy in registering incomes and expenses.	1	1	1	100

Source: Murrja, Ndrejoni, Maloku, Prendi (2022).

Table A3: Financial risk events

Risk code	Financial risk events	(P)	(C)	(RF)	Damage value
(1)	(2)	(3)	(4)	(5)=3*4	(6)
R _{f1}	Lack of sufficient money to pay obligations.	3	9	27	10,000
R _{f2}	Realization of lower than expected profits.	3	13	39	43,000
R _{f3}	High cost of production factors.	4	11	44	42,000
R _{f4}	Excessive borrowing (debt) and high interest rates.	2	10	20	15,000
R _{f5}	Higher demands on money for family needs.	3	9	27	9,000
R _{f6}	Inaccurate production forecasts.	2	7	14	8,000
R _{f7}	Fluctuations of currency exchange rates.	1	3	3	1,500
R _{f8}	Economic decline of country.	2	6	12	1,000
R _{f9}	Inflation.	1	4	4	500

Source: Murrja, Ndrejoni, Kapaj, Maloku, Kapaj (2022).

Table A4: Legal risk events

Risk code	Legal risk events	(P)	(C)	(RF)	Damage value
(1)	(2)	(3)	(4)	(5)=3*4	(6)

R _{L1}	The failure of the farm owner to meet their financial responsibilities is considered negligent and irresponsible.	4	12	48	27,500
R _{L2}	If clients, customers, or rental properties do not follow the agreements or contracts, non-compliance will occur.	2	2	4	2,500
R _{L3}	Court cases.	1	12	12	5,500
R _{L4}	They need to meet the instructions for using nutrients and keeping proper records.	3	3	9	6,000
R _{L5}	Not following laws related to food safety can lead to failures.	1	4	4	500
R _{L6}	Lack of information.	4	10	40	10,000
R _{L7}	Lack of consultation with experts (lawyers, economists, veterinarians, zootechnicians, etc).	4	11	44	25,000
R _{L8}	I have a limited amount of time to study.	4	12	48	5,000

Source: *Ndregjoni, Murrja, Prendi (2023)*.

Table A5: Human resources risk events

Risk code	Human resource risk events	(P)	(C)	(RF)	Damage value
(1)	(2)	(3)	(4)	(5)=3*4	(6)
R _{h1}	Managerial incompetence of the farm owner	3	10	30	5,000
R _{h2}	Premature death of the farm owner	2	4	8	4,000
R _{h3}	Divorce in the family	2	15	30	75,000
R _{h4}	Displacement of family members from the farm	3	8	24	6,600
R _{h5}	Professional incompetence of employees in agriculture	3	7	21	1,600
R _{h6}	Environmental pollution (chemicals, pesticides, waste)	1	9	9	60
R _{h7}	Failure to train employees	5	7	35	5,500
R _{h8}	Lack of legal provisions knowledge	4	12	48	25,000
R _{h9}	Accidents of employees at work	2	2	4	1,200

Source: *Murrja (2023)*.

Table A6: Generic description and qualitative assessment (in numbers, words and colours) of the event probability

Possibility of event occurrence	Frequency in 5 years	Scale	Probability in words	Colour rating
Event occurrence almost impossible (1%)	1 time	1	Very low	Green
Rare event occurrence (2%)	2-10 times	2	Low	Light green
Possible event occurrence (3-9%)	11-30 times	3	Average	Yellow
Frequent event occurrence (10-39%)	31-40 times	4	High	Orange

Almost certain event occurrence (over 40%)	Over 41 times	5	Very high	Red
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Source: Fletcher (2005), Murrja et al. (2022, Murrja (2023), Ndrejoni et al. (2023).

Table A7. Generic description and qualitative assessment (in numbers, words and colours) of the event consequences

Consequence description	Value of damage	Scale	Consequences in words	Colour rating
Very low consequence	Up to €1,150	(1-3)	Very low	Green
Low consequence	€1,151 - €2,300	(4-6)	Low	Light green
Average consequence	€2,301 - 10,150	(7-9)	Average	Yellow
High consequence	€10,151 - €44,000	(10-12)	High	Orange
Very high consequence	Over €44,000	(13-15)	Very high	Red

Source: Fletcher (2005), Murrja et al. (2022, Murrja (2023), Ndrejoni et al. (2023).

Legislation Issues Regarding the Implementation of Blockchain-based Application in Higher Education Institution in North Macedonia

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Abstract.

The implementation of blockchain-based applications in higher education institutions would prevent numerous misuse, and above all it would improve the generation of academic credentials and especially their quick verification. Generation and verification of academic credentials through the blockchain system, although it would be challenging for all users, including students, administration, management, verifiers, it is also challenging for other state institutions, as they will have to adapt to the standardisation of diplomas and other documents, as defined by the legal framework. Each institution of higher education has its own statute, which guarantees the autonomy of its operation. The statute and other legal documents contain all the details of the operation, including the generation of diplomas with all their necessary elements. Through this paper we make an analysis of several statutes in the higher education institutions in North

Macedonia, regarding the possibility for electronic generation of diplomas. We will also discuss the possibility to add a QR code, generated from the blockchain system, to the printed version of the diplomas as a tool for their quick verification. The standardisation of diplomas, and their generation in a standard form throughout the blockchain system over all the country, regardless of whether it is a private or public institution, would be one of the best measures that could be taken to stop the various misuses of these documents, important for society in general.

Keywords: blockchain system, higher education institution, diploma verification, QR code, legal framework.

1. Introduction

The implementation of a blockchain-based system in higher education institutions, in addition to preventing possible misuse, especially with important documents, such as diplomas, various certificates, credits and grades, would also digitise many processes within these institutions, especially the process of generation of academic documents, which until today are still being processed in the physical (paper) form. From the systematic literature review [1], which we have done in the direction of the application of blockchain in higher education institutions, it results that there is a lack of implementation of blockchain in the field of education in general, and the most important reason is the lack of literature in this direction, the lack of programmers who deal with blockchain programming and blockchain databases, the high cost of system maintenance, the lack of professional people for maintenance and data processing, up to the various legal issues within different countries. Although there are blockchain solutions created that have been tested for the generation and verification of diplomas, most of them have certain limitations and challenges towards implementation for a longer time. As a result, we came to the conclusion that there are some main points that are obstacles to the implementation of blockchain in higher education institutions. The process of transferring diplomas from current systems, or physical files to blockchain systems is a difficult process that requires a lot time and commitment. The maintenance of the system is very difficult from the higher education institution itself, since there are neither programmers nor people who will work with it, so in advance they must follow long trainings related to blockchain systems. The use of new security and identification methods for students is difficult, as they require the use of digital signatures, or self-sovereign methods for identification, which are costly for both the students and the institution. The need for auxiliary tools for the implementation of the blockchain system, since unlike centralised systems when the operation of the system was possible with several applications, in blockchain systems, there are many more additional tools, which are connected to the ethereum blockchain platform, the database, the testing of smart contract etc. The process of automatic realisation of diplomas and their verification is challenging, since for every mistake they will need to be regenerated, because blockchain and smart contract cannot be changed, due to the characteristic of immutability. There is a lack of frameworks and conceptual models, systematic architectures and detailed literature in terms of the implementation of blockchain systems.

Improving the quality of education, and especially in higher education institutions, has been and it is a priority of all institutions, especially in the European Union, and for this reason, it has been possible to create many standards for students, the exchange of students through various programs, free trainings that are organised for teachers and students, but above all the main focus has been the prevention of various abuses that can occur in higher education institutions [2]. Despite the

fact that this idea and the possibility of implementing blockchain in higher education institutions is an idea that dates back to earlier times and the first concepts were given precisely by the European Commission with the aim of improving the quality of education, but up to the present day we do not have any comprehensive blockchain system for measuring student progress, generating and verifying academic credentials including diplomas, with the exception of some solution and researches [3].

Nowadays, students face various difficulties, in addition to long delays for the generation of various documents, they also face difficulties during graduation, complete files, or during various transfers, from a university to another, and even more difficulty during various transfers abroad, due to complicated legal procedures. It would be much easier and simpler if they were all generated in electronic form, in a standardised form, with parameters defined by the state itself, and all universities would generate standard documents that would be very easily verified for various reasons [4]. Blockchain technology is not only seen as a hope for solving problems in the field of education, but it is also seen as an opportunity to overcome many challenges in the field of artificial intelligence and internet of things, as two important areas that are currently making a technological revolution. Also in the field of education, and especially in institutions of higher education, it is inevitable to use artificial intelligence and the Internet of Things to implement the blockchain system in a safe way [5].

2. Related survey

The implementation of a blockchain system for the generation and verification of diplomas is of great importance in the field of education, although efforts in this direction have been made and continue to be made, however without any successful implementation for a longer time in any public or private high educational institution. However, there are many challenges in terms of implementation, where among others we can highlight technical complexities, difficult integration of data from current systems, scalability, adaptation of system users, electricity consumption, immutable data, etc. Overcoming these challenges requires great commitment, detailed planning of the system both in functional and legal aspects, as well as good knowledge of programming languages that are related to programming in blockchain technology. It is evident that there is a lack of programmers in this direction, as all developers are directed towards cryptocurrencies and the material benefits that blockchain technology is bringing, and very few take up programming, as they do not see it as profitable.

Nguyen et al. [6], presented a model and smart contract architecture, how to create a blockchain system for the generation, verification and retrieval of diplomas, which he named as A Blockchainized Certificate Verifying Support System (CVSS). Salau et al. [7], presented another blockchain solution, where in addition to the models and framework which he presented graphically, he also presented in the form of interfaces the successful practical implementation of this system, and successfully managed the insertion of data in a chain, and if there are changes in the data, the chain becomes invalid and alerts the user for unauthorised access to the network. A very interesting research is presented by Yfantis et al. [8], where in addition to the conceptual modelling of the system, a description of the adaptation of the characteristics of gamification in

the public sector, including higher education institutions is also made. An initiative for the creation of a common platform for the management of credentials based on the concept of the European Credit Transfer and Accumulation System (ECTS) was given by Turkanovic et al. [4], where among other things, the modular concepts of some important processes in the system are presented, such as the process of verifying student credentials and the process of course registration by students. Liu et al. [10], has presented a scheme for accessing data in the blockchain network, where in graphic form through mathematical equations and up to the relevant test results, he has presented the methods for generating certificates, self- authentication without having the party third, safe data storage and special importance has been given to security evaluation. El-Dorry et al. [11], propose a blockchain system for the generation of digital certificates and has the ability to keep track of each certificate, respectively to verify them using Hyperledger Fabric. EduCrypto is another blockchain solution proposed by Badlani et al. [12], which is based on the Ethereum platform and uses InterPlanetary File Storage (IPFS) as data storage. Among other things, EduCrypto has the ability to save, follow the entire process of student evaluation until the generation of results. Another system proposed by Tariq et al. [13], Cerberus, is a system aimed at verifying diplomas and academic credentials. The system uses on-chain smart contracts, and does not require students or employees to use digital identification to be verified, but the system uses other cryptographic mechanisms to generate academic credentials [13]. The other blockchain platform for generating and verifying academic credentials, Verde, is proposed by Nousias et al. [14], which, among other things, is based on third-party work using the standardised token based on ECTS credits.

3. Centralised vs. decentralised systems

The development of information computer technologies (ICT) and the digitization of services has caused that in almost all spheres of life, most services are digitised and generated electronically through various devices. Compared to the past, with traditional learning methods, where students have had the opportunity to acquire knowledge only through books, nowadays they can access any information they need in digital form in a very short time through digital devices [15]. Learning Management Systems (LMS) also facilitate the educational process in higher education institutions. Today, the distribution of literature, electronic learning, real-time tasks, electronic evidence, distance learning, and the classroom, are just some of the many opportunities that students have thanks to LMS. It is worth emphasising a great help of Youtube in this direction, where through videos the professors very easily distribute to the students the teaching unit with relevant explanations, which luckily the same can be distributed in the LMS and in the classroom [16]. Centralised systems always have a third intermediary in the generation of each service. Figure 1 presents a model of the centralised system for higher education institutions, describing the main actors as well as the way the same actors interact with each other.

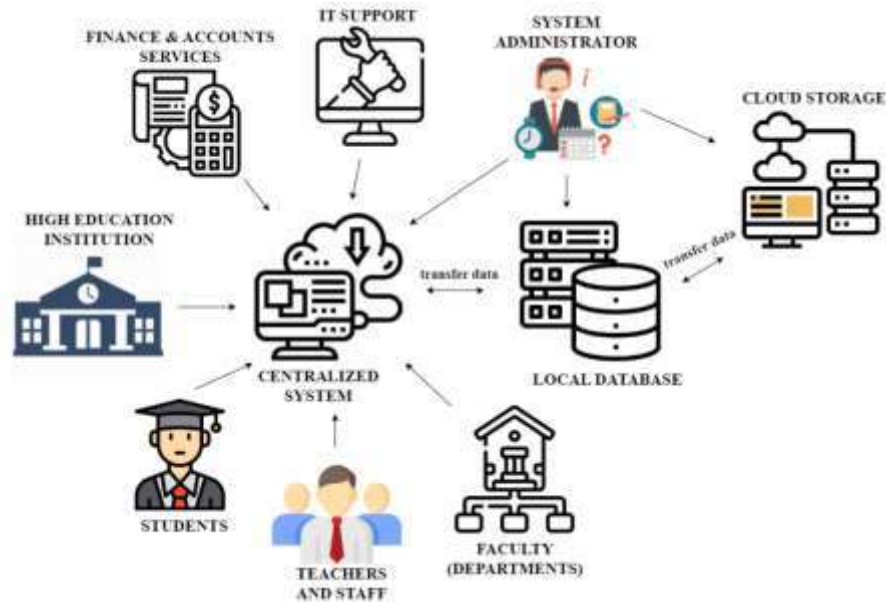


FIGURE 1. Centralised high education institution supply chain

The centralised systems that are used nowadays in higher education institutions offer a large part of services in digital form. However, the main limitation of the centralised systems is the fact that they are administered by a third party, and precisely here lies the suspicion of possible abuses in these institutions. One of the shortcomings in terms of the application of blockchain in higher education institutions is the lack of research, literature, manuals and descriptions of the practical realisation of blockchain solutions in this direction. From the systematic literature review that we have done in the direction of the literature that has to do in particular with the generation and verification of diplomas [1], including from 2018 to 2022, there are only a few researches that have clarified this process in detail, including the models conceptual and system architectures of generation and verification processes. Nguyen et al 2018, has presented the conceptual model of the process of registration, verification, generation, retrieval of academic credentials of the CVSS platform, as well as the smart contract architecture and their connection through the class diagram [6]. Cernian et al 2021, in the proposed blockchain model for the storage of diplomas, has presented, among other things, only UML diagrams describing the flow of processes, however, a detailed architecture of the system is missing [17]. Meyliana et al 2020, has given importance only to the student registration process, underlining the fact that it is one of the most important processes for the traceability of students, presenting the conceptual model and the development progress of the processes [18]. Vidal et al 2020, has given importance to the process of revocation of diplomas, describing this process in detail through schemes, models and architectures and has also offered some practical solutions in this direction [19]. Nousias et al 2022, has made a detailed description of the VerDe blockchain platform, where in addition to the detailed architecture, the process of registration and verification of diplomas in VerDe, he has also described the process of nostrification by designing the architectural model. The interfaces of some practical implementations are also not missing, including the implementation of the VerDe token on which the platform also works, since through the token the platform emulates ECTS credits [14]. Tariq et al 2023, in the Cerberus blockchain platform, in addition to the detailed description of the platform, also presented the architecture, characteristics and the presentation of the interfaces as the researchers think of the platform [13]. Badlani et al, has made a detailed description of the

EduCrypto platform, where, in addition to the conceptual models and the mode of operation, it has also presented the interfaces and the way of generating the document through this platform. In the end, the authors have also presented concrete results from the analyses and tests with the EduCrypto platform [12]. Turkanovic et al 2018, has made a detailed description of the EduCTX platform, presenting all the processes in graphic form, in a detailed form as the authors think of the platform. In the end, the interfaces for the realisation of a prototype realised in the open source Ark platform were not missing [4]. Based on the VerDe blockchain platform, and the detailed analysis where the authors have presented the system model of the processes within the blockchain system, in particular for the process of generating and verifying diplomas, we created a modified architecture based on our concept regarding these processes [14]. Figure 2 presents the detailed process for the generation of diplomas or other academic credentials.

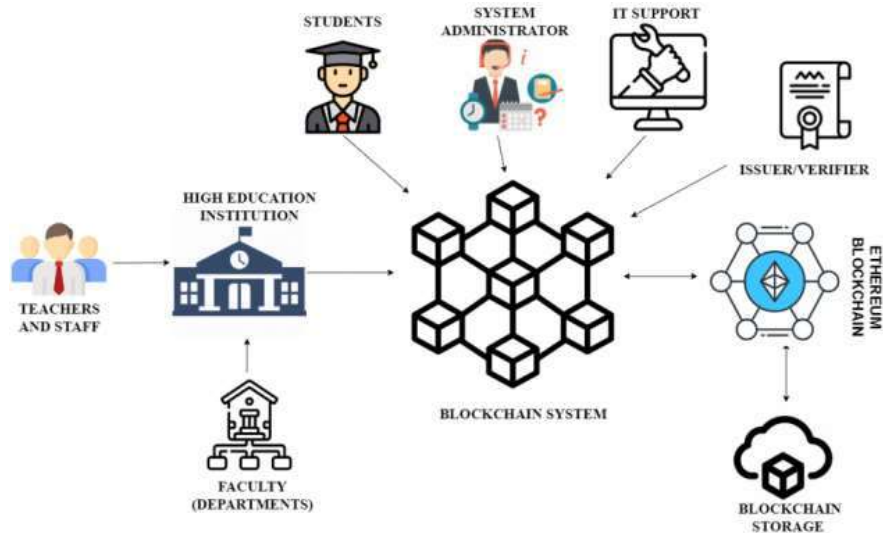


FIGURE 2. Decentralized high education institution supply chain

IV. Legislation Issues

The application of blockchain systems in higher education institutions presents a challenge for all the main actors involved in the system, however, in addition to the challenges related to cost, energy, maintenance, user adaptation, there are also legal challenges that higher education institutions must respect when implementing such a system based on blockchain technology. Besides the law on higher education, every institution of higher education has a statute that regulates all the legal acts by which it operates. In North Macedonia, the implementation of such a system based on blockchain represents a great challenge, since most of the services in these institutions are still generated in physical (paper) form, and their digitization requires maximum dedication and commitment from all participants (university management bodies, academic staff, administrative staff, students, etc). The users of the blockchain-based system, among other things, will need substantial trainings in this direction. From the analysis of the statutes of higher education institutions, the fact emerges that the statute does not specify whether the diploma can include

other elements besides the mandatory data related to the major the student studies, average grade, name, surname, and finally be signed in physical form by the management, the rector and the dean of the respective faculty, and be sealed with the official seals of the institution in question. Among other things, each institution of higher education has its own template for how it generates the diplomas, respectively its own design, the data is generated in the Macedonian language, in in some cases, also in Albanian language. There is no standardisation of diplomas, therefore their verification is much more difficult, compared to the proposed digital verification of diplomas, where, in addition to the shorter time, it would be much safer, efficient, transparent and the credibility of the data is offered. From the analysis of the statutes of public universities in our country, respectively of Ss. Cyril and Methodius University in Skopje, University of Tetova in Tetovo, Goce Delchev University in Stip, it turns out that they are almost similar in terms of the generation of diplomas, where possible changes in the generation of diplomas in electronic form are not specified or even the addition of various elements for quick verification such as QR code containing the unique hash value generated by the blockchain-based system, or the use of the tokenization method of diplomas in the blockchain-based system. However, before any change can be made in this direction, it must be preceded by changes of articles in the legal framework, namely the statute and other relevant legal acts based on the statute. However, the complete digitization of diplomas, respectively their generation in electronic form, their verification in electronic form, must also receive an approval from the country's government, respectively the Ministry of Education and Science, because it is about the generation of documents that are important, and should be maintained by the state and relevant institutions responsible for higher education in our country.

However, the main challenge remains the practical creation of the blockchain system for the generation and verification of diplomas and academic documents. The legal aspects, with changes to the statutory acts, can be changed and the electronic generation of diplomas can be allowed, although the issue of digital storage of data must also be specified, respectively for how long the documents will be stored, in electronic form in the system, because their storage for an indefinite period obviously has high costs of maintenance and management of memory spaces, when we know that for blockchain systems, maintenance is much more expensive than the current centralised systems.

V. Conclusion

Digitization of services is a challenge for all public and private institutions, as people are used to seeing documents in physical form and with stamps from the respective institutions. However, digitalization is the step towards the removal of physical papers, and everything to be managed electronically. Estonia is one of the countries that has developed digitization, and almost all services are in electronic form, where only with the identification number, the person can check his entire history. It is much easier to transform into a blockchain system, since we have digitalization of services, since the transfer process does not require entering data into the system, but only their conversion into the relevant blockchain database. For North Macedonia and the countries of the region, the implementation of a blockchain system is a big challenge, since many services are still not digitised. However, intensive work is being done to offer digital services in almost all institutions. It is worth mentioning in this aspect, the service of a digital point for all citizens, where several centres have been created where more digital services are offered in a

certain place. After numerous analyses, systematic literature review made in relation to the implementation of blockchain systems in institutions of higher education, the creation of architectures and modular concepts, the design of databases and the creation of the system, the description of the auxiliary tools for the creation of the blockchain system, the challenges the only next step is the practical implementation of a prototype, to test the validity, performance, efficiency of the system in real time. The system for generation and verification of diplomas, in particular, would prevent abuses related to diplomas, and would offer higher credibility for their online generation.

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Approaches to ESP course design at Southeast European University

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Introduction

The process of developing an ESP course is an important part of the work for preparing a successful curriculum. This includes a series of steps that must be followed to ensure that the program is structured, appropriate and meets its learning objectives. So, in this study we will elaborate some of these steps included when we design courses for English as foreign language at SEEU. Hutchison and Waters (1987) constantly confirm that ESP must be seen as “an approach not a product” and as such they have identified three approaches to ESP course design. One is the Language Centered approach, the second one is the skills-centered approach, and the last one the learning-centered approach (Hutchison and Waters 1987).

Keywords: course design, language centered approach, foreign language, curriculum

Language-centred approach

The language centred approach is a course design process to identify and describe the relation between the content of the course and the target situation. As Hutchison and Waters (1987) state, this approach starts with the learner proceeding to different stages of analysis to a syllabus, then materials in use in the classroom and finally assessing items of the syllabus. Furthermore, Hutchison and Waters (1987) in their book also found that even though this approach “starts from learner and their needs”(p.66.) (and we might think that this is learner centred approach, this is not entirely like that. Just as described by the name itself it is the language in target situation which is taken by the learner instead of teaching the learner all the language.

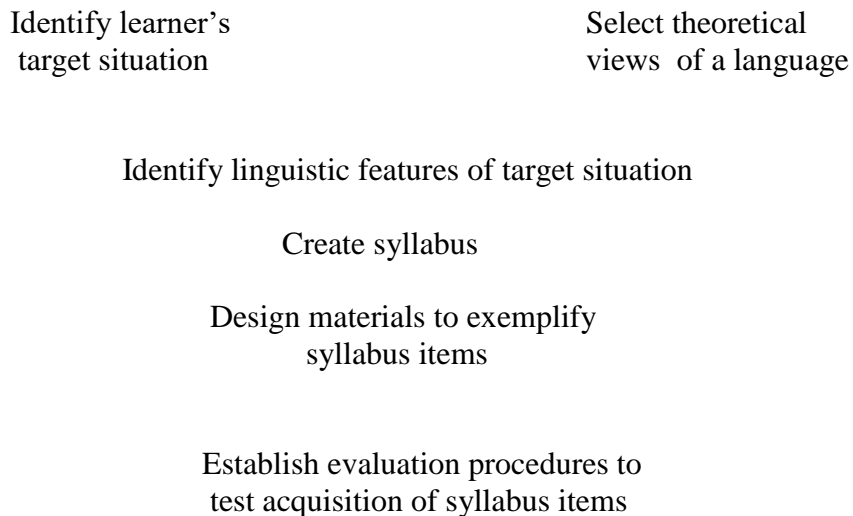


Figure 1

Skilled centred Approach

Skills centred approach is important on the whole language approach and the idea is to present the theories that emphasize its strengths on the whole language course design.

According to Ellis (as cited by El-Koumy 2004) the skilled centred approach is the most widely used approach throughout the whole world. El-Koumy (2004) in his study of teaching and learning of English as a foreign language, comprehensive approach, advocates skills centred approach as a “collection of separate skills”. In his book El-Koumy highlights other scholars who advocate this approach. He describes their views of this approach as a positive attitude by claiming that the teaching of language as “isolated skill” makes language learning easier because students do not have to engage in all implications that language brings up. Also this approach reduces students’ errors and its implementation is easy since it provides a systematic plan that is easy to follow (Shuy, 1981 as cited by El-Koumy, 2004, p. 15)

Furthermore, El-Koumy divides these skills into bits and pieces of sub-skills. As regards the teaching of these sub-skills, he reckons that they should be taught regularly in pre-determined syllabi. He emphasizes that the best way teachers can teach these skills should be direct explanation, reproduction and repetition. In relation to the assessment El-Koumy supports the use of “discrete point tests” as he calls them, to measure the acquisition of these

skills before moving to the next. With “discrete point tests” he meant (multiple choice, true or false and fill in the spaces) (ibid, p.15)

Learning Centred Approach as a main approach of this study

“Learning is totally determined by the learner”

(Hutchison, T., & Waters, A. 1987)

Learning centred approach is the main tool of this study. This approach is generally used in conducting this research. As already indicated, the development of English for Specific Purposes Course Syllabus by using a Learner Centred Approach can give us two kinds of things. The first reflects learners’ proficiency in English, their level, and their previous experiences with English. The second represents what learners believe they need or want in an ESP course.

Theoretical bases of the *Learning Centred Approach* have been explored by many researchers. Among the many of them is Nunan (1988) according to whom, this approach, is a wide area but its value can be easily identified by some main principles that every learner should have. According to Nunan (1988), as he cites two influential specialists in adult learning, Brundage and MacKeracher whose work has been described as influential in language teaching Learning Centred Approach, is identification of values, experiences of learners as a “resource for further learning”. By the same token, with learning centred approach we understand the involvement of the learner in developing the learning objectives for themselves for the purpose of best learning. (Nunan, 1988, p. 24)

Like for every other course, for English for Specific Purposes it is very important to start the course developing process with an analysis of the needs of a target group of learners. Attention should be paid to learners’ interests and needs. The Learner should be seen as an essential source of information and as a result, the learner, apart from other valuable information for the course developer, can express very specific needs which can serve particular learning objectives and goals. In Hutchison & Waters view (as cited by Lo, Y. 2012, p. 78) learning should be perceived as a process by which the learners use what they know or are good at doing in order to make sense of the new information. Consequently, approaching the learners by analysing their needs and previous experience is of crucial importance for developing English for Specific Purposes Courses, which is principally a focus of this PhD as well. Although teaching can never take place in isolation, still finding information about students’ needs from the learners themselves plays a very important starting point in designing a course syllabus.

My own experience and the research conducted by other scholars inspires me to think that a syllabus can serve to help learners more easily acquire the material, communicate, and provide a good first impression for the course. The syllabus itself sends many messages to the learner and as such, for its design it is very important a good deal of time to spend with the learner himself. In terms of this question, Pask and Scott (as cited by Petrova, p.15 and cited by Wallace 1991:21) describe learners into “serialists” who “digest” the material better in small groups and “holists” who need to see a total picture to draw any conclusions. Nevertheless, a good ESP course should try to cater for as many participants’ needs as possible. In short, engaging learners in the syllabus design can provide us with a very useful advice about how to succeed in the course. To put it differently, Nunan (1988) describes this as “development of learners’ competence”, or as a process with a number of actions towards

some end and the “product” is the end itself. With this in mind, we can simply say that, needs analysis, based on a learner centred approach helps the learners determine their own objectives in the course which are at the end put it into a product called “syllabus”.

In discussing approaches to ESP course design Basturkmen (as cited by Lo, Y. 2012, p. 79) considered four essential topics: (1) varieties of language, (2) needs analysis, (3) types of syllabuses, and (4) narrative and wide-angle course designs. Two viewpoints are given in terms of varieties, “specific-purpose language based on” which extends from the basics of general language and one variety with no basic core language. As for the types of syllabuses, there is rising of many types during its design, and specifying the content of an ESP course would require involvement of several theoretical stances as well as revealing the beliefs of the actors in the course design about the way of teaching and learning. For the end, if needs analysis are specific than the “narrow-angled” course may be the one appropriate, otherwise if needs analysis are more general, the wide-angle course may be more acceptable.

With regard to the types of syllabuses, traditionally, a distinction has been drawn between “product oriented” and “process oriented” syllabi according to Nunan (cited in Petrova *ibid*). With “product oriented” syllabus as the term suggests, it implies the product at the end, in this case, what the learners will be able to do at the end while the “process oriented” it implies the development of learners’ ability and how they progress in the process of learning. Saraswathi 2004(as cited by Petrova pg.15) classify the syllabus in terms of the affiliations between its different items. A linear syllabus has been considered the one which does not have direct related structure units and spiral syllabus has been called the one with already learnt items in relation to other units.

Another important aspect is the actual role of the syllabus in the learning centred approach. According to Hutchison and Waters (ac cited by Petrova pg.16) who strongly advocate the learning-centred approach, the syllabus’s role is to give basic guidelines for designing the course pack. To put it another way, a syllabus indicates general directions as to what should be taught in the course. The role of the syllabus in the learning-centred approach is best described with.

Hutchison and Waters, define syllabus content based on two factors: the learning situation and the target situation. The first one representing and contributing for the materials that will most be acceptable for the course, and second helps to select the relevant topics for the course which directs the teacher to a more detailed planning of the basic skills to be addressed for learners to cope with the given task. Nevertheless, both are interrelated and accommodated if needed.

Conclusions

Given these points, the learning centred approach, although, it requires thorough planning according to Hutchison and Waters (1987, pg.53) than the other two, still it is the most adjacent one in responding to the trends in ESP courses, where learners’ needs must be competently matched with the content to be learned for efficient use in a given specific situation.

To summarize what has been reviewed in this section, we can clearly point out that all the three approaches are important in syllabus design and as such syllabuses should be multidimensional to reflect the aspects of all the three approaches. However, the learning centred approach is the one that we abide by in this study, which does not mean that the other two are under evaluated. The learning approach is the chosen one for the conduct of the case study for creating an efficient syllabus based on the selection of the material through examination of learners’ needs that would be relevant for the ESP students.

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Knowledge of health professionals about Telemedicine and eHealth

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ABSTRACT

Telemedicine is the exchange of medical information from one place to another using electronic communication, which improves the health status of the patient. Electronic health (eHealth) is an emerging field at the intersection of medical informatics, public health and business, referring to health services and information provided or enhanced via the Internet and related technologies. The purpose of this paper is to learn about the use and benefits of telemedicine and eHealth in health care, new methods for examination, diagnosis and treatment of diseases. The methodology used is the quantitative method carried out with the help of the questionnaire. Fifty health workers from Isa Grezda Hospital in Gjakova were the selected sample. The results showed that 34% of health workers have declared that they have knowledge about telemedicine and e-health, while 66% have no knowledge. As for the question that it is necessary to develop the IT system in health care in SC, 48% answered that they agree, 34% were neutral, and 18% disagreed. Regarding the question whether the development of IT and e-health will have a positive effect on health care or not, 40% answered agreed, 36% were neutral and 24% disagreed. In the discussion, this study shows that technologies are considered useful in the hospital sector for both patients and health care providers, who use it in diagnosis and follow-up, chronic disease monitoring, rehabilitation, and residential medication management of patients.

The paper concludes that Telemedicine and eHealth are digital healthcare applications that fit well with modern life. Based on the responses of health workers at the Isa Grezda Regional Hospital in Gjakova, it is concluded that their knowledge about telemedicine and eHealth is lacking, and this is especially noticeable among older workers who at the same time express their refusal about the application of these methods.

Keywords: eHealth, Health Workers, Telemedicine, Hospital, Gjakova.

Entry

Telemedicine is the provision of medical services remotely, through the use of information technology and electronic communication that enables the exchange of health information useful for the diagnosis, training and prevention of diseases and injuries, for research and scientific work, as well as for continuous education of medical personnel, all this in the interest of improving and fully developing the health of individuals and communities (WHO, 1997).

WHO has recognized the power of telemedicine to support health for all, releasing a major report in 2010 entitled *Telemedicine: Opportunities and Developments in Member States*, which was considered to be a recommendation in the WHO guide to digital interventions for health system strengthening in 2019. It recommends that national digital health strategies support all telemedicine interventions and include leadership and governance, strategy and investment, infrastructure, legislation, policy and compliance, workforce and services and applications. A major challenge facing developed and developing countries today is the inequality of access to health care resources. Based on information and communication technologies (ICT), telemedicine offers a possible solution to the problem by providing cross-regional, accessible and high-quality

healthcare services^{1,2)}. Telemedicine can overcome geographical and time barriers and help health care professionals exchange valuable information and provide medical services.

Telemedicine, a term originally coined in the 1970s, which generally refers to the use of modern ICTs to increase the access of medical institutions, doctors and patients to health care resources and medical information for the prevention. Therefore, it leads them to diagnosis and treatment of diseases, response to major public health emergencies, continuing education of medical personnel, interdisciplinary research, evaluation of administration and effectiveness, and others in the interest of improving public health²⁾. Use of TM will only expand if patients and providers are at least as satisfied with it as they are with in-person visits. Since deviations from expected care can result in reduced satisfaction regardless of visit quality or objective medical outcomes, it is important to understand and help shape these expectations when possible. Patients consistently report a 95-100% satisfaction rate with TM when compared to in-person appointments³⁾.

Telemedicine in Kosovo dates back to 2002 and came exactly at the time when Kosovo's health needs to recover quickly, as the state of the health system was very difficult during the time of repression. Moreover, albanian doctors took the path of exile while quick complex and immediate intervention was needed, to help the health and educational system in the field of medicine⁴⁾.

Because the Internet created new opportunities and challenges for the traditional healthcare information technology industry, using a new term to address these issues seemed appropriate. These "new" challenges for the health care information technology industry were primarily the ability of consumers to interact with their systems online. What is more, it helped them improve opportunities for facility-to-facility data transmissions. It developed new opportunities for peer-to-peer communication to-peer, "consumer to consumer"⁵⁾. As such, the "e" in e-health does not just mean "electronic," but stands for a number of other "e's," which together perhaps best characterize what e-health is (or should be).

Benefits of using eHealth:

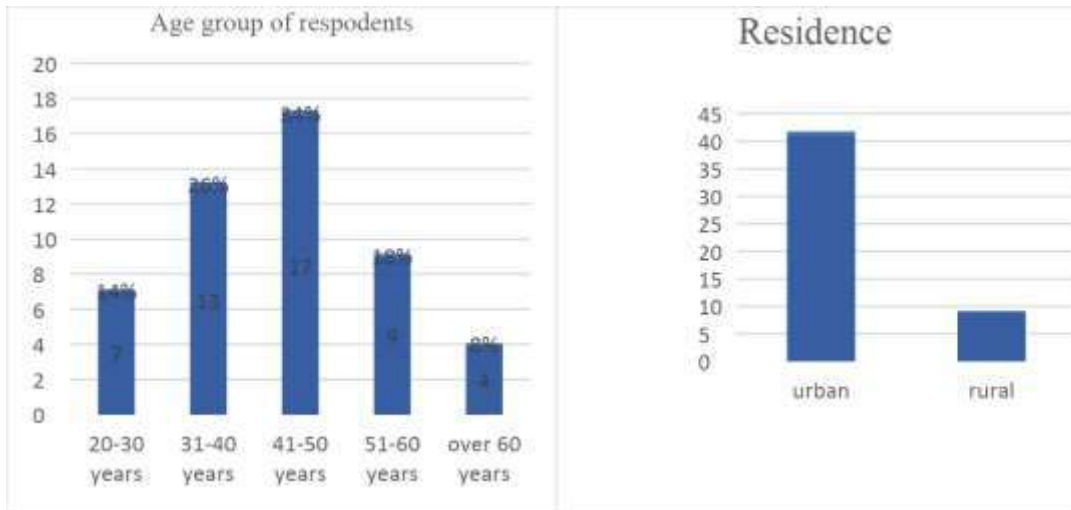
- Efficiency, Improving quality of care, Evidence-based, Consumer and patient empowerment, Encouragement, Education, Opportunities, Expansion, Ethics, Capital⁵⁾.

The purpose of the research is to learn about the use and benefits of telemedicine and eHealth in healthcare, new methods for examination, diagnosis and treatment of diseases. The methodology is a quantitative method carried out with the help of the questionnaire, while for the realization of the theoretical part, literature from the database MedLine, National Library of Medicine, Pub Med, Google Scholar was used.

The selected sample were 50 health workers from the "Isa Grezda" Regional Hospital in Gjakova who voluntarily participated in the survey, assuring them of confidentiality and anonymity.

Results

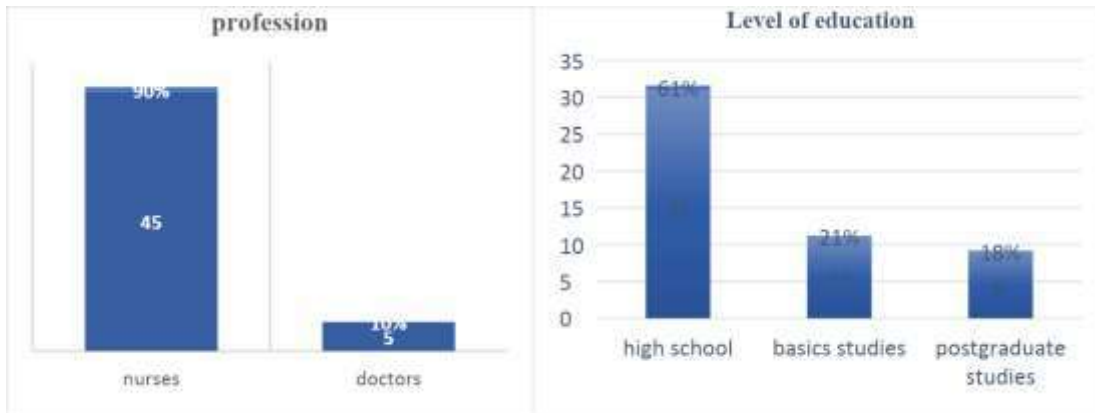
From this research, the following results are extracted, which we are presented in the form of graphs as follows:



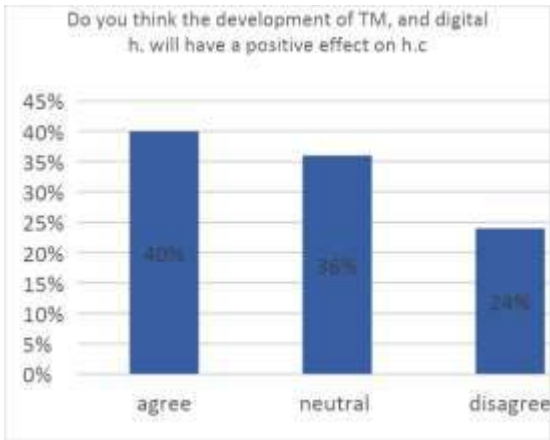
Graph 1. Age 20-30 years 14%, 31-40 years 26%. Graph. 2- participants according to place of residence

51-60 Years 18%, about 60 years 8%.

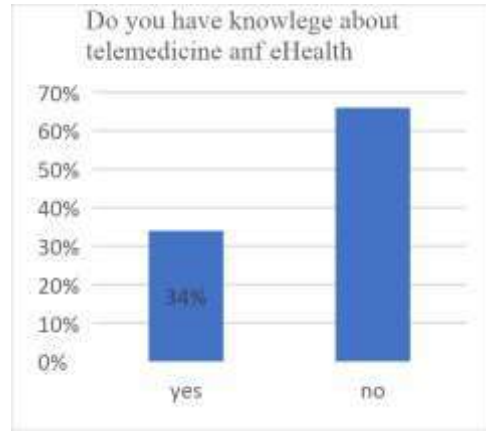
Urban: 82% ; Rural 9%



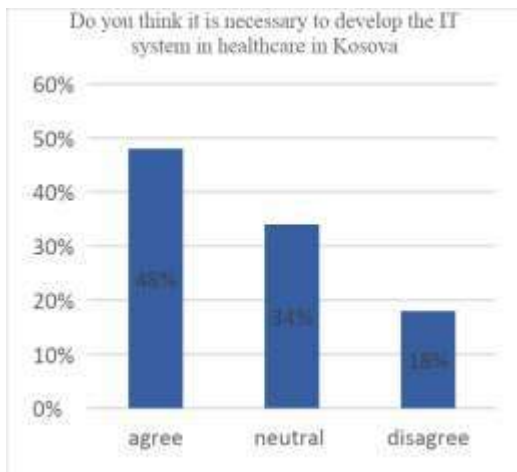
Graph 3. Participants by profession: nurse 90%; Doctor 10%. Graph. 4. Education level: high school 61%, basic studies 21%, postgraduate studies 18%



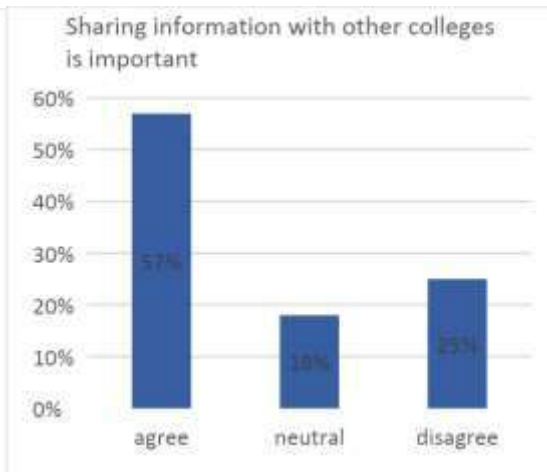
Graph.5 opinion about the effect of Telemedicine in health care: Agree 40%; neutral 36%; disagree 24%



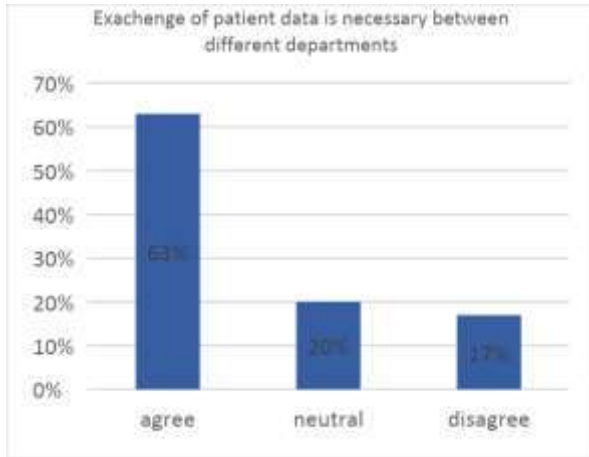
Graph.6. possession of knowledge about Telemedicine and eHealth: Yes 34%, And, No 66%



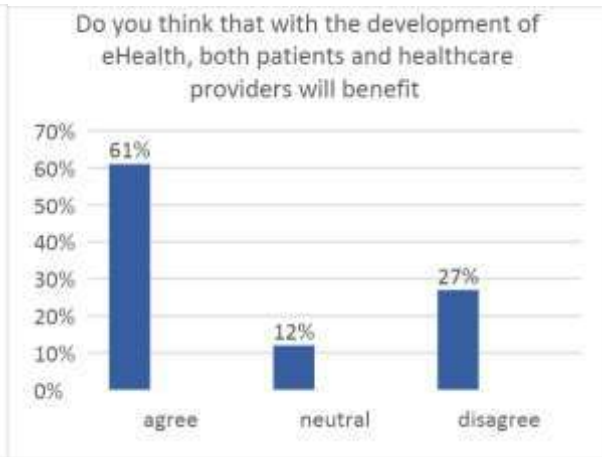
Graph.7. the need for IT development in Kosovo. Agree 48%; neutral 34%; disagree 18%



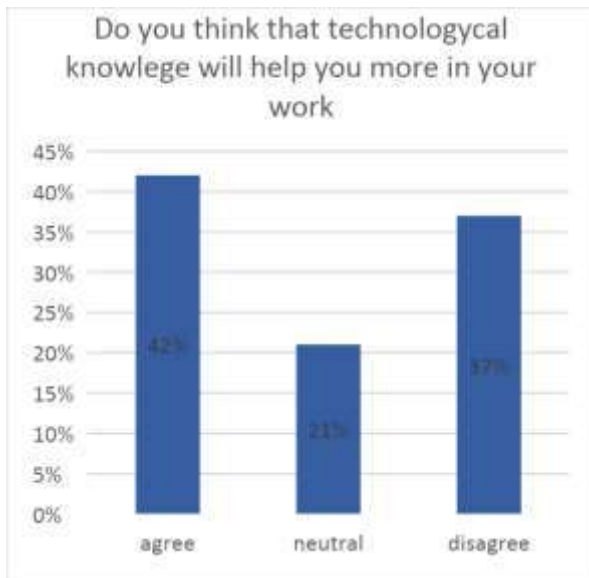
Graph. 8. sharing information with other colleges, agree 57%; neutral 18%; disagree 25%



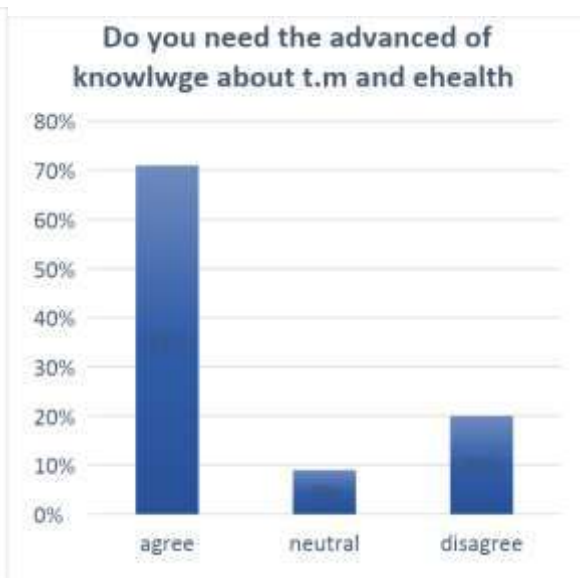
Graph. 9. Importance of sharing patient information.
 Agree 63%; neutral 20%; disagree 17%



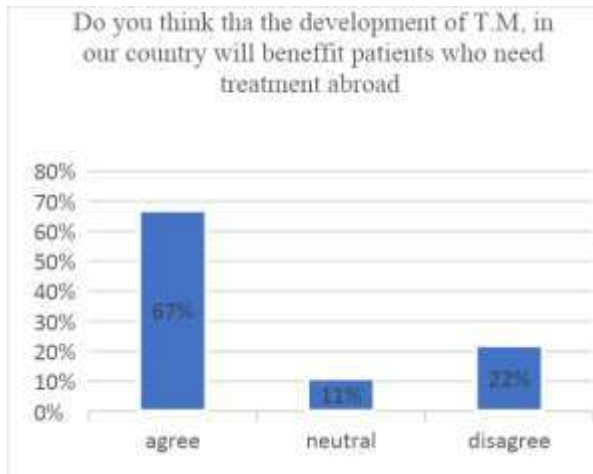
Graph. 10. the benefits of eHealth
 agree 61%; neutral 12%; disagree 27%



Graph. 11. possessing technological knowledge and helping them in their work:
 agree 42%; neutral 21%; disagree 37%



Graph. 12. advancement of knowledge about T.M. and eHealth:
 agree 71%; neutral 9%; disagree 20%



Graph.13. the benefit of patients with the development of Telemedicine:
Agree 67%; neutral 11%; disagree 22%

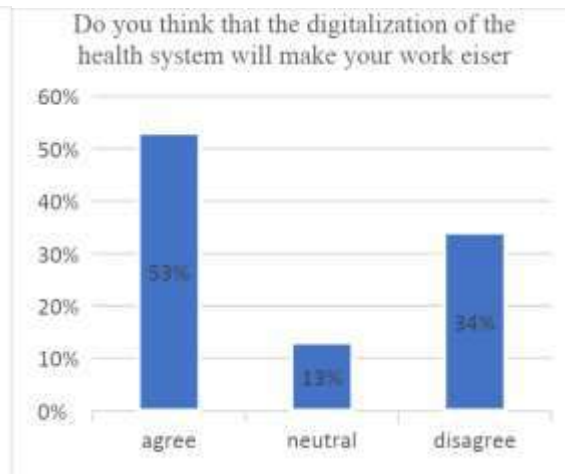


fig. 14. the impact of health digitalization at work agree 53%; neutral 13%; disagree 34%

Discussion

The technologies are considered useful in the hospital sector for both patients and healthcare providers, who use it in diagnosis and follow-up, chronic disease monitoring, rehabilitation and residential medication management of patients.

The introduction of technology and communication in health is changing the way in which health care is delivered. Initially there was a lot of skepticism about the introduction and implementation of Telemedicine (TM) in a developing country as there was not enough evidence for the successes of telemedicine. There a question comes to the discussion: how can people define eHealth in the academic setting? A member of the JMIR Editorial Board believes that the term should remain in the realm of the business and marketing sector and should be avoided in medical scientific literature and discourse. It seems quite clear that e-health involves more than simple technological development. I would define the term and concept as: "e-Health is an emerging field at the intersection of medical informatics, public health and business, referring to health services and information provided or enhanced via the Internet and similar technologies." In a broader sense, the term characterizes not only a technical development, but also a state of mind, a way of thinking, an attitude and a commitment to networked, global thinking to improve health care at the local, regional and worldwide using information and communication technology"⁵⁾.

Today, thanks to the advent of broadband communication links and advances in image compression and processing technology, telemedicine and tele-education applications are becoming realistic solutions. Taking into account the mobility of people and the obligation of the government to provide citizens with their just and ever-increasing demands for health care services is a prominent challenge. To achieve this, all healthcare providers must collaborate effectively. Information and Communication Technologies (ICT) provide the necessary infrastructure and software tools to make this connection effective; thus shifting the concept of "Health" to "eHealth". Telemedicine in Kosovo, according to health professionals, is considered a bright spot in the health

system. Digital transformation or digitization refers to "a process that aims to improve an entity/phenomenon by causing significant changes in its properties through combinations of data, technology, communication and the connections between them ⁽⁶⁾. Without a doubt, the healthcare industry is one of the largest sectors in terms of data, with up to 30% of the world's volume produced in the care industry ⁽⁷⁾. However, the challenge in health is not simply the volume of data. The sheer playability of data types is the biggest challenge. This includes patient demographics, appointments, diagnosis, pathology, laboratory tests, medications, radiology, radiation treatments, surgical treatments, post-therapy care, notes and documents, financial information, insurance and provider characteristics. However, as a result of the rapid development of technology, numerous tools and resources have been brought that classify information into different categories. eHealth systems enable, among other things, the exchange of health care, the storage of administrative data, the transfer of medical images and laboratory results. Improvement in these processes has gone hand-in-hand with technological progress that is generating ever higher resources, greater storage and processing capacities, smaller components and higher levels of safety ⁽⁸⁾.

Telehealth improves access to health services by removing time and geographic barriers. It reduces the need for in-person consultations and travel, allowing patients to receive healthcare when it is most convenient for them. Telehealth also enhances the quality of care by empowering patients through education and self-monitoring. Moreover, it is considered to be a key component in advancing integrated care and managing the demand for health sector resources⁽⁹⁾. Clinical studies have shown that telemedicine is safe and cost-effective compared to hospital treatment, especially for patients suffering from chronic diseases. In addition, it is important to note that the introduction of telemedicine services must overcome a number of obstacles such as patient acceptance, accessibility issues, technology costs, physical and psychological disabilities of patients, and the acceptance and availability of medical personnel ⁽¹⁰⁾.

Conclusion

Telehealth offers patients and providers significant benefits as a lower-cost and easier way to access quality care, but the medical community is still working to perfect the balance between technology and personal care.

Meanwhile eHealth, unlimited by time and place, offers solutions for patient empowerment and value-based healthcare. Women of reproductive age are particularly frequent users of the Internet, social media, and smartphone applications. Therefore, the pregnant patient appears to be a prime candidate for telemedicine-supported e-health care for fetal and maternal conditions⁽¹¹⁾. The implementation of eHealth systems in the public hospitals of Kosovo would have great advantages in the current infrastructure, where the Hospitals would have greater control over their workers and patients. It would also enable more accurate data on patients and treatments that would help in more accurate statistics, as well as the prevention of similar diseases by recommending different treatments, etc. The strategy for the future should include immediate and massive investment in intelligent medical systems and adaptive networks, radical improvement of systems development

methodologies, and societal transition to a "Trust Machine" mentality, where health decisions can also be made by systems and not put by the doctors. Telemedicine and eHealth are digital healthcare applications that fit well with modern life. Based on the responses of the health workers at the Isa Grezda Regional Hospital in Gjakova, we concluded that their knowledge about telemedicine and eHealth is deficient, and this is especially noticeable among older workers who at the same time express their refusal about the application of these methods. The development of the electronic system, the information system, telemedicine and digital health require considerable investments, not only in the provision of advanced technological equipment. It also shows that investments in the education and training of health personnel are required, because being based on the findings of our research, one can notice that they have very little information about the use of telemedicine and digital health, which is problematic in itself. Some of them also express their negative attitudes, namely their rejection of technological advancement, digital health and the digitization of patient data, thereby overlooking the benefits they contain for both patients and health care providers. Based on telemedicine networks, connections and information exchanges between high-level hospitals and their subordinate facilities enable the transmission of high-quality health care resources in space and time. According to the literature, doctors and nurses use the Internet mainly in two ways: (1) for communication, to send information via email, and (2) as an extensive library, to consult clinical information. Furthermore, it is mentioned that they have good computer skills, positive attitude towards using computer and internet and are motivated to use both ways in daily activities. However, some health professionals still show some resistance to accepting new technologies, even when some health sectors have started to integrate ICT in some of their areas.

In general, telemedicine refers to the use of information and telecommunications technologies to share the information and/or expertise needed for the provision, collaboration, and/or delivery of health care between geographically separated participants, including physicians and patients. Various definitions emphasize that telemedicine is an open and constantly evolving science, as it incorporates new technological advances. Moreover, it responds and adapts to the health needs of changing societies. Telemedicine supports various types of relationships between two or more actors who are not in a shared physical space. The most common relationships established are 1) professional-professional, 2) professional-professional-patient and 3) professional-patient ⁽¹⁰⁾. Telemedicine covers different forms of information: 1) transmission (voice, video, still images and text); 2) communication technologies (standard telephone line, coaxial cable, satellite, microwave, digital wireless, ISDN and Internet); and 3) user interfaces (desktop computers, laptop computers, personal digital assistants, fax machines, telephones, mobile phones, videophones, various stand-alone systems and peripherals). All of them allow for a wide range of activities, such as store-and-forward applications, which include asynchronous transmission of medical information, patient/healthcare provider communications and other data, and live audiographic meetings, which combine sound with still pictures, and perhaps, most importantly, live consultation with interactive two-way video ⁽¹⁰⁾. Telemedicine is the remote delivery of clinical and other health care services using information and communication technologies (ICT). Health professionals in developed countries use telemedicine to enhance communication with patients and professional colleagues. Indeed, the American Telemedicine Association states that "Telehealth has progressed from a curious form of clinical communication to a mainstay in the way providers and consumers interact." It is predicted that telemedicine will have a deeper impact in developing countries than in developed countries. However, successful implementation depends largely on the "buy-in" of local people as recommended by Zilgalvis and Jungmann ⁽¹²⁾.

With the rapid development of information technology (IT) and the growing need for medical services, the Internet-based healthcare system is becoming more and more common. As one of the safe and easy platforms for doctor-patient interactions, telemedicine platforms have been crucial in providing online patient consultations, especially during the COVID-19 outbreak. On the one hand, online consultation of patients on telemedicine platforms reduced face-to-face contact between doctors and patients, contributing to viral (i.e., COVID-19) transmission and infection reduction⁽¹³⁾.

Telemedicine is a sustainable investment that can be optimized through the attention that the government will pay to the following areas:

- Informing patients how to use and receive the telemedicine service;
- Security of medical data, images, text and audio to be protected;
- Accessibility and equity; analyzing how to communicate and how to better support patients and health workers who may find it more difficult to use technology; and
- Proper use, identification of services where telemedicine is valid and effective and services for which it is not suitable for the patient's needs or profile⁽¹⁴⁾.

Recommendations

- Providing affordable, accessible care for individuals with chronic health conditions will continue to be a major challenge for the health care delivery system.
- Education of health personnel about telemedicine, digital health and the benefits offered by their implementation and use.
- Reforming the health system, investment and utilization of existing telemedicine capacities in Kosovo.
- To reaffirm once again the role of telemedicine in order to communicate initially with the countries of the region, which have approximately the same level of the health system as that of Kosovo, in order to prepare the health staff for communications at higher levels.
- In addition to educating the staff about the role and importance of using telemedicine and eHealth, the population should also be educated in the context of health promotion, about the opportunities offered by the use of information technology, because among the basic human rights, among others, is the right to a second health opinion.

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COMPARATIVE ANALYSIS OF IMPORT-EXPORT OF ALBANIAN TOMATOES WITH THE 5 COUNTRIES OF THE WESTERN BALKANS

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Abstract

Albania imports and exports both fresh and processed tomatoes to meet domestic demand. The competitiveness of Albanian tomato imports and exports compared to regional countries like Kosovo, North Macedonia, Montenegro, and Greece depends on various factors. Albania has a history of importing more agricultural products than it exports. This means that the country often needs to rely on imports to fulfill its domestic demand for various agricultural goods. The competitiveness of tomato imports can be affected by production costs, including labor, land, and inputs. This study aims to assess how competitive Albanian agriculture is compared to other neighboring regional countries. It does this by taking a comprehensive approach, looking at import-export of Albanian tomatoes with Western Balkan countries. By doing this, we can gain a better understanding of the current state of Albanian agriculture in the regional context. The findings of this study highlight the strengths and weaknesses of the sector and suggest some strategic recommendations on how to improve competitiveness. The future of Albanian agriculture is expected to be shaped by integration with global markets and advancements in farming practices. To access the latest and most accurate information, it's recommended to consult trustworthy and recent sources. Recently, the agricultural sector in Albania has experienced significant transformations, as a result of changing market trends and government policies. This analysis involves evaluating imports and especially exports that affect Albania's agriculture and comparing them to neighboring countries.

Key Words: Comparative analyses, Import-Export, Tomatoes, Trade balance, Western Balkans.

1. Introduction

Albania, is striving to improve its economic growth and development to become more competitive within the region. Competitiveness includes various factors, such as economic efficiency, political stability, social progress, infrastructure, and innovation. Albania trades agricultural products with neighboring countries Kosovo, North Macedonia, Montenegro, and Greece through both exports and imports. Albania's neighboring countries import a variety of agricultural products from Albania, such as fresh and processed fruits and vegetables, dairy products, meat, and other commodities, which leads to a boost in Albania's trade revenue and economic growth. Albania

imports some agricultural products from neighboring countries to meet local demand and supplement its own production. Albania imports and exports both fresh and processed tomatoes to meet domestic demand. The panorama of the tomato commercialization must be analyzed in a turbulent agricultural market scenario due to the consumer food price crisis since 2008, as described in the Agricultural Outlook report 2014–2023, jointly developed by the Organization for Economic Cooperation and Development and the Food and Agriculture Organization (Capobianco Uriarte et al., 2021).

According to (Aksoy et al., 2021), the popularity of tomato as a crop not only applies to Balkan countries but also other major tomato producers in the world because of the fact that tomato is regarded as one of the important and indispensable agricultural product in human nutrition. The competitiveness of tomato imports can be affected by production costs, including labor, land, and inputs. Albania's cost structure in tomato production compared to neighboring countries is significant. The competitiveness of Albanian tomato imports can be influenced by their adherence to international food safety and quality standards. Meeting or exceeding these standards is essential for successful competition in the market. The competitiveness of tomato imports depends on transportation and logistics efficiency and cost-effectiveness, as well as factors like proximity, infrastructure, and trade routes. Trade policies, tariffs, and agreements with neighboring countries can impact the cost and convenience of importing tomatoes. Preferential trade agreements can give a competitive edge. Understanding consumer preferences and market demand for tomatoes is crucial for enhancing competitiveness. Government subsidies and import incentives can impact the cost and competitiveness of tomato production. The productivity and yield of tomato crops in Albania can affect import volume and competitiveness compared to neighboring countries. According to (Martinovska Stojcheska, A. et al., 2021), the changing consumer habits and retail chains pressure dictate the rules and conditions of marketing and trade of vegetables, and this pattern is increasingly transferred to the countries in the Western Balkans.

2. Methods

We have conducted a thorough research to comprehend the tomato import-export dynamics. For this purpose, we have relied on the secondary data research methodology to help us with our analysis. The data on tomato export volume and value has been sourced from World Bank sources, which provides a reliable and consistent database for global markets.

In order to make our analysis as complete and accurate as possible, we have chosen to use a combination of two analytical techniques: time series analysis and comparative analysis within the group. The combination of these two techniques is a well-known and widely used practice in scientific research to develop a deeper approach to the analysis of complex data (Ndregjoni et al., 2023; Murrja et al., 2023; Murrja et al., 2022; Lushi et al., 2023; Prendi, 2023).

By using time series analysis, we were able to analyze the trends and patterns of tomato exports over a specific period of time. This technique has allowed us to identify changes in the increase or decrease of tomato export over time, making it easier to assess temporal changes. By performing a comparative analysis within the group, we were able to compare various records of exported tomatoes especially from the data set. This method enabled us to identify significant differences and changes in the data, highlighting the various features and the influence of other factors that may have affected tomato exports during certain periods.

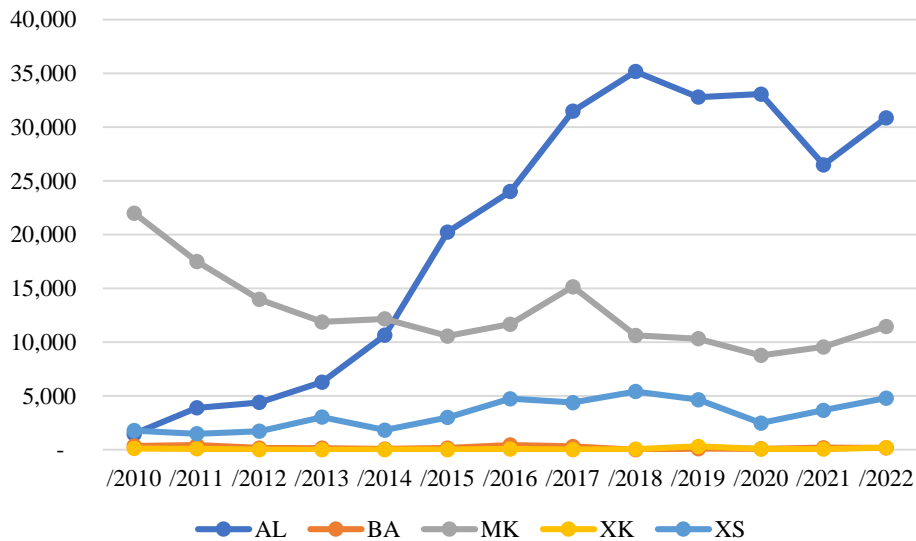
Using analysis techniques has become an effective way to understand the dynamics and trends of tomato exports. The combination of time series and comparative analysis within the group has

played an essential role in describing the market's developments. It has also helped us identify the significant factors that have influenced this sector of the market. This study utilized World Bank data to enhance clarity and consistency, resulting in reliable conclusions on tomato exports in terms of production quantity and value.

3. Analysis and Discussions

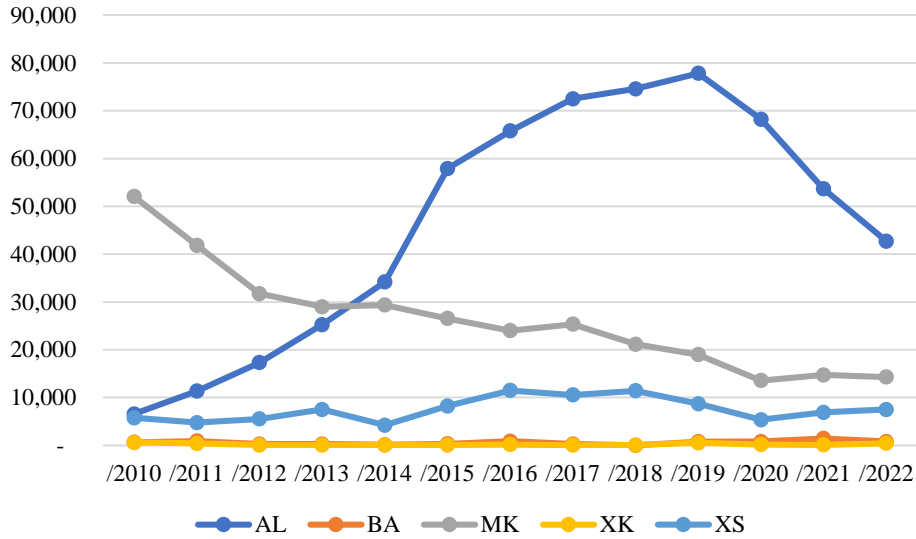
Based on the data of the World Bank for the export of tomato production in the countries of the Western Balkans for the period 2010-2022, we have done the time series analysis combined with the comparative analysis for the five countries. Fig. 1 and Fig. 2 reflect these analyzes for export in thousands of euros and tons of products. Fig. 3 reflects the ratio of export value to the exported quantity and Fig. 4 summarizes the trade balance.

Figure 1. Tomato exports in 000/euro



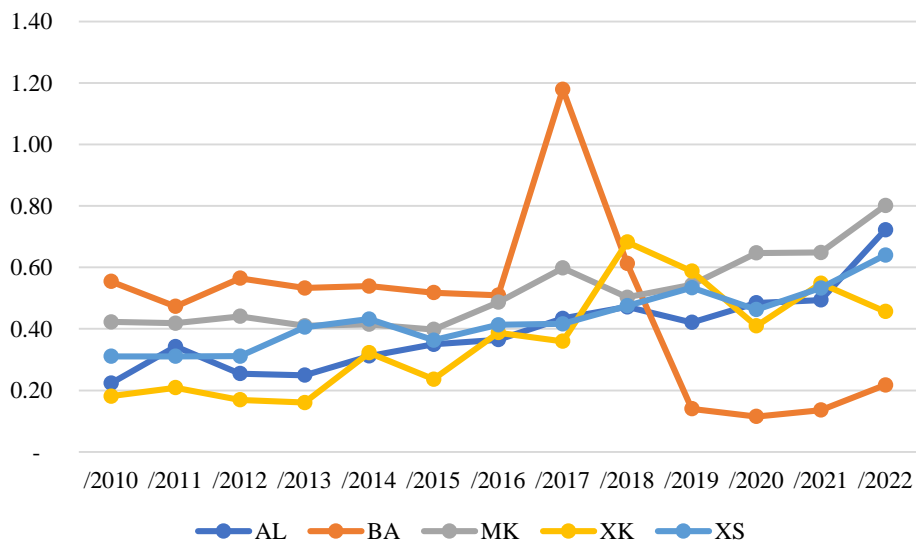
From 2010 to 2022, we see that Albania has a lead in the export of tomatoes to the Western Balkan countries. The lead is very visible every year until 2018, and the lead continues but with a downward trend. On the other hand, Bosnia Herzegovina and Kosovo have the least tomato exports, followed by Serbia and North Macedonia.

Figure 2. Tomato exports in tons



More or less, Fig. 2 presents us with the same situation as Figure 1. But in Fig. 2, the declines in exports in quantity for Albania and North Macedonia have a more visible downward trend compared to the value shown in Fig.1. This means, that the prices have been more profitable, especially after 2018. The situation is almost the same for the other three countries, Serbia, Kosovo and Bosnia and Herzegovina.

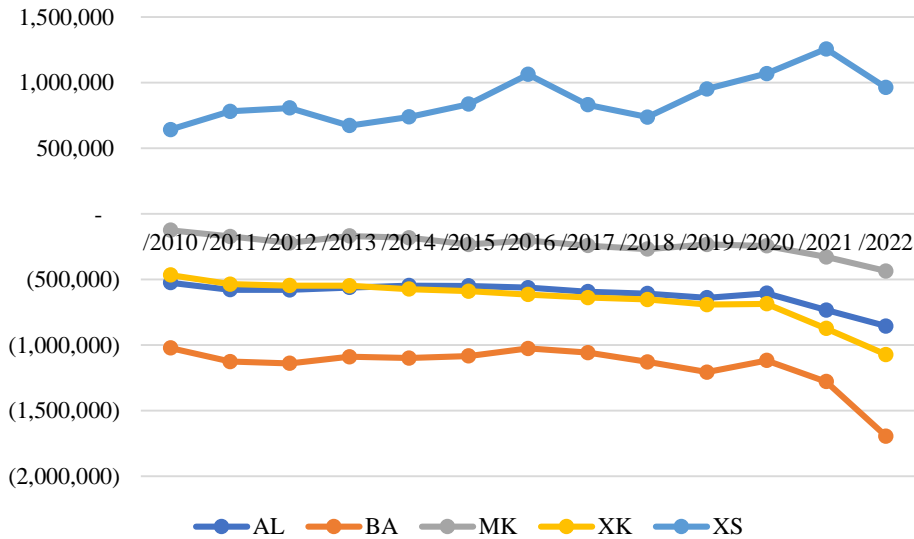
Figure 3. The ratio of exports in value to quantity



The ratio of exports in value to quantity presents us with a different approach. It suggests that until 2017, Bosnia and Herzegovina had a better performance, but after that, there was a noticeable decline. In fact, the trend is among the lowest in the Western Balkans from 2018 onwards.

Similarly, countries such as Kosovo, Serbia, Albania and North Macedonia also have a similar declining trend.

Figure 4. Trade balance



Based on the analysis presented in Fig. 1, 2, and 3, it appears that Albania and North Macedonia have a relatively optimistic outlook. Although the balance of trade in Western Balkan countries generally favors Serbia, meaning that they export more than they import, North Macedonia is in a nearly balanced position. Albania and Kosovo are in similar situations, with a heavier reliance on imports, while Bosnia and Herzegovina is in last place.

4. Conclusions and Recommendations

After analyzing the time series and comparing the export values and quantities of tomatoes produced, it appears that Albania has a clear comparative advantage with North Macedonia, Bosnia and Herzegovina, Kosovo and Serbia. This highlights the need for farmers to increase their investment in tomato production. While Albania's positive performance in the time series analysis and within the Western Balkans group is commendable, it does not translate into a positive trade balance for this crop. Serbia has a significantly higher positive trade balance than other countries in the region, while North Macedonia's balance is somewhat stable. Albania and Kosovo, on the other hand, have a negative balance and a similar trend. Bosnia and Herzegovina has the lowest trade balance among the Western Balkan countries.

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The Role of Information Technology in Health

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ABSTRACT

An important aspect of information technology in health care is the electronic health system, patient health information is stored electronically instead of using traditional files, allowing us easier access, better communication and more rapidly among health care providers.

The purpose of the paper: to learn and highlight the role and importance of the development and use of information technology in health. The methodology used: consists in the use of the quantitative method. Sample: 50 respondents from Isa Grezda Hospital in Gjakova.

Results: do you think IT development is important in your department, 74% answered that they agree, 18% are neutral and 9% disagree. On whether IT development is useful in your work for making effective health care decisions, 57% agreed, 18% were neutral and 25% disagreed. Keeping patient records in electronic form is important, 72% agreed, 10% neutral and 18% disagreed. How do you rate your knowledge about the use of IT, 21% declared excellent, 33%

average, 29% low and 9% do not possess. Discussion: Using IT reduces unnecessary waiting, medical costs, gives a competitive advantage, saves money, faster access to the right information for the patient, improves treatment for the patient, including medical records, patient records, disease histories, the vaccination calendar, the results of various tests. And it is very necessary for the functioning of IT in our country as well as in all countries of the world. Conclusion: Based on the results of the survey of the health workers of the Regional Hospital Isa Grezda Gjakova, we concluded that some of them do not possess technical-technological skills and dexterity and therefore express their refusal about the use of IT.

Key words: patient, health workers, information technology, Hospital.

INTRODUCTION

The role of IT in healthcare affects almost every area of the industry. Most commonly, "Health IT" refers to the technology and infrastructure used to record, analyze and share patient data.

This too includes several technologies, from comprehensive health data systems and patient portals to personal health devices and apps.

The common goal of any information technology in health care is to improve the health of the patient¹⁾.

The importance of IT includes helping to provide more accurate, actionable and accessible health information to patients. Supports shared decision-making between patients and healthcare professionals. Creating bonds of social support for patients and health care professionals. It enables faster and more informed decisions about health-related risks²⁾. SISH began to be implemented at the beginning of 2020. The servers were located in a data center located in Pristina. The other computers are connected by means of a zero-client device where, with its help, they are connected as a virtual computer to the data center. This connection is made via VPN. The system is divided into several roles, where the functions of the system are also assigned based on the roles. All hospitals and family medicine centers, all staff employed in hospitals, medicines, etc. are initially registered in this system. While the integration of patients in the system is done by the registers of the civil center or they will be registered by the receptionist when the first medical visit is made to them. The system is functional in all the cities of Kosovo, while as for the villages, only a small number of them have access to the system. It is expected that the network will be installed in those parts very soon and use will begin³⁾.

The rapid spread of health technologies has exposed governments to challenges in providing high-quality and effective care. Healthcare information includes sensitive data and, as such, must be secure; however, the risk of health care information leakage is increasing. Nurses manage healthcare information in hospitals; however, previous studies have either been conducted on medical workers from other professions or have not synthesized different factors⁴⁾. In medical facilities, nurses operate within large workplaces and are in contact with patients 24 hours a day. Information technology systems are important for nurses who directly produce, access and manage

healthcare information in hospitals. SI behavior of nurses can significantly affect the protection of patients' privacy by preventing leakage of healthcare information¹⁾. Nursing services is an evolving field that has been significantly impacted by the use of health technology. In this regard, some knowledge of technology/computer literacy is therefore a prerequisite for a nursing career in many healthcare settings. It is reported that healthcare providers such as nurses are designed to resist technology⁵⁾. Increasingly, information technologies (IT) are being proposed as solutions to the challenges facing health care systems, addressing population health issues and encouraging the emergence of new ways of providing health care. Although the benefits of IT implementation in health care are well documented, there remains much variation in the satisfaction levels expressed by health professionals. The professional culture of nurses is generally favorable for the adoption of innovations such as an Electronic Patient Record (EPR), but the affective response remains a critical factor influencing the decisions and behaviors of IT users⁶⁾.

The Purpose of the Paper:

To learn more and highlight the role and importance of the development and use of information technology in health.

Material and Methodology Used:

The descriptive method was used, as well as the quantitative one carried out through the questionnaire which contains 14 closed questions through which 50 health workers of the "Isa Grezda" Regional Hospital in Gjakova were surveyed. The selection of the sample was done randomly, the participation in the survey was on a voluntary basis.

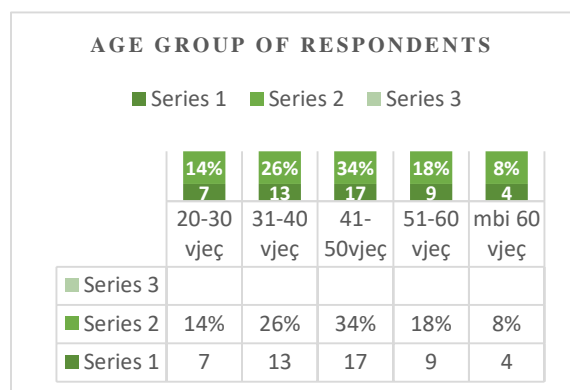
Meanwhile, the secondary data for the realization of the theoretical part, the data were provided by Library PubMed, Google Scholar, National Institute of Medicine.

Limitations: The result of this research is subject to some limitations. As respondents answered questions about their own meaning, experiences and perceptions, it is possible that the data collected may not adequately reflect the objectives of this study. However, the quality of the data collected is satisfactory in relation to the nature of the report. In addition, subjects were recruited voluntarily for this survey, although it is believed that this did not adversely affect the findings as this approach is commonly used in the field.

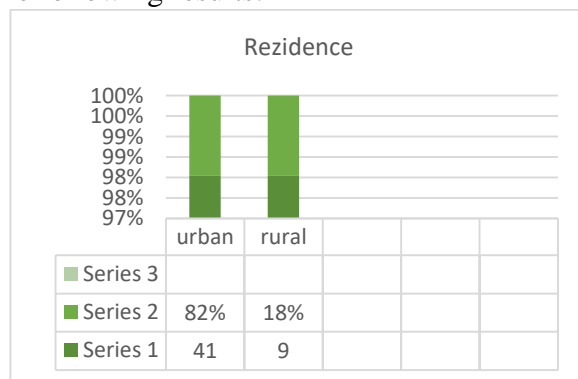
Results of the Work

Through the analysis of the data collected from the survey, we have obtained the following results which we have presented in the form of graphs.

Regarding the socio-demographic aspect, we have the following results:

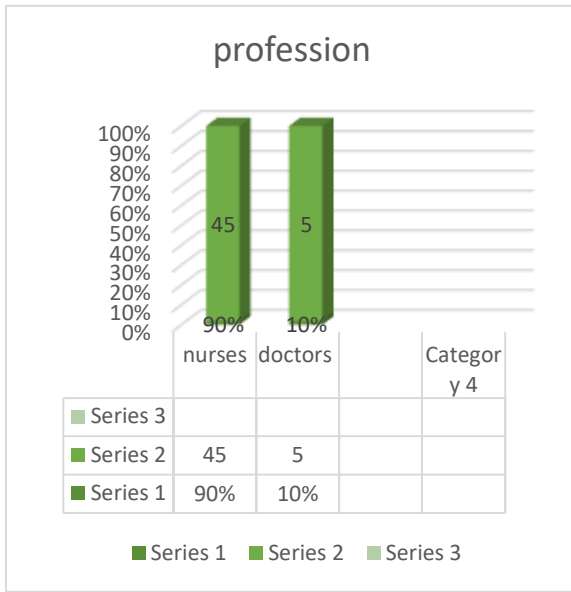


Graph.1. Age 20-30 is 14% ; 31-40 yers is 26%

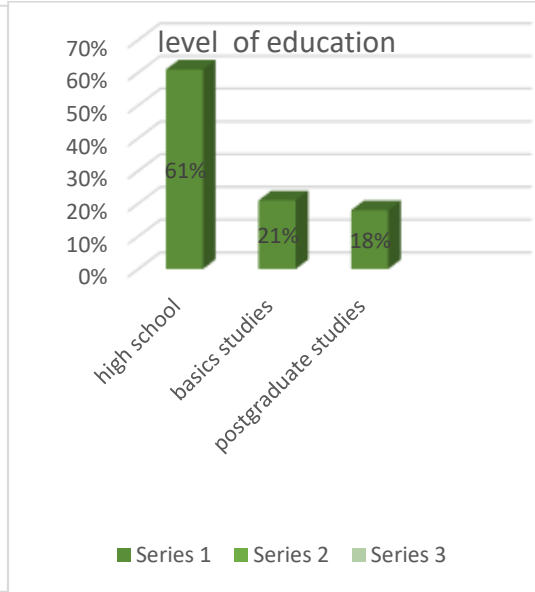


Graph. 2- participants by place of residence

51-60 is 18%, over 60 yers 8%.

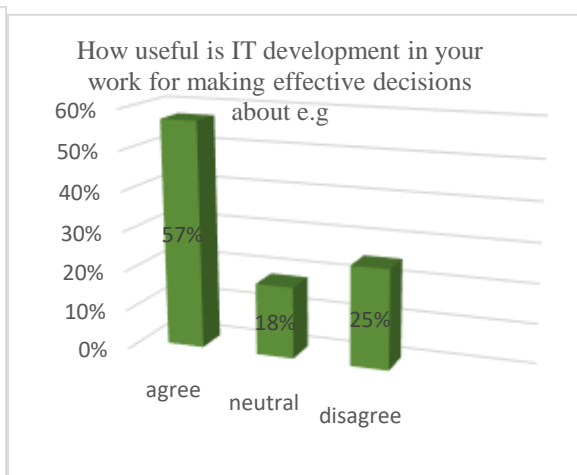
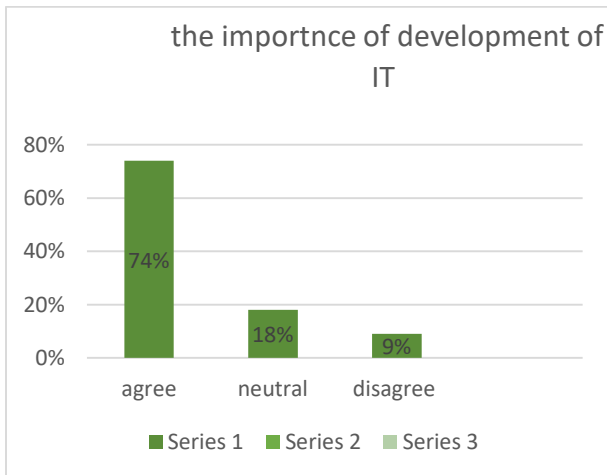


Were Urban 82% and Rural 9%



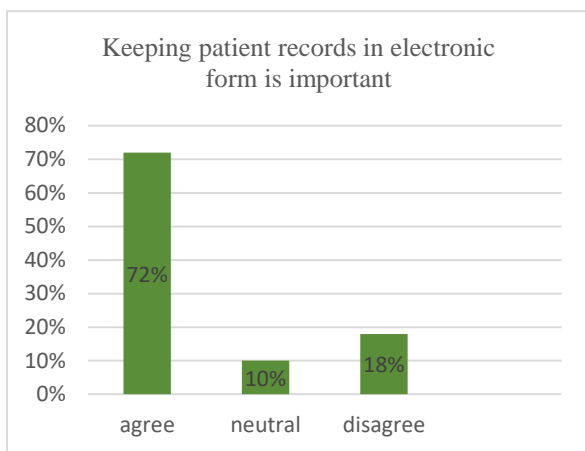
Graph. 3: Participants by profession:
Nurse 90% ; Doctor 10%
postgraduate studies 18% .

Graph.4. level of education:
Participant with high school were 61% ; basic studie s21%

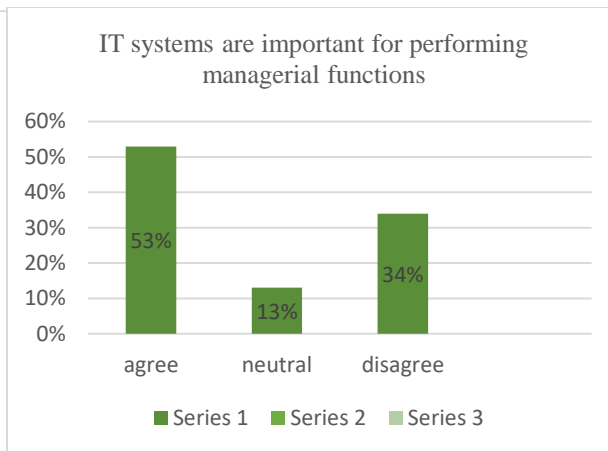


Graph. 5. The importance of the development of IT:
Agree74% ;Neutral 18% Disagree9%

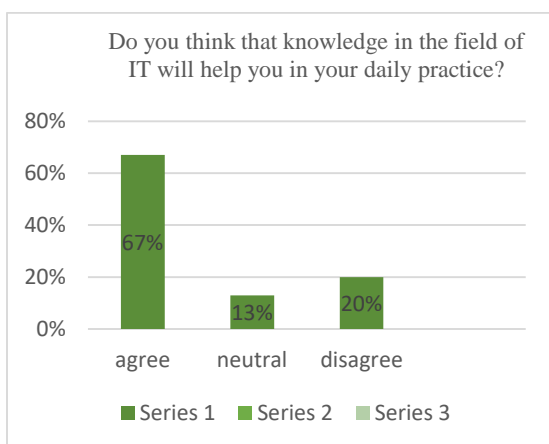
Graph.6. IT development and effective decision making
Agree 57% ; neutral 18% ; Disagree 25 %



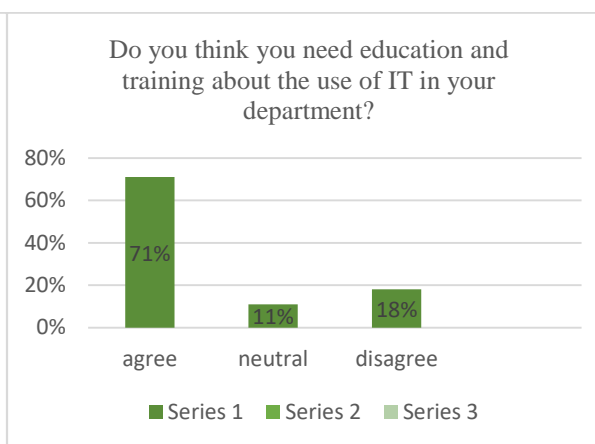
Graf.7. Patient records in electronic form
 Agree 72% ; neutral 10% ; Disagree 18 %



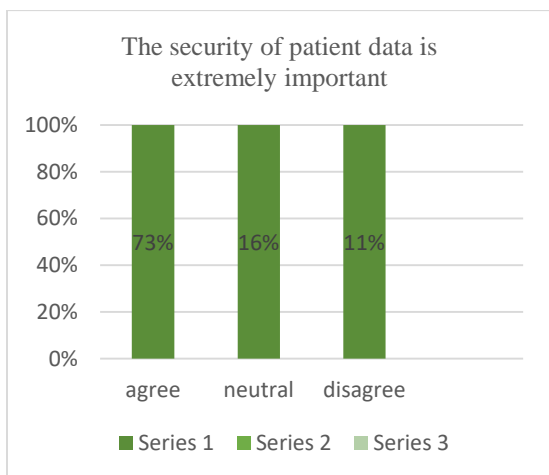
Graf8. IT and managerial functions
 Agree 53% ; neutral 13% ; Disagree 34%



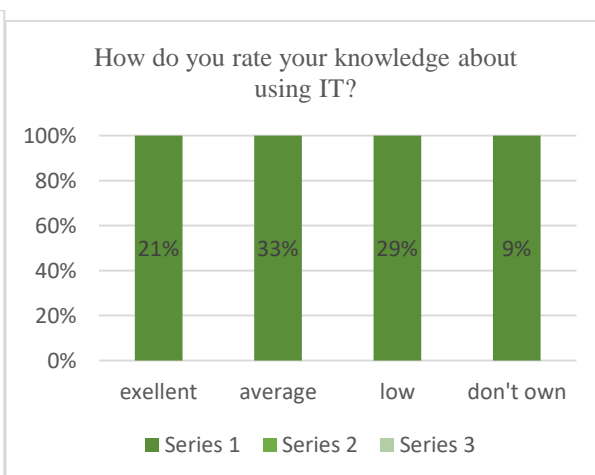
Graph.9: Knowledge about IT and daily practice
 Agree 67% ; neutral 13% ; disagree 20%



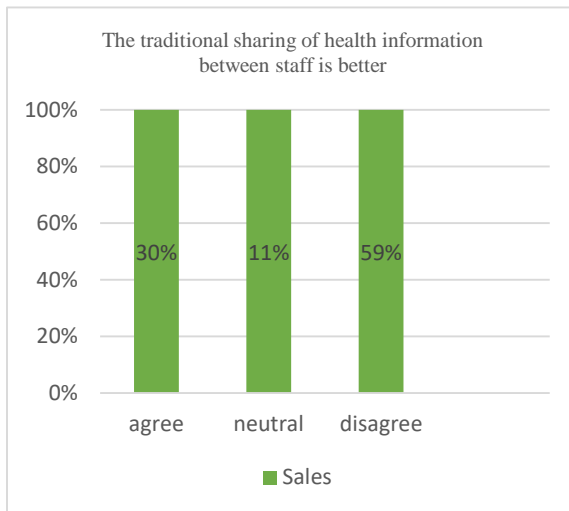
Graph.10: The need for IT education and training
 Agree 71% ; neutral 11% ; disagree 18%



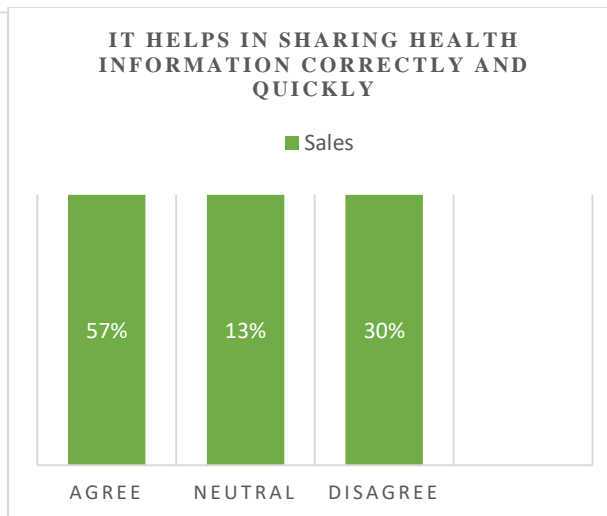
Graph.11: Security of patient of data
 Agree 73% , neutral 16% , disagree 11%



Graph.12: njohuritë rreth përdorimit të IT
 Excellent 21% ; average 33% ; low 29% ; don't own 9%



Graph.13. Ssharing important information Agree30%; neutral 11%; Disagree59%



Graph.14. Quick and accurate sharing of information Agree 57%; neutral 13%, Disagree 30%

Discussion

Using IT reduces unnecessary waiting, medical costs, gives a competitive advantage, saves money, faster access to the right information for the patient, improves treatment for the patient, including medical records, patient records, disease histories, calendar of vaccination, the results of various tests. And it is very necessary for the functioning of IT in our country as well as in all countries of the world⁷⁾. Healthcare Information Technology provides a complete and streamlined system for healthcare providers that allows them to communicate effectively with their patients and provide them with effective care. Based on the literature review, several factors at the interpersonal, intra-organizational, and inter-organizational levels important for successful information sharing have been identified. At the interpersonal level, socialization is critical as an influencing factor and a process that facilitates the sharing of information, in the form of tacit knowledge and tacit knowledge, between individuals. However, information sharing behaviors become more complicated when individuals are inside. Health Information Systems are the backbone of any modern health care system, lack of information is a major obstacle to successful health care delivery. One of the biggest needs in healthcare is obtaining, storing and accessing patient information, health information. Throughout the time, there have been many problems for both patients and health workers in the storage and access of patient data. Within the framework of the "Kosova That We Want" platform funded by FES, the Southeast European Institute for Health and Social Policy in cooperation with the NGO "Me and Per Sochërine", organized the discussion table on the topic "The Present and the Future of the Health Information System". The purpose of this roundtable was to gather key actors of the health sector and present the results of a research related to the Health Information System.

Kosovo still remains without complete and accurate information and statistics on diseases. The current information system relies mainly on paper for record keeping and, as such, is unable to provide a viable platform for the service provider to access the patient's medical history, or to extract health-related information. general population, disease burden and more⁹⁾.

The use of digital IT technology, was vital and more than necessary especially during the period of COVID-19, to provide support, medical consultation, provision of health care services and tracking the spread of the virus has been identified as a vital solution to help in inhibiting the

transmission of the virus⁴). Research shows that many health care systems were vulnerable in the face of such a pandemic, as it has exacerbated existing challenges such as staff shortages, personal protective equipment (PPE) shortages, and intensive care unit (ICU) and hospital bed capacities. This extraordinary situation imposes additional challenges on existing health care systems¹⁰). A systematic review reported that digital technology services have been the dominant strategy during the pandemic, especially for isolated people. The systematic review included eight studies showing that the use of telehealth applications in medical fields has the potential to mitigate the spread of the virus. The study examined the extent to which Australia, the United Kingdom and the United States, in the 2 weeks following the declaration of the pandemic, sought to promote telehealth as a tool that could help identify COVID-19 among older people who may live alone, weak, or isolate and provide support or facilitate treatment of people who are or may be infected¹¹).

Conclusion

The Health Information System (HIS) is a system developed or adapted for the purpose of information management, through the combination of personnel, electronic devices, computer programs and other elements to cooperate in the collection, transformation and exchange of information with health care organizations. SISH works to improve resources in the management of the organization and the provision of patient information. SISH will be oriented towards the system that collects, analyzes, stores and exchanges information in a standardized and useful way for decision-making in health care at all levels: Primary Health Care (KPSH), Secondary Health Care. (KDSH), Tertiary Health Care (KTSH). The movement of patients within the system is regulated by the referral system. Referrals are usually forwarded by the PSC (primary health care) to secondary/tertiary care in the form of a request for an opinion on a case where a diagnosis has not yet been made or completed. Referrals are made even if the necessary treatment cannot be provided by PSC. Referrals also include communication with the PSC doctor after hospital treatment. Integrated health systems are considered as solutions to challenges in the health care system^{12,13}). The health system in Kosovo is continuously facing various challenges regarding health care. Within Kosovo, the AviCenna Health Information System (SISH) is in the installation phase, this system will replace the existing data which are in the form of paper, providing an excellent overview of the health care system following the reform of health care to achieve the goals of effectiveness and efficiency. AviCenna enables the e-Health revolution in healthcare delivery. Looking from the aspect of health information and management, AviCenna is an infrastructural platform built on the basis of high standards. It automates the management of data and services in a digital environment, where it internally incorporates the results seemingly in a window, which provides immediate access to all authorized parties, such as institutions and decision makers. AviCenna provides electronic access to information related to health institutions, resource management, patient management, disease management, population health management, pharmaceutical management. The AviCenna system is an advanced system containing a wide range of medical services¹³). The AviCenna system is the first step in the transformation of health information. After the implementation of the AviCenna system, some advantages and disadvantages can be identified when comparing with paper-based documentation. The main advantage is data security where the ability to exchange health information electronically ensures quality health care for patients. AviCenna enables the provision of accurate information, with recent changes on the patient, the possibility of faster access to the patient's data as well as the

exchange of electronic information between the patient and the staff. In order to improve the health service to the citizens of Kosovo, the Ministry of Health (MOH), in 2011, tried to start the implementation of this system in three phases.

The first two phases were planned to include the piloting and implementation of the system in 30% of the country's territory and the evaluation of the piloting at the end of 2014.

Whereas, the third phase included the implementation of the system in the entire territory of the country, with the aim of being realized by 2020. However, even now in 2023, the system in question has not been realized.

Based on the results of the survey of health workers of the Isa Grezda/ Gjakovë Regional Hospital, we came to the conclusion that some of them do not possess technical-technological skills and dexterity and therefore express their refusal about the use of IT, this is observed more in old workers who are adapted to the work system by keeping notes on "papers", documents, various forms and in books. Respondents believe that advances in the field of IT in health care can be useful to supplement and enhance traditional care. However, many challenges still need to be overcome to fully consider IT use a standard of care. Strategies that can help address these challenges include additional data governance and reimbursement regulations, evidence-based guidelines for the use of telemedicine, greater integration of tools and processes, patient-centered training for physicians, materials for patients to assist patients in virtual navigation. sessions, different language options and greater involvement of caregivers in the care process.

While other countries of the world, Europe, but also the region, enjoy an integrated health system, which undoubtedly, despite the challenges, has its own benefits for both patients and health care providers, we still remain without the most basic "Health Insurance".

Although, in 2013, the Assembly of Kosovo approved the Law on Health Insurance in Kosovo (2013/04-L-249) in order to ensure the universal access of citizens and residents of the Republic of Kosovo to qualitative basic health care services, with purpose of improving health indicators and ensuring financial protection from impoverishment due to large expenses for health care, through the establishment and regulation of the public health insurance system¹²⁾.

It is very important to take into account the health system when dealing with the importance of health insurance. The importance of the health system in relation to the health insurance system consists in the fact that the very operation of these insurances is focused on the provision of services, which are performed by health institutions. Today, almost every country has integrated one or more health systems to offer great care to patients. When we say one or more systems, then at first glance we understand that these systems are connected to each other, but unfortunately this is one of the main problems we face in the field of technology.

Data exchange is very important in the healthcare industry, but poor interoperability between systems makes it difficult. Another issue, but no less important, is the security and privacy of the data stored in the system. We are aware that these systems have often been the target of attacks for stealing or hindering the work of the program. Therefore, it must be ensured that when data storage, especially data exchange, use standards and technologies that offer maximum protection. Technology's ability to change the world is no longer a foreign concept—it's a reality that is unfolding before our eyes every day, having a direct impact on all industries. When it comes to healthcare, technology is playing a role in almost all processes, from patient registration, data monitoring, laboratory tests to personal self-care tools. With the implementation of information systems in health, health providers have benefited a lot, now doctors, hospitals or clinics have an easier time treating patients because they have the opportunity to access the medical history of patients, this means that patients receive a treatment safer and more efficient.

The European Commission's eHealth Infrastructure, which refers to eHealth as "tools and services using information and communication technologies (ICTs) that can improve prevention, treatment, monitoring and management". In recent decades, there have been comprehensive strategies and plans that focus on the digitization of healthcare services around the globe, but the initiatives do not seem to have had the expected effect. In the eHealth Action Plan of 2004, for example, there are several measures to promote the widespread adoption of eHealth technologies across Europe.

Health care reforms often emphasize coordination in both the design and delivery of health care services. Both intra- and inter-organizational, vertical and horizontal coordination have become objects of increased focus in the field of health services research, for example in coordination between primary health care and specialist health care, and within different primary care providers health¹⁴⁾.

And in conclusion we can say that digitalization in health care has three main drivers: rapid technological development in data processing, ever-improving understanding of the biological basis of human life, and increasing patient sovereignty coupled with a growing desire for transparency. Prerequisites for digital medicine are the interoperability of data and the creation of a (telematics) network infrastructure¹⁴⁾. Due to the rapid advancement of digitalization, healthcare will also change. Doubts about data protection may become a thing of the past if data protection law is reformed and harmonized and new patient consent procedures are developed. New professional fields can be created and market access for innovative digital medical products can be further improved. Another important aspect that can help exploit the potential of digital healthcare is the creation of a European data space based on a technical infrastructure that supports ethics and high ethics and social standards significantly in the coming years¹⁵⁾.

Recommendations:

- Education and training of healthcare workers in the use of IT, computer science and health/biomedical informatics
- To support educational and retraining efforts for students, nurses and doctors who want to explore the possibilities of research work in health care.
- Development and redesign of work processes to provide effective feedback to doctors, nurses, logically precedes the implementation of IT to automate the work flow.
- Investments in supporting IT infrastructure to encourage, support and respond to opportunities for healthcare benefits and increased clinical performance.
- Functionalization of SISH, which generates, compiles, analyzes, communicates and uses data for the public and private health sector.
 - Implementimi i sistemit AviCenna në të gjitha nivelet e kujdesit shëndetësorë, sistem ky që do t'i zëvendësojë të dhënat ekzistuese të cilat janë në formën e letrës duke ofruar një pasqyrë të shkëlqyer të sistemit të kujdesit shëndetësor duke e ndjekur
 - reformën e kujdesit shëndetësor për të arritur qëllimet e efektivitetit dhe efikasitetit.

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Co-adsorption of Pb (II) and Cd (II) ions from aqueous solutions on MMT Prrenjas clay

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ABSTRACT

Clays are known as the XXI century materials because they are abundant, inexpensive and environmentally friendly. Water pollution from heavy metal ions with toxic substances is a major problem for human health and environmental quality. The main purpose of this study was to evaluate the performance of the adsorption of the Montmorillonite (MMT) clay of Prrenjas in natural form for co-adsorption Pb (II) and Cd (II) ions from aqueous solutions. Optimization of adsorption conditions such as (i) the interaction time, pH, temperature and amount of adsorbent, (ii) determining the adsorption capacity of Prrenjas (MMT) for the Pb (II) and Cd (II) ions have been carried out. The adsorption of Pb (II) and Cd (II) ions simultaneously presented in solutions, increases with rising contact time until equilibrium is reached. The % of adsorbed Pb(II) ions vs. contact time, starts in a linear mode until equilibrium is reached, whilst 100% of the ions in the solution are adsorbed after 60 minutes. The % of adsorbed Cd (II) ions increases with contact time until it reaches equilibrium after 120 min, being the 82 % of adsorbed Cd (II). A significant increase in the % of adsorbed Cd (II) ions is observed in the co-adsorption compared to the case when the solution contains only Cd (II) ions, where the % of adsorbed ions is 70%. This might be due to the presence Pb (II) ions, which can move the clay layers slightly apart, increasing the space between them and allowing the Cd (II) ions to move easily. Results of this study showed that Prrenjas clay can be used efficiently as an adsorbent for the simultaneous removal of Pb (II) and Cd (II) from aqueous solutions.

Key words: MMT Prrenjas clay, heavy metal, lead ions, cadmium ions, adsorption.

INTRODUCTION

Metal ions in the environment are not found alone, but are always accompanied by other metals in a wide range of concentrations. Unlike organic contaminants, heavy metals are non-biodegradable [19]. They accumulate in living organisms causing adverse effect to many vital functions [9]. That is why heavy metals like zinc, cooper, mercury, lead, cadmium and chromium have to be removed from industrial wastewater before being discharged in the ecosystem [16]. Adsorption is the most effective method for removal of heavy metal from aqueous solutions. [17] Adsorption of different metal ions by different adsorbents is selective. Adsorption of metals from solid surfaces is an important mechanism controlling trace metal concentrations. [10]. The adsorption of metals by MMT occurs through two different mechanisms [12], firstly cationic exchange occurs in the space between the layers as a result of the interaction between ions and the negative charge of the layer

and secondly as a result of the formation of inner sphere complexes through Si-O groups - and Al-O- at the edges of the clay particle. [10]. In general, the most important factors that affect the relative selectivity of the adsorption of group IA and IIA ions from solutions are their valences and ionic radius [6]. The order of adsorption appears to be proportional to the ion radius. The adsorptive qualities of transition metals can be explained using the Lewis concept of strong and weak acids and bases. According to this principle, a strong one shows high electronegativity, low polarity and small ionic radius, while the opposite is true with weak acids. Most cations are Lewis acids and most anions are Lewis bases. According to this principle, strong Lewis acids are preferred to react or form complexes with strong Lewis bases and weak acids with weak bases. [9]. The use of natural clays in the removal of heavy metals from aqueous solutions is of particular interest for environment. The present study has been carried out to evaluate the applicability of natural clay in the removal of Pb(II) and Cd(II) ions from aqueous solutions. The co-adsorption experiment of Pb(II) and Cd(II) was performed for different contact time [6]. This work has been carried out in the laboratory of Chemistry Department, Faculty of Mathematical Engineering and Physical Engineering, Polytechnic University of Tirana and will continue with the study of the adsorption capacity of Prrenjas MMT for other metals as well.

CLAY SAMPLING AND CHARACTERIZATION

Montmorillonite clay was collected from Prrenjas region in Albania. The structural formula of the Prrenjas montmorillonite is given as: $(\text{Na}_{0.42}\text{K}_{0.09}\text{Mg}_{0.034}\text{Ca}_{0.009})_2(\text{Fe}^{3+}_{1.26}\text{Al}_{0.45}\text{Mg}_{0.24}\text{Fe}^{2+}_{0.006})_2(\text{Si}_{3.69}\text{Al}_{0.30})\text{O}_{10}(\text{OH})_2$. [5]

Quartering technique was used to get a representative sample of natural clay. Before using, the natural clay became richer evacuating the roughly sediments on clear water to conserve their natural forms. The clay was then crushed ground and sieved. Physicochemical characteristics of the clays used were assessed by X-ray fluorescence technique for chemical analysis, loss on ignition and BET methodology [13]. Specific surface area was measured using the standard BET technique as described elsewhere [8], [12] based on nitrogen gas adsorption on solid surface.

ADSORBATE SOLUTIONS

Chemicals used were of analytical/laboratory grade procured from Merck. Salt of $\text{Pb}(\text{NO}_3)_2$ and $\text{Cd}(\text{NO}_3)_2$ was used as a source of heavy metal ions. pH adjustments were carried on using 0.1N HCl and 0.1N NaOH.

SORPTION EXPERIMENTS

Different sets of experiments have been conducted to study the influence of various adsorption parameters (time, pH, temperature, the mass of the adsorbent and the initial metal concentration) on the interactions of metal pollutants with the studied clays [18]. The batch adsorption experiments were carried out in 100 ml Erlenmeyer flasks by mixing clay and 50 ml aqueous solution of metal ions and agitating the mixture in a constant temperature water bath thermostat for a desired time interval and the mixture was centrifuged. The experiments were repeated with different clay amounts, adsorbate concentration, and pH of the medium, interaction time and temperature. The initial and the equilibrium metal ion concentration (mg/L) in solution were carried out using atomic absorption with air-acetylene oxidizing flame. The results are represented as metal uptake per unit weight of adsorbent (q_e) by using the following formula [14]:

$$q_e = [(C_0 - C_E)/m] \times V \quad (1)$$

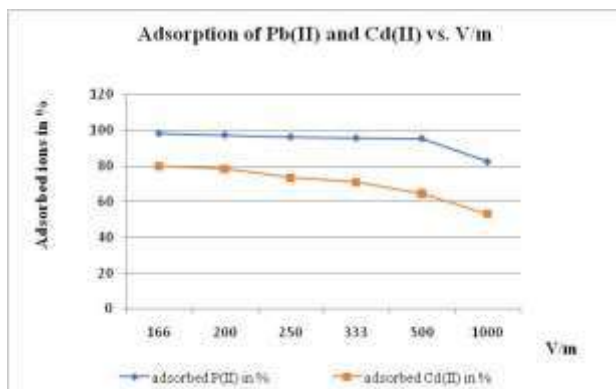
Where:

C_0 : is the initial metal ion concentration (mg/L), C_e : is the equilibrium concentration of metal ion (mg/L), m : is the mass of clay (g), V : is the volume of sample in (ml).

RESULTS AND DISCUSSIONS

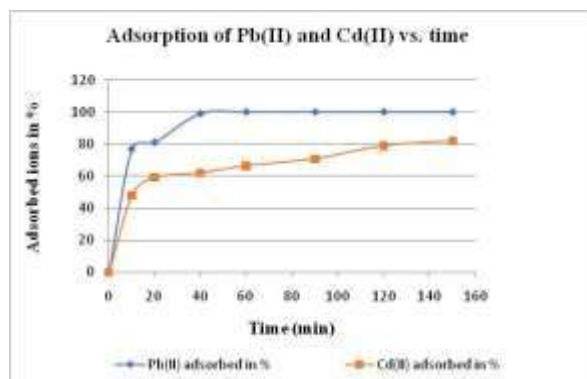
Experimental parameters such as: interaction time; pH, adsorbent amount, metal concentration and temperature have been optimized in order to achieve the maximum amount of Pb(II) and Cd (II) ions adsorbed from aqueous solutions using natural Prrenjas clay. Based on the experimental data, as the optimal time of adsorption of Pb(II) and Cd(II) ions from Prrenjas clay, for further experiments can be, 90 minutes for Pb(II) ions and 120 minutes for Cd (II). The optimal pH of the adsorption of Pb (II) and Cd (II) ions on the clay of Prrenjas can be maintained at pH = 5.7-6, while the optimal temperature can be 30°C. The optimal amount of clay during the adsorption of Pb(II) and Cd(II) ions can be 2g/L for solutions with concentrations around 10mg/L. This optimum mass was selected for the experiments carried out as it avoids the formation of adhesive gels during high adsorbent concentrations.

For the study of the adsorption of metal ions by batch techniques, it is important to determine a suitable ratio of the volume of the solution to the mass of adsorbent (V/m), which can be such that adsorption can be achieved the maximum removal of ions from the solution.



From the experimental data we note that the % of removed metal ions depends on the V/m ratio. It is clear that the % of adsorbed ions increases if the value of the V/m ratio decreases (or when the clay mass increases) and the adsorption is almost constant for high adsorbent doses. This is due to the availability of more surface area ready for adsorption.

The co-adsorption experiment of Pb (II) and Cd (II) ions was performed for different contact times. $C_0=10 \text{ mgPb(II) /L}$; $C_0=8.3 \text{ mgCd(II)/L}$.



Graph of the percentage of Pb (II) and Cd (II) ions adsorbed simultaneous vs. the contact time.

From the experimental data, it is clear that the adsorption of ions when they are both present together in solution increases with increasing contact time until equilibrium is reached. After 60 minutes 100% of Pb(II) ions are adsorbed from 95% that is adsorbed when Pb(II) ions are alone in the solution. While 82% of Cd (II) ions are adsorbed after 120. A significant increase in the % of Cd (II) ions adsorbed is observed compared to the case when the solution contains only Cd (II) ions, where the % of Cd (II) ions adsorbed is 70%.

CONCLUSIONS

All the experimental parameters should be optimized in order to achieve the maximum adsorption capacity from aqueous solutions. Adsorption of Pb (II) ions from Pprenjas clay happens quickly and in less than 40 min more than 95% of the ions in solution are adsorbed. While for Cd (II) ions, adsorption occurs more slowly, after 120 minutes 69% of Cd (II) ions have been adsorbed.

For Pprenjas clay, the optimal parameters are: contact time 90 minutes for Pb (II) and 120 minutes for Cd (II), pH 5.7-6, the amount of clay 2g/l for solutions with ions concentration of about 10mg/l, temperature 30°C.

For the co-adsorption experiment, a significant increase in the % of adsorbed Cd (II) ions is observed compared to the case when the solution contains only Cd (II) ions, where the % of adsorbed ions is 69%. This is because the adsorption of Pb (II) ions is thought to move the clay layers slightly apart, increasing the space between them. This can lead to better adsorption of Cd (II) ions on Pprenjasi clay

The results of this study showed that Pprenjas clay can be a successful, economical and environmentally friendly alternative for the removal of heavy metals from wastewaters. Therefore further studies are recommended for the adsorption of other metals and for the study of the co-adsorption process (when in aqueous solutions we have some metal ions present).

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"THE FIGURE OF THE WOMAN AS VICTIM OF A MEDIA CAMPAIGN IN HEINRICH BÖLL'S ROMAN 'THE LOST HONOUR OF KATHARINA BLUM'"

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Abstract.

Heinrich Böll is still one of the most widely read authors, not only in German-speaking countries but also beyond. His works have also aroused interest in Albanian-speaking countries, but

unfortunately not to the same extent as in German-speaking countries. With this in mind, it was thought it would be useful to study his most famous work on an academic level. Another main reason why this topic and this novel were chosen is because of what the novel is about. The power that language can have when it is manipulated in a given situation, taking it out of context or even avoiding certain facts to create the desired narrative, to the point where this manipulated language has the power to destroy the honour of an honest person.

The paper aims to analyse the protagonist of the work, the analysis and interpretation of linguistic expressions, the manipulation of information and the analysis of the media campaign of the "ZEITUNG" against the character of the novel and the political situation in Germany in the 1970s.

In preparing this theme, we've tried to highlight the role of the figure of the woman and the role of the media in manipulating information, using the method of source analysis, the method of comparative literature, the feminist method, and the method of generalization through language in action.

Keywords: Women, media campaigns, politics, Germany after the Second World War.

1. Introduction

Language is man's most important tool; it can be used to create and destroy. Language is the tool with which we can create beautiful art and literature, but it is also the tool with which we can destroy people's lives. It is for this reason that language is one of the central themes in the novel by Heinrich Böll.

Another important topic of the novel is free speech. Free speech is one of the most important parts of every democratic state, it symbolises the Freedom of expressing your ideas and opinions, but how far can free speech go, to still be acceptable? Destroying a woman's life?

Heinrich Böll's novel *The Lost Honour of Katherina Blum* is about the power of media. The media's role is to inform the public, but in the novel of Böll media falsifies the pieces of information that are given to the public, in this way the media has the power to influence the people and keep the narration that the media wants. In this case, powerless and ordinary people can be the victims of media campaigns.

The ideal victim of a media campaign would be a woman since society is more inclined to believe the news about a woman, and if that news is in the same narrative line as the stereotypes for women, it is immediately taken as true without question or doubt. This is also the central topic of this research paper to analyse the role of a woman and the reason why her gender makes her a victim of the newspaper.

2. Heinrich Böll - The engaged writer

As well as being a literary figure, Böll was a political activist and a contemporary, enlightened, and responsible citizen.

He was an idealist for his country, whose work should be seen and analyzed as a reflection of his country's consciousness. His writings should be understood as social criticism, written in his realistic style towards German society. (Manicke, 1988)

In the time of Konrad Adenauer, Böll was recognized as a protagonist of German left-wing intellectuals. He became politically active, opposing the war in Vietnam and the threat of nuclear war, but above all, he was a critic of the church authorities and a pacifist.

As for his political orientation, he remained faithful to the Ostpolitik of Willy Brandt, but never committed himself to a political party. Although he was close to Brandt, he was never a member of the SPD, unlike Grass. Despite his stance on several political issues, he did not want to be held up as an example of his political stance, as it was never his wish to become a politician. (Dückers, 2007)

One of his many clashes with politicians, as well as with newspapers, was with Springer publications, particularly BILD, which wrote a series of slanderous articles against him. Despite his efforts to calm the reports, he continued to be attacked by BILD and labelled a terrorist.

Why was Heinrich Böll offended by the newspaper? Because of the narrative the paper had created about him, which was as follows: He was a terrorist sympathiser, called for violence and was even compared to Hitler's propaganda minister Joseph Goebbels: One obituary said: Being a good man damaged his literary reputation. (Kieselbach, 2018)

Despite the efforts of the press to create a false narrative about the author, this was not achieved, because, in reality, Böll was the symbolic figure of a committed writer who participated in and commented on social events - and who decisively shaped the Federal Republic of Germany after the war.

Heinrich Böll remains one of the most vocal post-war writers, constantly expressing his revolt and criticism of society, politics and the press, without ever allowing Germany's dark past to be forgotten, but always with the idea of learning from the past and not repeating the same mistakes.

3. The figure of the woman as a victim of a media campaign in Heinrich Böll's work "The Lost Honor of Katharina Blum"

The main character of the novel is a young and honourable woman who is highly respected by her friends and employers. She lives alone and works to lead a quiet life. Katharina's odyssey begins with her inconvenient and inappropriate arrest by the police and continues with the writing of an unscrupulous newspaper story that puts her at the centre of a media campaign. It is important to note that the reader learns almost nothing about Katarina and her lost honour directly from her in the novel. On the contrary, almost all the information about her comes from various sources.

The sources of information shared with the public, the narrator divide them into two categories, primary and secondary sources.

Die Hauptquellen: Vernehmungsprotokolle der Polizeibehörde, Rechtsanwalt Dr. Hubert Blorna, sowie dessen Schul- und Studienfreund, der Staatsanwalt Peter Hach.

Die Nebenquelle, einige von größerer andere von geringerer Bedeutung, brauchen hier nicht erwähnt zu werden, das sich ihre Verstrickung, Verwicklung, Befäßtheit, Befangenheit, Betroffenheit und Aussage aus dem Bericht selbst ergeben. (Böll, H., *The Lost Honor of Katharina Blum*, 1974, page 7)

To some extent, the narrator serves as a counterweight to the actual journalist, Tötges, who is the source of the newspaper's slanderous reports. Böll's use of this narrative structure serves to give the text a kind of standard against which to measure the novel's diverse collection of facts.

Journalists and policemen, for example, are supposed to serve as public fact-gatherers, and their portrayal of Katharine can be assumed to be based on factual objectivity. However, the factual evidence presented by the broadcaster makes it clear that the alleged objectivity of journalist Tötges and the police is one-sided. Their reports are deliberately distorted and serve other interests than objective facts. (Armster, 1988)

The point of departure, we can say, which is the first act of a vicious campaign launched against our main character, is her unjustified arrest; the police entering her home is the first step taken when her reputation is compromised. Sending her to the police station, as well as the expressions used by the commissioner.

To get a confession from her side, the malicious intention to humiliate the main character is shown. With this act, verbal sexual violence became the method by which Katharina was attacked. Even in the novel, this issue is emphasised by Blorna, who believes that this is where Katharina's anger, shame and rage begin. (Böll, 1974, page 20)

During the receipt of the report by the police, some of Katharina's expressions were changed during its formulation, which caused controversy about the definitions.

To conclude the role of the woman character in the novel "The Lost Honour of Katharina Blum", we must emphasise that her gender plays an important role in the story of the novel. She is the subject of a sensitive media campaign at a time when discrimination and stereotyping of women were present in German society.

Katharina Blum is seen as a suspicious person and a media sensation, which makes it easier for the media and public opinion to condemn and criticise her actions. In the course of the novel, she becomes the victim of a media campaign that seeks to condemn her actions, using misogynistic labels and placing her in an unequal position compared to men.

Discrimination and stereotyping of women is a general problem in society and directly affects the way women are treated and seen by society and the media. In the case of Katharina, she becomes the subject of a media campaign that shows the stereotypes and discrimination against women in German society in the 1970s.

In this context, her gender is a factor that significantly affects the attacks and criticism directed at her. Stereotyping and discrimination against women in society and the media affect the public's perception of her image and the way she is treated by society.

A female character is more likely to be the victim of a media campaign because society is more likely to believe negative news and criticise women than men. In the novel "The Lost Honour of Katharina Blum", Heinrich Böll wants to highlight the commercialisation of the media, where

helpless people become the object of tabloid and sensational news. In this type of media, the goal is profit, and to achieve this goal, they go to extremes, destroying the life of an honest woman.

In this context, the character of Katharina Blum is seen as a serious victim of a media campaign to destroy her reputation and demonise her actions.

In the novel, Böll describes in detail how society's misogynistic labels and stereotypes directly influence the attacks and criticism directed at Katharina. This shows that discrimination and shaming of women are still present in our society and that women are more targeted by the media to become victims of media campaigns.

We can therefore see the novel "The Lost Honour of Katharina Blum" as a sharp criticism of media practices and a call for a change in the way the media treat public figures, especially women. Heinrich Böll wants to make the public aware of this problem and promote changes in the way the media operates in our society.

4. The use of language in the description of the figure of the woman in the novel

The importance of words and linguistic expressions is extremely important because it is through words and the manipulation of language that it is possible to manipulate the credibility of the narrative of the event and the description of the character of the image from the part of the newspapers. In the novel *The Lost Honour of Katharina Blum*, the newspaper describes Katharina Blum in several ways.

First, she is described as a "red terror bride" who supports her "seducer" and resists the police. The newspaper also calls her an "unrepentant communist" and describes her alleged links to a left-wing group.

When the newspaper identifies Katharina Blum as a suspect in a criminal case, she is portrayed as "unstable" and "dangerous". The newspaper describes her as "one of Germany's most wanted women" and provides details about her appearance and background to mobilise its readers and urge them to cooperate in the search for Katharina Blum. (Böll, Heinrich., 1974)

The language used by the newspaper concerning Katarina is highly charged and polarising. The paper portrays her as a threat to society and creates an atmosphere of hysteria and paranoia. This portrayal of Katarina Blum contributed significantly to her isolation and persecution by society, which ultimately led to her tragic fate.

It is important to emphasise the power of language, that certain words that have an impact on society when manipulated, have the power to destroy the lives of certain individuals.

5. The novel's relevance to the present day

"*The Lost Honour of Katharina Blum* was a great success for Heinrich Böll. Out of political opportunism, some magazines stopped printing their bestsellers in the weeks following the publication of Böll's novel, because this author's work was selling so well. What Böll wrote touched people's hearts and exposed the intrigues of the media and state structures. (Kieselbach, 2018)

Today, the issue that Böll tackled in the 70s seems more relevant than ever. When Böll wrote his work, the media had not yet reached the dimensions it has today. Nowadays, the media has a huge impact on every aspect of life, influencing the way we think and perceive everyday events. By shaping the narrative of events and manipulating language, the media gives events a new shape.

The novel is still relevant today because its themes are still relevant in today's society. Media sensationalism and the media's tendency to jump to conclusions without proper evidence is still a problem in modern times. The novel also explores issues of government surveillance and the balance between personal privacy and national security, which remain controversial in many countries.

6. Conclusions

The central theme of Heinrich Böll's (1974) novel *The Lost Honour of Katharina Blum* is the power of the media press. Böll's work shows how media violence, through violent language, can eventually lead to violence and tragedy in real life. This theme is illustrated through the life of the novel's main character, Katharina.

The novel "*Katharina Blum*" by Heinrich Böll, known as a ruthless critic, created a controversy after its publication. It has been suggested that the novel was the author's response to the *BILD* newspaper's smear campaign against him, as well as an attack on the hypocrisy of society. In Germany in the 1970s, "*Katharina Blum*" was caught up in the tensions surrounding the Springer publishing house and its special relationship with left-wing political activism.

Through this novel, Böll discovered the machinery of society, the manipulations of the media and the police. For this reason, it can be considered one of Heinrich Böll's best literary works.

Katharina Blum's *Lost Honour* is undoubtedly the most important work to date, reminding us of media politics and the dangers of social conformity, and calling for more individualism and critical thinking.

It is important to emphasise the role of her gender, because her gender plays an important role in making Katharina the subject of a sensational campaign in the media, at a time when discrimination and stereotyping of women were very present, thus making Katharina a media sensation and putting her private life at the centre of society to judge and criticise her as much as possible.

In this way, Katharina becomes the victim of a campaign to delegitimise her actions, with the media using misogynistic, sexist and even radical labels. What stands out in this elaboration is society's approach to this news and Katharina. Since society does not question or doubt what is fed by the media, it even goes so far as to send Katharina various threats.

Through this work, Böll also criticises German society, which takes the real news as it is offered by the media, without checking it out.

It is important to emphasise that powerless people with political or social positions become objects of blackmail and sensational news, where their lives and honour are destroyed for the sake of profit.

Therefore, we can say that this novel is a harsh criticism of media practices, but at the same time, it can be seen as a call for public awareness to question what they read and to urge the media to change, reveal and report the truth, not to blackmail and be biased.

The work of Heinrich Böll, seen in its overall context, shows how the operation of newspapers and other media can lead to the violation of individual freedoms and rights, resulting in the victimisation of people within an unaccountable system.

Today, the media and news are extremely important and one of the main topics of discussion in our society. How language is used and manipulated by the media for specific purposes is a disturbing problem in society. Therefore, Böll's novel can be seen as a critique of the media and its unethical and irresponsible methods that affect the process of gathering information and then manipulating it for specific purposes.

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Challenges and opportunities of the green economy - case study Kosovo

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Abstract

This paper outlines essential policy priorities to facilitate a green recovery in Kosovo, specifically addressing carbon and energy intensities. Kosovo's heavy reliance on coal in electricity generation

within the Western Balkans necessitates urgent transformative measures. Prioritizing energy efficiency, particularly in buildings and heating systems, is crucial for substantial emissions reduction and improved energy accessibility.

Kosovo is in the early stages of exploring intermittent renewables like solar and wind energy. To maximize progress, creating a supportive environment for renewable initiatives is imperative. This includes implementing market-driven support mechanisms, ending subsidies for coal, and enhancing electricity system flexibility. Addressing high transmission and distribution losses is also crucial for overall efficiency.

To align with global energy transitions and access foreign financing, Kosovo must establish greenhouse gas emissions targets following international best practices. Formulating an inclusive strategy for a low-carbon transition is vital to meet sustainable practices and international expectations.

The paper emphasizes the pivotal role of the green economy in supporting economic growth, attracting investments, and enhancing competitiveness. The shift from a conventional economic model to a green paradigm is deemed essential for overall well-being, encompassing economic considerations, environmental preservation, and the adoption of alternative energy sources within the framework of international strategic priorities.

Key words : Green Economy, Economic Growth, development, Kosovo.

1. INTRODUCTION

This paper seeks to examine the commitment of Kosovo to the principles of green growth and aims to analyze the inherent opportunities and challenges associated with establishing conditions conducive to sustainable growth in the region. Recognizing and addressing political, economic, and legal constraints are identified as imperative measures to overcome obstacles hindering the expeditious development of the green economy. Consequently, the paper endeavors to meticulously investigate potential strategies for surmounting these identified barriers.

The intricate interplay between economic growth, sustainable development, and the trinity of political, economic, and social stability is emphasized. The proposition that economic development is intricately tied to a pristine environment, a secure energy supply, and a populace in good health underscores the complex interconnectedness of these multifaceted elements.

The paper explicitly outlines its objective, which is the comprehensive analysis of key indicators influencing the growth and development of the green economy. The selected indicators, ranging

from GDP per capita to general government gross debt, export of goods and services, final consumption, gross savings, and current account balance, collectively provide a holistic view. The utilization of data from the World Bank not only enhances the credibility of the analysis but also ensures a globally informed perspective.

The imperativeness of environmental conservation has assumed a focal position within international strategic frameworks. At the crux of this emphasis lies the acknowledgment that the green economy serves as a pivotal catalyst for economic growth, investments, and competitiveness. The transition from a traditional economic model to a green paradigm is recognized as a substantial endeavor, integral to the advancement of societal well-being. This transformation encapsulates the dual objectives of environmental preservation and the adoption of alternative energy sources.

In light of the acknowledgment of the centrality of growth and the embracement of the green economy concept, Kosovo has committed to the principles of green growth. This study seeks to systematically analyze the associated opportunities and challenges, with the objective of delineating the requisite conditions for fostering sustainable growth in the region. The examination is contextualized within the framework of prevailing political dynamics and the economic and legal constraints that hinder the expeditious development of the green economy. Additionally, the paper explores prospective strategies aimed at overcoming these identified impediments.

The symbiotic relationship between economic growth, sustainable development, and political, economic, and social stability is posited as an intrinsic condition. It is asserted that genuine economic advancement remains elusive without concurrent considerations for a pristine and secure environment, a dependable energy infrastructure, and the overall well-being of the population.

A principal objective of this paper is to conduct a comprehensive analysis of key indicators influencing the growth and development of the green economy. The selected indicators span a spectrum of economic variables, encompassing GDP per capita, general government gross debt, export of goods and services, final consumption, gross savings, and current account balance. This analysis will be underpinned by data sourced from the World Bank, thereby ensuring a robust and globally informed perspective.

2. LITERATURE REVIEW

Literature review focusing on the investigation of the relationship between carbon dioxide emissions and economic growth. Various authors have explored this connection, offering diverse perspectives based on their studies conducted across different countries, time periods, and methodological approaches. The presentation and discussion of the findings aim to offer a comprehensive overview of the existing research landscape, shedding light on the complexities and nuances inherent in understanding the intricate interplay between carbon dioxide emissions and economic growth. This synthesis encompasses a synthesis of diverse viewpoints, contributing to a more nuanced understanding of the multifaceted relationship under examination.

Literature on Kosovo highlights the significant challenges it faces, with environmental issues emerging as a prominent concern. Waste management, a critical aspect of environmental conservation, has been identified as a field requiring urgent attention due to its potentially harmful impact on the environment. The reliance on an outdated lignite-based thermal power plant as a

primary source of energy further complicates Kosovo's challenging environmental situation, particularly considering its non-compliance with EU regulations.

Amidst these challenges, the literature advocates for transformative measures, emphasizing the inefficiency in current waste management practices. Municipal waste management, conducted by contracted companies, often leads to the disposal of household waste in designated landfills, exacerbating environmental risks. A proposed potential solution involves establishing an incineration plant, presenting an innovative approach to energy production through waste incineration.

Furthermore, the literature underscores the importance of solar energy projects in Kosovo. With abundant sunlight, a solar plant is considered not only necessary but also a practical and profitable initiative. Exploring the interplay between inefficient waste management, environmentally unfriendly energy sources, and their negative environmental impact is a focal point in the literature.

The scientific work published by the author Dallku (2020) significantly contributes to this discourse. Dallku examines the potential benefits of implementing incineration and solar energy plants in Kosovo, elucidating how these projects can not only mitigate environmental risks but also stimulate economic growth. The discussion encompasses an analysis of associated risks, budgetary considerations, and costs involved in the construction of such plants. Furthermore, the thesis explores financing methods, emphasizing alignment with the legal framework in Kosovo, primarily based on EU directives.

Thus, the urgent need for transformative environmental measures in Kosovo is acknowledged, and Dallku's thesis emerges as a valuable contribution, offering a comprehensive analysis of the feasibility and potential positive impacts of implementing incineration and solar energy plants in the region (Dallku, 2020).

According to a study conducted by authors Ketikidis et al. (2023), the global significance of environmental issues has intensified, necessitating a delicate balance between economic growth and sustainable development, particularly for transitioning economies. This research focuses on the construction industry in Kosovo, a region undergoing significant transformation. The study employs a cross-sectional survey design involving 124 construction companies, aiming to assess the intricate relationship between green supply chain management (GSCM) practices, environmental pressures, and environmental performance of these companies. The structured questionnaire used in the survey, developed based on previous research, serves as a comprehensive tool for assessing GSCM practices, environmental pressures, and company performance, taking into account the characteristics of respondents and the company.

Regression analysis of the collected data reveals essential insights. It indicates that Green Supply Chain Management (GSCM) practices and environmental pressures significantly predict the GSCM performance of construction companies in Kosovo. However, an interesting nuance arises as GSCM pressures do not seem to mitigate the effects of GSCM practices on company performance. The findings underscore the importance of GSCM practices and regulatory pressures in shaping the environmental performance of construction companies in Kosovo.

The study by Ketikidis et al. (2023) substantially contributes to the literature by exploring these complex relationships in a specific context – companies in the Southeast European region, particularly in Kosovo. This focus on a transitional economy adds a unique dimension to

understanding how environmental practices and pressures influence the performance of construction companies. In conclusion, this study provides a framework for analyzing the relationships between environmental practices and performance, offering valuable insights for both academia and practitioners in transitional economies. The emphasis on the construction industry in Kosovo contributes to the limited research in the Southeast European region, highlighting the importance and applicability of green supply chain management practices in economies undergoing significant transformation (Ketikidis et al., 2023).

According to a study conducted by authors Lajqi et al. (2020), there is an urgent need for Kosovo to address the challenges of greenhouse gas emissions and decarbonization of its energy sector. With an overwhelming majority of 91.43% of installed capacities for electricity production relying on coal-fired power plants, the study explores the potential of harnessing renewable energy as a decisive strategy to combat the high pollution resulting from the current coal-based system. This paper systematically examines the landscape of renewable energy in Kosovo, utilizing measurements of wind, solar radiation, biomass, and average water flows in various locations to assess their potential for utilization. The aim is to provide insights into the feasibility of transitioning to renewable technologies. The review includes an analysis of existing and future renewable energy projects integrated into the electricity sector, offering a comprehensive overview of efforts made in this direction.

The study evaluates a significant potential for a 54% reduction in carbon dioxide emissions in the energy sector, considering the maximum potential of biomass, wind, and solar renewable energies compared to a reference scenario. This discovery underscores the substantial impact that a shift towards renewable sources can have on environmental mitigation. The presented results in this paper contribute valuable information, highlighting pathways for identifying the potential utilization of renewable resources and providing an overview of current and planned renewable energy projects within the Kosovo Energy Sector. This study adds a crucial dimension to the literature by offering practical insights into the potential integration of renewable energy in a region heavily dependent on coal, providing a foundation for informed decision-making and policy formulation in the pursuit of sustainable energy alternatives in Kosovo (Lajqi et al., 2020).

The study conducted by authors Chang and Hao (2017) examines the complex interaction between environmental performance, corruption, and economic growth using panel data from 87 countries spanning the years 2002 to 2012. Particularly, this research is pioneering in utilizing the Environmental Performance Index to assess environmental quality in the context of its impact on economic growth. The study employs static and dynamic panel models, revealing nuanced insights into the relationships among these key variables. The findings of the study highlight a positive relationship between environmental performance and economic growth, with this link being more pronounced in non-Organisation for Economic Co-operation and Development (OECD) countries. The inclusion of corruption in the analysis further complicates the dynamics of these relationships. Lower corruption is identified as a factor supporting economic growth, especially in non-OECD member countries.

However, the study presents a crucial dimension by demonstrating that the positive effect of environmental performance on economic growth diminishes when corruption is taken into account. Furthermore, the negative coefficients of interaction terms suggest that higher environmental performance, coupled with abundant natural resources, may result in inefficient bureaucracy, subsequently hindering economic growth. These findings underscore the need for

careful consideration by policymakers, especially in non-OECD countries. While strong environmental performance is positively linked to economic growth, the study emphasizes the importance of ensuring better government quality to mitigate any potentially adverse impact on economic growth. This cautionary note highlights the multifaceted nature of the relationship between environmental performance, corruption, and economic growth, encouraging policymakers to adopt a comprehensive approach that considers both environmental and governance factors (Chang & Hao, 2017).

According to the study conducted by Wang and Zhang (2018), the ongoing policy debate on the relationship between economic growth and CO₂ emissions is enriched by considering the moderating influence of corruption. This research introduces a novel conceptual framework to explore the complex dynamics between economic growth, corruption, and carbon dioxide emissions, using a fixed-effects panel regression model for BRICS countries covering the years 1996 to 2015. The study underscores the importance of corruption as a factor that not only increases pollution at certain income levels but also dampens income for growth.

Empirical findings reveal that the moderating role of corruption is crucial in shaping the relationship between economic growth and CO₂ emissions. Particularly, corruption control emerges as an influential factor in reducing CO₂ emissions, offering a potential avenue for policymakers to address environmental concerns. The research delves further into the moderated effects of corruption within specific links in the growth-emission relationship for BRICS nations. A significant moderating effect of corruption is observed in the relationship between urbanization and carbon dioxide emissions, signaling weak environmental performance within BRICS countries. Furthermore, the study identifies a mitigating effect of corruption in the relationship between trade and CO₂ emissions. The novel findings not only contribute to the existing literature but also offer a clearer and nuanced understanding of the growth-emission relationship, especially in the context of BRICS economies. The application of partial least squares regression modeling and the confirmation of results through variance importance analysis enhance the reliability of the study's findings (Wang & Zhang, 2018).

3. RESEARCH METHODOLOGY AND DATA

In this section of the chapter, descriptive statistical results regarding key indicators of green economic growth for the Republic of Kosovo are presented. The data presentation covers the period from 2005 to 2021 (the latest year for which data is available).

Table 1. The Economic Situation in the Republic of Kosovo

Year	GDP	Income per Capita	Human Development Index
2005	6.03	2754.54	0.77
2006	3.67	2852.45	0.78
2007	7.29	2914.24	0.79
2008	6.30	2965.45	0.79
2009	3.60	2847.56	0.79

2010	4.94	3009.56	0.80
2011	6.32	3540.89	0.80
2012	1.71	3410.86	0.75
2013	5.34	3704.78	0.76
2014	3.35	3902.68	0.76
2015	5.92	3520.77	0.79
2016	5.57	3759.56	0.79
2017	4.83	4009.38	0.80
2018	3.41	4384.05	0.80
2019	4.76	4416.11	0.77
2020	-5.34	4310.81	0.78
2021	10.75	5269.78	0.73

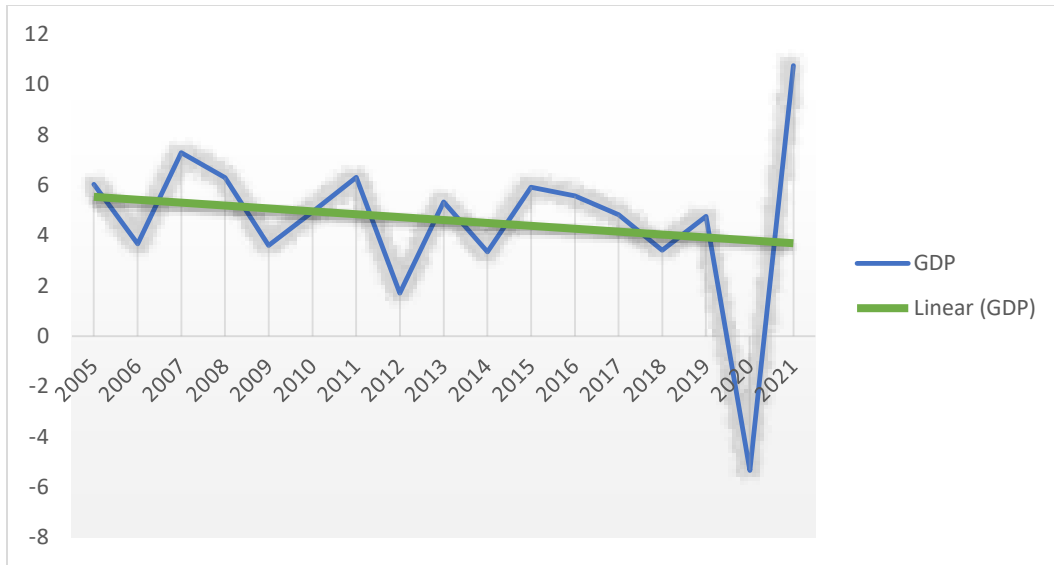
Source: World Bank

Based on data spanning from 2005 to 2021, there is an observable fluctuation in the economic performance and human development of Kosovo. Economically, Kosovo has experienced significant development with a notable increase in Gross Domestic Product (GDP), reaching a figure of 10.75% in 2021. However, there have also been periods of economic decline, particularly in 2020 when GDP witnessed a contraction of -5.34%, a period potentially influenced by the global COVID-19 pandemic.

Simultaneously, Kosovo's Human Development Index (HDI) has shown continuous improvement, with a significant enhancement in 2011 and a high level sustained at 0.80 since 2010. Nevertheless, in 2021, there is a slight decrease in HDI, reaching 0.73. These fluctuations may be associated with various factors, including investments in education, healthcare, and economic challenges intertwined with global events.

In general, when assessing economic growth and HDI improvement together, Kosovo has undergone a challenging journey but with noticeable progress in certain aspects of human and economic development. To understand more deeply, it is necessary to analyze the broader context of politics, economy, and society in Kosovo.

Figure 1. Economic Growth Trend in the Republic of Kosovo (2005-2021)



Source: World Bank

The above figure depicts the linear trend of economic growth in the Republic of Kosovo. According to the presented data, the only year where the economic performance of the Republic of Kosovo is negative is 2020 due to the global crisis caused by the COVID-19 pandemic. However, when comparing the overall economic growth, it indicates a declining trend, thus negative.

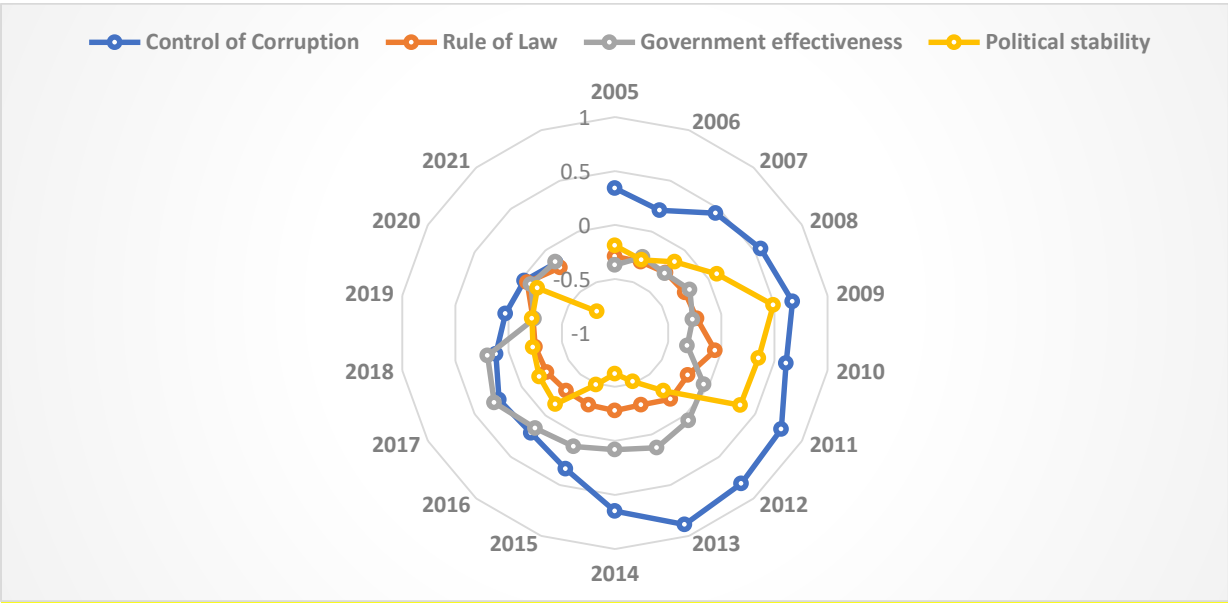
Table 2. Financial and Political Stability Index in the Republic of Kosovo

Year	Control of Corruption	Rule of Law	Government effectiveness	Political stability	Financial freedom
2005	0.34	-0.29	-0.37	-0.19	40.00
2006	0.21	-0.30	-0.25	-0.28	40.00
2007	0.45	-0.27	-0.28	-0.14	40.00
2008	0.56	-0.25	-0.20	0.09	40.00
2009	0.67	-0.23	-0.27	0.49	30.00
2010	0.61	-0.06	-0.32	0.35	30.00
2011	0.78	-0.22	-0.05	0.34	30.00
2012	0.82	-0.20	0.06	-0.30	40.00

2013	0.89	-0.29	0.13	-0.52	50.00
2014	0.65	-0.28	0.08	-0.62	50.00
2015	0.34	-0.29	0.12	-0.49	50.00
2016	0.21	-0.30	0.15	-0.14	60.00
2017	0.24	-0.27	0.29	-0.19	60.00
2018	0.12	-0.25	0.20	-0.23	60.00
2019	0.03	-0.23	-0.24	-0.22	70.00
2020	-0.03	-0.06	-0.10	-0.17	70.00
2021	-0.15	-0.21	-0.14	-0.74	70.00

Source: World Bank

Figure 2. Comparison of Index Values



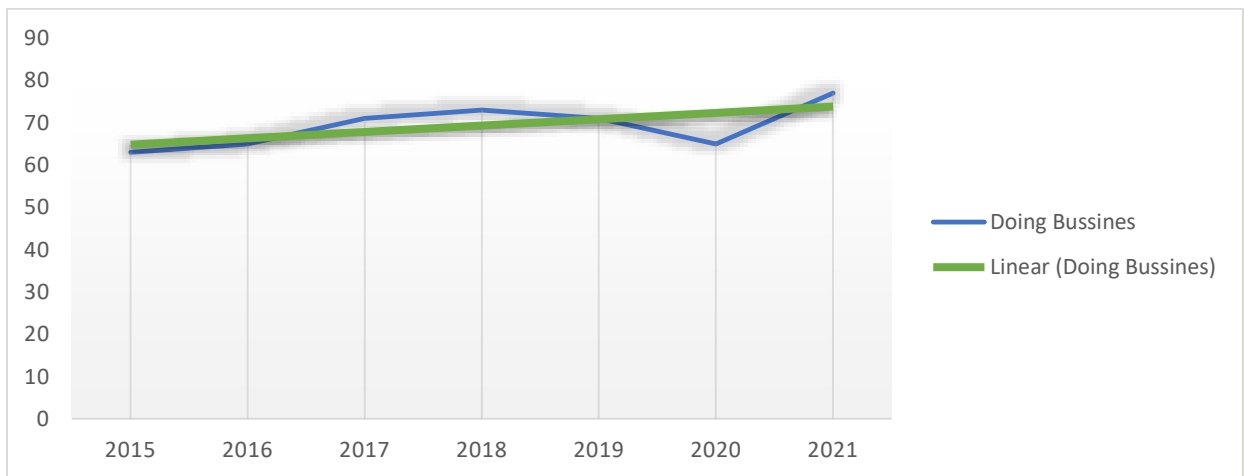
Source: World Bank

Based on the table and the above figure, where the presented data for the period from 2005 to 2021 provide an overview of the levels of corruption control, rule of law, government effectiveness, political stability, and financial freedom in Kosovo. From the perspective of corruption control, there is a significant increase from 2005 to 2013, after which there is a declining trend. In addition, levels of rule of law and government effectiveness have shown fluctuations, while political stability experienced a significant decline in 2021.

Financial freedom, expressed as percentage values, has undergone a gradual increase from 2005 to 2016, reaching 60.00. However, after this period, there is a decline in 2017 and a continuation of the negative trend in 2021. This may be related to changes in the country's economic and political environment.

In general, it can be observed that Kosovo has faced challenges in controlling corruption and maintaining political stability during this period. Interactions among various factors, including global economic developments and domestic political events, may have influenced these results. To better understand these trends, it is important to analyze the political and economic context of Kosovo at the time when this data was collected.

Figure 3. Doing Business in the Republic of Kosovo according to the World Bank



Source: World Bank

In the above figure, the results regarding the trend of the Doing Business indicator for the Republic of Kosovo are presented, and the way of measuring or presenting this indicator is through the ranking of the state. According to the presented results, we observe that the conditions for doing business overall have a positive trend, indicating a higher ranking. This signals an improvement

in conditions from year to year, except for a decrease in the ranking in 2020 due to various financial problems faced by businesses.

5. CONCLUSION AND RECOMMENDATIONS

Based on the analysis of the presented results, we can propose several recommendations for improving the economy and fostering economic growth:

- **Promotion of Renewable Energy Development:** To enhance positive impacts on economic growth, governments can invest in and promote the development of renewable energy resources. This not only contributes to environmental protection but also influences increased productivity and job creation in the renewable energy sector.
- **Integration of Anti-Corruption Policies:** To improve the business climate and instill investor confidence, it is crucial to continue the fight against corruption. Governments and relevant institutions should enhance their efforts to reduce corruption at all levels of administration and promote transparency in the implementation of public policies.
- **Stimulation of Export and Reduction of Imports:** Policies that encourage the export sector and reduce import levels can be effective in promoting economic growth. Incentives for local producers to export, collaboration with foreign companies to boost exports, and reduction of import barriers are some measures that can help in this direction.
- **Investments in Education and Healthcare:** To enhance the Human Development Index, ongoing investments in the education and healthcare sectors are necessary. This includes increasing investments in school and hospital infrastructure, as well as promoting education and healthcare programs at the local and national levels.

- **Support for Small Businesses and Innovation:** Governments can provide additional support for small businesses and innovation. Creating a favorable environment for new business initiatives and encouraging investments in innovative fields can bring about fundamental changes in the country's economic structure and development.
- **Monitoring Political Stability and Investment Environment:** To ensure political stability and a favorable investment environment, continuous monitoring of the political situation is essential. Actions should be taken to meet the conditions of both foreign and domestic investors.

These recommendations collectively aim to address key aspects of economic development, fostering a more inclusive and sustainable growth trajectory.

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Study on work performance and its relationship with job satisfaction, work motivation, commitment to work and work stress among Albanian lower secondary school teachers

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Abstract

The aim of the study was the estimation of the work performance of Albanian teachers in lower secondary schools. Identification of relationships between work performance and job satisfaction, work motivation, commitment and work stress are issues that have been elaborated in this study. Information gathered from interviewing a sample of 198 randomly selected teachers was used for this study. Work performance of teachers is assessed at the "good" level (3.75 scores). There are no statistically significant differences between teachers in public and private schools. Estimation of the Pearson correlation coefficients showed that between work performance and job satisfaction, work motivation and teachers' commitment the linear positive relationship are significant ($p < 0.05$; $p < 0.01$). Work stress has a negative effect on teachers' performance ($p < 0.01$). Job satisfaction is the psycho-emotional state of teachers that has the greatest impact on their work performance. Demographic features affect work performance. According to their importance, they are ranked: seniority, age of the teacher and civil status. The gender of the teacher does not affect his work performance ($p > 0.05$). To increase the work performance among Albanian teachers working in lower secondary school, the drafting and implementation of policies for interventions in the pre-university education system to increasing the level of job satisfaction, work motivation, teachers' commitment and reducing stress among the teachers, are necessary.

Keywords: *Work performance, Job satisfaction, Motivation, Commitment, Stress Demographic features, Teachers, Lower secondary school, Albania.*

Introduction

In Herzberg's theory, known as the theory of two factors, it is emphasized that an employer always aims to motivate his employees as much as possible, in order for them to perform as well and as effectively as possible at work. Referring to this theory [Baluyos. et al. \(2019\)](#) point out that the employer must be invested in "fulfilling all the motivational factors such as salary and benefits, evaluation of achievements, etc.." and together with them, must fulfill, as best as possible, the related requirements with hygiene factors such as working conditions, safety at work, quality of management, interaction between colleagues...etc. Based on Herzberg's theory, [Baluyos. et al. \(2019\)](#), after identifying the factors that condition the level of satisfaction in the work of teachers and the factors related to the performance in their work, has estimated the relationship between job satisfaction and performance using a multifactors regression model. Unlike these authors, [Minghui et al. \(2018\)](#) have used a hierarchical multi-factor regression model used, in which, in addition to hygiene factors (salary) and factors that condition work engagement (energy, dedication, absorption), was included demographic factors and social support factors, also.

The study of the relationship between work performance and job satisfaction, work motivation, commitment and work stress is given a special place in the literature of the time ([Riyadi, S. 2015](#);

[John Ritchie V. Reyes et al. 2022](#); [Oco, R. 2022](#); [Hakim, et al. 2022](#); [Danladi and Cheche 2022](#); [Raralio, 2022](#); [Oloo, 2022](#); [Kumari, J., Kumar, J. 2023](#); [Solania, et al. 2023](#)).

Ayomide, R. B. (2016), cite by [Adolph, P. \(2021\)](#) states that "job satisfaction and motivation affect the performance of teachers to a significant extent.... the effects of job satisfaction and work motivation on the performance of teachers are positive"

[Genelyn R. Baluyos et al \(2019\)](#) support the hypothesis according to which the work performance of teaching staff is affected and is statistically related to their job satisfaction. These authors emphasize that the contribution of the factors that are responsible for the formation of job satisfaction, is not the same. According to them safety at work generates a positive effect, while relations with managers generate a negative effect. This conclusion differs from that published by [Cheng, J. \(2013\)](#), according to which relationships with managers are a factor with a positive effect on the relationship between job satisfaction and performance. [Minghui, et al. \(2018\)](#) have communicated the identification of statistically significant relationships between teachers' performance and motivation or their job satisfaction.

[Sittar, \(2020\)](#) has identified the relationship between work engagement and work performance as positive. The increase in the level of work engagement of teachers is accompanied by an increase in their work performance. This relationship is also influenced by the demographic characteristics of the teacher.

Among the factors that have a great impact on the work performance of teachers, researchers single out stress at work. [Danish, et al. \(2019\)](#) point out that "...stress at work caused by employment policies, pressure and discipline at work, reward for work, has a significant negative effect on teachers' work performance". The effects of stress at work also depend on individual factors related to the individual's personality. According to Bakker & Bal, (2010); Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, (2010); Salanova, Schaufeli, Martínez, & Bresó, (2009); Schwarzer & Hallum, (2008) these factors act as moderators in the process of the effects of work stress on the work performance of educational workers.

Effects of factors that are responsible for the formation of psychological and emotional states, expressions of which are job satisfaction, motivation, engagement of teachers and stress at work, on performance and effectiveness at work of teachers, varies depending on the institutional context, social, cultural and economic in which the education system is implemented. As a result, their study with the aim of using these effects in the planning and implementation of policies and programs to increase the performance of the education system, is necessary for each country and for different stages of its economic and social development.

Methodology and data

The aims of study

- To evaluate the level of work performance among Lower Secondary Schools teachers.
- Identification the relationship among the job satisfaction, work motivation, work engagement, work stress and work performance of lower secondary schools' teachers

Research hypotheses

H₁. Job satisfaction among teachers, intrinsic factors and extrinsic/hygienic factors, would have a significant and positive effect on their Work performance

H₂. Work motivation among teachers, external and internal motivation factors, would have a significant and positive effect on their Work performance

H₃. Work engagement among teachers, Vigor, Dedication and Absorption factors, would have a significant and positive effect on their Work performance.

H₄. Stress has a significant and negative effect on Work performance among teachers

H₅. The work performance is influenced by the teacher's demographic characteristics.

Data

To carry out this study, the data obtained from the interview of 198 teachers in lower secondary schools, in the region of central Albania, where about 69% of the entire Albanian population lives, were used. The questionnaire related to *job satisfaction* contain 22 questions (6 questions correspond to extrinsic factors and 16 hygiene factors). *Work motivation* was studied considering its two components, intrinsic motivation (14 questions) and extrinsic motivation (9 questions). The questionnaire related to *work engagement* used contain 16 questions (6 questions that correspond to the vigor factors, 6 to the dedication and 4 absorption factors). The answers to the questions generate the values of a five-point Likert scale, 1=strongly disagree up to 5=strongly agree.

The Cronbach's Alpha Coefficients corresponding to Job satisfaction, extrinsic factors and the hygiene factors, were 0.79 and 0.81 and for Work motivation, Intrinsic motivation and Extrinsic motivation factors were respectively 0.76 and 0.82. The calculated values of the Cronbach's Alpha coefficient Vigor (0.76), Dedication (0.83), Absorption (0.77)

The level of security of the information was assessed as "Good" and the information was valuable.

The *work stress* was evaluated using a questionnaire contains 14 questions (4 questions that correspond to the job security, 5 to the work pressure and 5 workload factors), the answers of which generate the values of the Likert variables, with 5 scales. The minimum scores that an interviewee can receive is 14 and the maximum is 70 points. The following classification was used to assess the stress level: 14 - 35 points, stress is low, 36 - 49 points stress is moderate. and 50 - 70 points stress is high. The calculated values of the Cronbach's Alpha coefficient for information of job security (0.73), work pressure (0.89), workload (0.76) show that the collected information is valid.

The questionnaire related to work performance that was compiled according to [Bezati \(2012\)](#), contains three questions. The answers to each of them generate the values of a 5-point Likert variable. The minimum scores that an interviewee can give is 3 and the maximum is 15. Referring to the sum of scores given, work performance was classified: Very low (1.0 - 1.79 scores), Low (1.80 - 2.59), Sufficient (2.60 - 3.19), High (3.20 - 4.19) and Very high (4.20 - 5.0).

Sample characteristics

In the sample, about 18% of teachers are male. In Albania, male teachers in lower secondary education schools make up about 16%. About 12.6% are teachers who work in private schools. At the national level, private schools of lower secondary education make up about 11% of the total number of schools in this cycle. The sample is also representative regarding the distribution of schools in urban and peri-urban/rural areas (71.8%/28.8% vs 67.3%/32.7%; $p < 0.05$)

Conceptual research model

The conceptual research model for carried out this study (Figure 1) was built keeping in mind the requirements of the research questions and the working hypotheses that are intended to be verified.

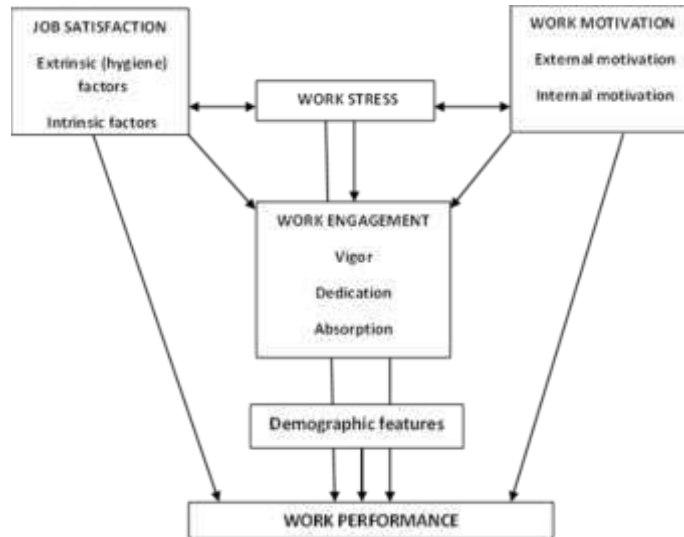


Figure 1. Research conceptual model

Data analysis methods

Descriptive analysis, estimation of the coefficient of correlations and hierarchical linear regression analyze was used to carried out this study.

Results - Descriptive analyze

Work performance

The average values of the indicators and average of work performance of teachers working in the cycle of lower secondary education showed in Table 1

Table 1. Values (mean±dev.st.) of performance indicators *

Item	Total	Ownership of school	
		Public	Privat
Quality of teaching	3.84±0.34	3.67±0.29 ^a	4.02±0.36 ^a
Involvement in extracurricular activities	3.45±0.37	3.69±0.35 ^a	3.22±0.41 ^b
Student results	3.96±0.47	3.78±0.46 ^a	4.15±0.49 ^b
Average-work performance	3.75±0.44	3.71±0.48 ^a	3.79±0.43 ^a

*The difference between the averages in a row marked with different letters is statistically significant (p<0.05)

According to the above result related to the quality of performance at work teachers working in lower secondary schools are evaluated at "Moderate" level. This level is higher among teachers in

private schools than among teachers in public schools. The statistically verified difference of +0.37 points ($p < 0.05$) is information that should be explained with the aim of identifying the factors that cause it. Statistically proven differences ($p < 0.05$) between teachers in public and private schools are also identified in all the indicators (items) used to evaluate their work performance. The explanation of these differences is important, because according to [Kume, \(2020, 2021 \(a\), 2021 \(b\)\)](#), between teachers working in public schools and teachers in private schools related to job satisfaction, work motivation and work engagement no statistically significant differences have been identified.

Results-Correlation analyses

The results of the correlation analysis (Table no. 2) show that the sample data identify a statistically significant negative relationship between job satisfaction and Turnover Intentions ($p < 0.05$). In this regard, hygienic/extrinsic factors make the most important contribution. This result is similar to the results reported by [Muchinsky \(1993\)](#), [Shah and Jumani \(2015\)](#); [Sirai et al. \(2022\)](#); [Zhang. et al \(2022\)](#).

The relationships between work motivation (Intrinsic motivation, Extrinsic motivation) and turnover intentions are evaluated as statistically significant ($p < 0.05$), negative relationships. This result shows that among teachers with a higher level of motivation at work, the turnover intention is lower. This result does not differ from the results published by [Zheng, et al \(2021\)](#).

Evaluation of relationships

Initial information about the existence of relationships between different indicators that reflect the approach and behavior of teachers towards their profession and their performance in teaching, could be obtained from the values of Pearson's correlation coefficients (Table. 2)

Table 2 Pearson's correlation coefficients

		1	2	3	4	5
1	Performance at work	1				
2	Job satisfaction	.472**	1			
3	Work motivation	.321*	.242*	1		
4	Work engagement	.374**	.315*		1	
5	Stress at work	-.226*	-.413**	-.396**	-.397**	1

* $p < 0.05$; ** $p < 0.01$

As can be seen, there are statistically significant correlations between work performance and satisfaction, motivation, commitment and stress at work. Referring to the above values of the correlation coefficients can be affirmed that teachers who have a higher level of job satisfaction, teachers more motivated and more engaged at work, have a higher performance at work. The

increase in stress at work affects the decrease in the level of performance at work. The existence of these relationships must be taken into account by policymakers, leaderships and administrators of educational institutions.

Results- Linear Hierarchical Regression

The results of the Linear Hierarchical Regression analysis (Table no. 2) show that work performance among teachers of lower secondary school in Albania is the result of the action and the interaction of factors that are responsible for their job satisfaction, work motivation, commitment, work stress and demographic features. The results of the Linear Hierarchical Regression analysis (Table no. 2) show that work performance among teachers of lower secondary school in Albania is the result of the action and the interaction of factors that are responsible for their job satisfaction, work motivation, commitment, work stress and demographic characteristics. Hierarchical regression analysis shows that the linear regression model that includes all the factors taken into analysis together with the demographic features of teachers manages to explain about 38.7% of the total variance of the relationships that exist between these factors and work performance. The more contribution in the explanation of this variance comes from the inclusion in the hierarchical regression model of factors related to work stress (+10%) followed by demographic factors (+8%).

Referring to the values of coefficients β in model 5 of linear hierarchical regression, it can be affirmed that:

- In the relationship identified between job satisfaction and work performance, which according to the data in Table 1 is evaluated as a positive relationship, Intrinsic factors have a greater effect. These factors manage to neutralize the negative effect that extrinsic (hygiene) factors bring to this relationship. The same is the assessment obtained from this regression analysis for the relationship between work performance and work motivation.

- The positive effect of work engagement on relationship with work performance is the result of the positive effect that vigor and dedication factors bring to this relationship. Their influence manages to neutralize the negative effect caused by absorption factors

- The work stress has a negative and significant effect on work performance. Workload factors have the greatest effect and after them are listed the factors related to work pressure and job security.

Table no. 2 Hierarchical regression analysis of predictors of Work performance

Predictor variables	Regression	Regression	Regression	Regression	Regression
	1	2	3	4	5
	β	β	β	β	β
Job satisfaction					
Extrinsic (hygiene) factors	-.011*	-.009*	-.009*	-.006*	-.006*

Intrinsic factors	.013*	.011*	.010*	.010*	.008*
Work motivation					
Intrinsic motivation		.016*	.013*	.011*	-.009*
Extrinsic motivation		-.109**	-.102**	-.084*	-.065*
Work engagement					
Vigor			.020**	.019*	.016*
Dedication			.018*	.013*	.011*
Absorption			-.009*	-.008*	-.008*
Work stress					
Job security				-.110***	-.106***
Work pressure				-.206***	-.194**
Workload factors				-.214***	-.211***
Demographic factors					
Gender					.003 ^{NS}
Age					.113*
Civil status					.002 ^{NS}
Seniority					.107*
R ²	0.11	0.14	0.201	0.304	0.387
F	18.13	22.34	34.15	51.21	55.32
Δ R ²		0.03	.06	.10	.08
ΔF		4.21	11.81	17.06	4.11

- Age and Seniority are identified as factors that have negative effects on the relationship between work performance and demographic factors. The effects of gender and teachers' civil status are not statistically significant ($p > 0.05$).

Discussion

The purpose of the study was to gain a more in-depth understanding of the impact of lower secondary school teachers' job satisfaction, work motivation, work engagement, work stress and demographic characteristics on their work performance.

Work performance among Albanian teachers who worked in lower secondary school was evaluated at "Moderate" level. The results of this study have confirmed a positive and significant relationship between job satisfaction, work motivation, commitment at work and a negative significant relationship between work stress and work performance. These results are similar to

those communicated by other authors ([Hakim, et al. 2022](#); [Danladi and Cheche 2022](#); [Raralio, 2022](#); [Oloo, 2022](#); [Kumari, J., Kumar, J. 2023](#); [Solania, et al. 2023](#)).

The results above, according to which the relationship between job satisfaction, work motivation and work performance is positive as a result of the greater impact on this relationship of intrinsic factors compared to extrinsic (hygiene) which are estimated to generate a negative effect on this relationship, highlight the need for intervention in the pre-university education system, in external factors, salaries, services, workload outside the classroom, number of students in the classroom, relationship with colleagues and schools' managers, etc., which condition job satisfaction and work motivation.

The analysis of the results obtained from the hierarchical regression model for the relationship between work performance and work stress, highlights the need for intervention in factors related to workload. Together with them, the changes that must be made in the policies for the administration of the system, in particular in the policies for the recruitment of teachers, in the relations between teachers and school leaders, etc. are necessities ([Danish, et al. 2019](#))

The above results showed that the demographic characteristics, age and work experience as a teacher, are factors that must be taken into consideration when policies are drawn up or decisions are made to intervene in the education system and in the administration of school affairs. Meanwhile, it is important to note that the relationship between age and seniority at work with work performance is complex. Often this is identified as a curved relationship according to which the positive effect of age and seniority after reaching a peak begins to be characterized by a decreasing trend ([Bailey et al. 2016](#); [Banks 2017](#); [Majau et al. 2023](#)).

Conclusions

Among Albanian lower secondary school teachers was identified positive relationships between job satisfaction, work motivation, work engagement and work performance.

The increase of work stress significantly negatively affects work performance.

To increase work performance among teachers in lower secondary school, reforms are necessary through which should be promoted the positive effects of extrinsic (hygiene) job satisfaction factors and external motivation factors.

Reducing stress at work, especially by reducing workload, is an effective way to increase work performance.

With the increase in age and work experience, the quality of teachers' work performance increases. After it reaches a maximum value, the positive trend of this connection starts to decrease. Work performance is lower among older teachers and teachers who have more seniority in this profession.

Gender and civil status have no significant effect on teachers' work performance.

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WORD FORMATION IN MARTIN CAMAJ'S WORK "MAN ALONE AND WITH OTHERS"

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ABSTRACT

Martin Camaj's literary creation represents a vast linguistic treasure. In the figure of this multifaceted Albanian writer, we can observe the intertwining of the work of a writer with that of a linguist. The literary creation of Martin Camaj presents a great linguistic richness, created with various word-forming tools. The author is quite knowledgeable about the linguistic elements of the Albanian language and its wide range of word formation. his linguistic wealth has been studied by various linguists, such as Prof. Kolec Topalli, who states: "From this perspective, his work needs to be studied not only for its thoughts, ideas, and the power of words, but also from a linguistic aspect, for the new words he created and the old words he introduced or used, as well as the popular expressions he gathered or created himself, for the construction of phrases, etc". (Topalli.K, p.9)

This scientific paper focuses on the study of word formation (prefixation, suffixation, composition, compounding) in the poetic volume "Man Alone and with Others" by the author through inductive and deductive methods.

Through this study, the author's word-forming tendencies are once again highlighted, illustrated through concrete examples, which have been exhaustively collected.

Keywords: poetic volume, word formation, prefixation, suffixation, composition, compounding.

INTRODUCTION

Martin Camaj was an Albanian writer and poet born in Albania in 1925 and died in 1992. He moved to Germany in 1990. His work is important for Albanian literature and has had a great impact on the development of the language. Albanian. Some of the linguistic values of Martin Camaj's work include:

- Use of rich and perfect language: He often used special words and expressions that make his work attractive to readers and rich for deep linguistic analysis.
- Lexical creativity: Camaj had extraordinary creativity in creating new words and using them in poetry and prose. This aspect of his work has contributed to the enrichment of the Albanian language and has helped in its continuous development.
- Use of metaphors and symbols: In his works, Camaj used strong metaphors and symbols, creating rich and deep images that reinforce the linguistic values of his work. This aspect has made his works have a great emotional and aesthetic impact on the readers.

THEORETICAL FRAMEWORK

In addition to these linguistic values, the work of Martin Camaj has also marked an important contribution to the preservation and promotion of the Albanian language, making him an important figure in the history of Albanian literature.

His linguistic wealth is quite large. Martin Camaj writes in the Gege dialect of the Albanian language, bringing us a quite accomplished linguistic form. Its linguistic values are so great that there is no study where it is not treated, regardless of the place it occupies in it. This wealth is closely related to the close relationship that the writer had with the Albanian world. After escaping from Albania, the author arrives in Kosovo, stays in Belgrade for a short time, and finally arrives in Italy, in Rome. Italy still keeps in touch with the Albanian world, as Ernest Koliqi and the Chair of the Albanian Language in Rome were very connected to the Albanian world. But Martin Camaj also leaves Rome, choosing the German world (the Martin Camaj chair is founded in Germany). With all this constant emigration, it is difficult to find another poet among Albanian poets where the world and the Albanian language have been preserved and cultivated so strongly and with high skill.

Martin Camaj's literary creation represents a vast linguistic treasure. In the figure of this multifaceted Albanian writer, we can observe the intertwining of the work of a writer with that of a linguist. His linguistic contribution extends to several areas, starting with the history of the language (mentioning here the monographic work on Gjon Buzuku's "Meshari" of 90 pages, written in Italian, a monograph that deals with many issues of Albanian orthography, phonetics, morphology, and vocabulary). (Topalli.K, p.13)

The author has shown great interest in the issues of word formation in the Albanian language. In 1966, he defended his doctoral thesis in German on the topic: "Word Formation in Albanian. Ways of forming ancient nouns." This monograph was an important step forward in the field of historical

linguistic studies of the Albanian language. The author has a good understanding of the linguistic elements of the Albanian language and its wide range of word-forming tools. He made efforts to create new words based on the word-forming means of Albanian, which he uses to add color to his discourse.

This linguistic wealth has been studied by various linguists, such as Prof. Koleç Topalli, who states: "From this perspective, his work needs to be studied not only for its thoughts, ideas, and the power of words, but also from a linguistic aspect, for the new words he created and the old words he introduced or used, as well as the popular expressions he gathered or created himself, for the construction of phrases, etc." Prof. Valter Memisha also appreciates Martin Camaj's literary work for its remarkable linguistic dimension because he continuously excelled in linguistic research and creation, becoming familiar with numerous values and contributions. It has also been studied by other authors such as Tomor Osmani, Ardian Klosi, Shaban Sinani, etc. (Memisha. V, p.20)

In this paper, the focus is on word formation in the poetic volume "Man Alone and with Others". This work has been chosen due to its central position in Camaj's overall creative work, whether poetic or narrative.

Through this modest study, the author's word-forming tendencies are once again highlighted, illustrated through concrete examples, which have been exhaustively collected. It is worth noting that some examples are believed to be the author's own creations, as not all of them may be his. Some of them may also be encountered in the works of other predecessors, contemporaries, or even earlier authors.

The methods of word formation (in this poetic volume), listed in terms of productivity, are presented as follows:

DATA AND METHODS

In this scientific paper I have tried to use the works of quite serious researchers of Albanian linguistics such as: Koleç Topalli, Tomor Osmani, Ardian Klosi, Mark Marku, Valter Memisha, Shaban Sinani etc. Through the method of descriptive analysis, I have tried to reflect the high linguistic values of this important writer of Albanian literature. Through the method of deduction, I used the relevant literature to get the valuable information that gave me the opportunity to present a clearer presentation on the linguistic values of the poetic work "Man on his own and with others". Through the method of induction, I have tried to collect all the words that are formed through different paths of word formation in the Albanian language. Furthermore, I managed to extract the word-forming tools which are more dominant in this poetic work. Martin Camaj has been an

excellent connoisseur of the tools and ways that the Albanian language provides to create as many new words as possible.

ANALYSIS

- **Prefixation:**

In this poetic volume, formations with prefixes are more numerous in quantity. The author uses a series of prefixes for the construction of nominal, adjectival, verbal, or adverbial lexemes, such as: për (for, with, through), pa (without), stër (thoroughly), nën (sub-), para (prior), ç (çveshun, dialectal variation used by the author), xh (xhveshun, again in the dialectal variant; thus, the prefix ç is used once and the prefix xh is used once for the voiced palatal fricative prefix in standard Albanian), z (zgur). The prefixes for and pa are more productive. However, the absence of foreign prefixes such as a, an, anti, de, dis, in, etc., is noticed.

- **Composition:**

Compound words in Camaj's work are frequent, a frequency that is also reflected in this poetic volume. They are formed based on correct structures and according to existing models of the Albanian language, which proves once again that Albanian has great expressive possibilities and resources. Below are examples of compositions constructed according to different models: noun + noun, noun + adjective, noun + participle, noun + preposition + noun, pronoun + noun, such as: rrokaqiell (face-moon), flokë-gjog (hair-chest), vdekje-krizëm (death-crisis), veshë-imët (ear-my), symbyllë (gate-close), sy-hapë (eye-open), frymëshkurtë (breath-short), krah-tha (arm-strike), pendlat-bletë (pendulum-bee), bjerraditës (scream-inducing), kurm-këputuna (stomach-cut), duerforta (hand-strong), krye-vogla (head-small), shum-dritaresh (many-lights), sy-grizhës (eye-curtain), kambë-zdardhë (leg-twist), vjetmirë (lasting), bukë-valë (bread-wave), gjithnatë (always), keq-ardhës (evil-comer), buzë-përgjakun (lip-blood), kryeqytet (capital), gjak-nxehtë (hot-blooded), duer-holla (hand-thin), krye-çot (head-hat), rro-rro (creak), erë-mirë (good-smelling), besëlidhje (covenant), gjasende (likely), res-keqja (council-evil), vojguri (idleness), vetëdije (self-awareness), etc. There are more compound words formed with adjectives and nouns, with a difference of two or three examples among them.

A part of the compounds, unlike standard Albanian, are written with a hyphen (e.g. sy-hapë, open-eye; erë-mirë, good-smelling; bukë-valë, bread-wave, etc.)

- **Suffixation**

In this poetic volume, formations with suffixes are highlighted: shëm (able to be), tar (singer), si (hider, warmer), im (silence, blink), az (great), ues (admirer, dimmer), ore (fruit), suffixes with a pejorative or diminutive sense aç (small road), thi (flutterer, serpent), z (bonnet, hat, mane, lock of hair, crown). The latter is presented as more productive in comparison to all other suffixes. However, the absence of constructions with the suffixes ac, acak, ak, an, ash is noticed, which can also have a pejorative or augmentative sense.

- **Prefix-Suffix Formation and Compounding**

The occurrences of word formations with these two methods are very few. Here I mention: ngurzo (prefix-suffix formation); njiqind, gjashtëdhetë (compounding).

In conclusion, we can say that the most productive paths of word formation in this poetic volume are:

- prefixes **for** and **pa**,
- compound words with adjectives and nouns,
- diminutive suffix **z**.

CONSLUSION

Once again, I bring to attention the author's tendency for word formation, through the poetic volume "Man Alone and with Others" (a topic that, as mentioned above, has been studied by various Albanian language researchers) as a continuous effort that needs to be made in the study of the author's language, a study that (I am convinced) will bring new and valuable contributions.

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Internationalization of higher education in Albania, challenge for quality in teaching, learning and scientific research

Double degrees in University of Durrës “Aleksandër Moisiu’s” reality

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Abstract

The process of internationalization of higher education with the transformation it brings, seeks to reform the process of learning, teaching and scientific research.

Today, Albanian universities found themselves involved in internationalization issues as a guarantee to create quality education conditions for graduates who choose higher education studies for the first time, but also for all others who joined of a university cycles of study.

Student exchange programs like Erasmus+ offer opportunities for students and academic staff to share their knowledge or experience with institutions and organizations in different countries.

As an integral element of internationalization, the universities responded to the requests of the Ministry of Education and Sports in opening up to the perspective of cooperation with national, international and intercontinental universities in areas such as joint degrees, support for capacity building, joint research programs, opportunities to study at a distance, etc.

This process has just begun and the "race" between universities in fulfilling this strategic obligation is open. More or less universities are seeing the first results of the initiatives undertaken.

This paper aims to show some of the causes and factors that have influenced this process, how effective it has been in implementation, the strong and weak points of this initiative as well as providing some successful cases.

The study of these factors is important in creating a sustainable higher education, at the national level, which will produce quality and further qualitative development of the nation's elites.

Keywords: Universities, internationalization process, joint research programs, joint degrees, challenge.

1. Introduction

Internationalization as a process has been integrated into the daily academic activity of the academic and administrative staff of HEIs in Albania. It is seen as a multidimensional promotion

and development opportunity that requires continuous work, cooperation, institutional and financial support.

Internationalization as a project offers a contribution to the fulfillment of government strategies that aim to keep students in the country, activating joint study programs with the most prestigious universities so that young people can study in Albania.

The legal framework that supports this process is based on:

- Higher Education Law No. 80/2015 - which opens the HEI to exchanges in scientific research with local and international partners;
- The National Strategy for Higher Education 2021-26, which significantly increases the quality and international cooperation in the field of higher education;
- Draft National Youth Strategy 2022 - 2029, which also focuses on increasing the value of diplomas in the labor market, as well as strengthening local universities;
- The European Youth Strategy 2019 - 2027 - with a special focus on the free movement of young people;
- The National Strategy for Development and European Integration 2030 - which defines the strategic objectives in the development of exchanges and international projects in the field of higher education;
- The National European Integration Plan 2022-2024 – orients the mechanisms on the intervention in the achievement of strategic objectives centered on the development of higher education, the qualitative increase in the standards of teaching programs, the capacities of the academic staff and the student body, the qualitative increase in study programs competitive in the international arena and the growth of international exchanges in the field of higher education.

2. General concepts on internationalization

Internationalization, over the last quarter century, has become a global, strategic component and important factor in higher education. Time ago (*around the 60s*) the focus of internationalization was related to aspects of scholarships for foreign students or international projects, today the elements of internationalization of higher education are shaped into elements of joint / dual study programs, student mobility and staff, global citizenship, international institution ranking, branding and other components.

The internationalization of higher education requires institutions to adapt and define lines of action for internationalization. Institutions that have integrated this dimension time ago, such as: *the curriculum revision and adaptation between partner universities*, best demonstrates the practical benefits of internationalization, graduating capable and competent students to cope both locally and globally. Internationalization is included in institutional strategies and / or action plans at the national level as well as in international plans and agendas. The reasons for inclusion can be many, but, in principle, it seems that the element of internationalization in higher education comes as a response to globalization, the increasing competitiveness of higher education institutions and in response to the need for students to be prepared to adapt to rapid changes in personal and professional life, as well as in the local and global community.

3. Internationalization in higher education

The concept of internationalization in higher education (although not new as a term) often means different things to different individuals. This concept seems to include everything related

to global, intercultural or international aspects. Within the wide range of meanings and interpretations, for some it may mean a series of international activities, such as:

- student or staff mobility;
- networking and membership in international networks;
- partnerships and projects; new joint and / or dual academic programs;
- joint initiatives (*between partner institutions*) of scientific research.

For some it may mean the provision of study programs through several processes and platforms based on technology development, which are innovations compared to the traditional method of teaching-learning process or the inclusion of global and intercultural dimension in curricula.

Others may see internationalization in the perspective of ranking of the institution of higher education nationally or internationally, or recruiting the best students and offering the best scholarships. International projects are also considered as part of internationalization.

The term used as internationalization in higher education, widely agreed and referred to, is "*internationalization is the process of integrating international, intercultural and global dimensions into the strategic goals and primary functions of higher education, at the institutional and national level*" (Knight 2004).

4. Why internationalization?

Higher education institutions, as creators and disseminators of knowledge and insights, as educators of future generations, are forced to face the key issues. Internationalization is exactly one of the dimensions that enable these institutions to respond to the challenges and at the same time the opportunities that societies face today.

There are many reasons and incentives that can push the leadership level of higher education institutions, to include internationalization as an essential part and strategic objectives of the institution. Among them we can mention some, such as raising awareness that intercultural competencies required in the global context are quite important and necessary to face, to work and live in multicultural societies.

On the other hand, the increasing demand by employers for a skilled and competent workforce, as well as the demand for training by students, reflects the growing interest in internationalization which enables the benefit of the same competencies and intercultural experiences that need to be gain across higher education, thus listing internationalization as a driving force for change.

Joint and / or multiple degrees with partner institutions create more employment space. Networking and membership in partner networks, at local, national and regional level, expand opportunities for cooperation, consolidate relationships and revitalize institutions, making them more competitive and better.

The demand to attract and promote talent needs to be accompanied by patent awards as well as knowledge transfer. In recent years, scientific research has become more complex, seeking increasing cooperation between institutions and academics, thus also increasing in competitiveness. The planning and implementation of research infrastructure, the increase of research capacities, the development of new teaching platforms and the better coordination of all instances, require a more strategic focus on capacity development and international research systems or policies. The need to be flexible, to enable alternative infrastructure to traditional teaching and research, was clearly evidenced by the pandemic situation which challenged the entire education system, not just the higher one.

Among these opportunities and challenges at the global level, higher education also needs to be actively linked to the local reality, to enable both dimensions, namely local and global, to come together in harmony by nurturing each other.

5. The pillars of internationalization

Internationalization is considered as a dual institutional process, internally and externally.

Internally, it requires institutional support, desire, commitment and will of the parties to meet the opportunities and challenges. Specifically:

- Curriculum review and adaptation; teaching in foreign languages;
- Education open to all - flexibility in the process of teaching and learning (the latter understood as a process of change from the traditional teaching process and the integration of new teaching methods such as: distance learning, peer to peer learning etc.);
- Possibility of accommodation of students and foreign staff by offering relevant facilities;
- Scientific-research activities or of another nature, joint and extra-curricular.

The international dimension of the curriculum needs to improve in terms of both subjects and foreign languages studied, to integrate the international dimension as well as the content. It is also necessary to emphasize the results of students, finding means to identify and share as good practices their international and intercultural experiences and competencies.

Externally, it also requires commitment in relationships and trust in partnerships:

- Student / staff mobility;
- Scientific research projects and joint activities;
- Development projects;
- Partnerships and networking.

The (physical) academic mobility of staff and students needs to be accompanied in parallel with the mobility of study programs (twinning / joint / dual diplomas) and the provision of education campuses and Hubs.

Cross-border education (*between countries with geographical proximity*) is gradually being transformed from models of framework cooperation, into models of partnership and finally into models of competitiveness. There is no doubt that the internationalization of higher education is becoming more and more important, also with a complex accompanied by challenges.

An important component that accompanies the entire internationalization process is the quality (*such as that of the curriculum, teaching and learning processes, practices, or support services*) and the ongoing monitoring of the work.

6. Joint study programs, the case of “Aleksandër Moisiu” University of Durrës (UAMD)

UAMD has been one of the first public universities that opened the doors to cooperation for the creation, realization and provision of joint study programs. Today, our university offers joint programs in the three study cycles, specifically: in the Bachelor program are offered two joint programs, in the second cycle of studies three programs and two joint programs are offered in the third cycle of studies. The aim of the implementation of dual programs has been in collaboration with the European universities to provide quality and creating opportunities for integration into the job market of Albanian students.

Strengths of joint programs

The joint degree offers new facilities and opportunities for Albanian students. They will have the opportunity to benefit from a recognized field of study in another country except Albania, and with it in the entire European and world market. This degree will be recognized by all the partner universities of this program as well as the employment opportunities that this degree will offer.

In addition, the programs of the three study cycles will serve as a bridge and cooperation between the two Universities, qualified academic staff, pave the way for a comprehensive integration of students in the mutual academic environment, guarantee the maximum quality in teaching and learning, increase the possibility of employment of students in the relevant labor markets and increase the possibility of their employment in the European market.

In a historical and cultural moment in which the process of European integration requires high-profile professionals, open to the international dimension and to an increasingly globalized economic-legal context, the dual study programs aim to train graduates with knowledge advanced solid, on a methodological, cultural and professional level, which enable them to develop original solutions, in relation to the problems appearing in the new European and international scenario. The courses of the dual study programs are organized in such a way as to fulfill the questions of students who are interested in certain issues in a European context and who wish to pursue a career in national, international and supranational institutions. The issues that will be the focus of such programs are always accompanied by comparative, pro-European and internationalist profiles, as well as the economic implications of national and international policy choices. The programs aim to train graduates capable of acting with interdisciplinary skills in the specific field of study.

The specific objective of the programs is the transmission of appropriate skills to understand and solve issues that simultaneously affect different systems of study in key sectors of historical-political and socio-economic and legal development (such as: trade, competition, environment, immigration, fundamental rights, globalization and religious phenomena in international contexts, etc.). The programs have different durations in accordance with the Higher Education Law in the Republic of Albania and in accordance with the category of the implemented cycle of studies.

In general, dual programs are conceived as integrated curricula between the two partner universities that will apply them. An autonomy is established for the curriculum and the distribution of the subjects in accordance with the cycle of studies during the years of studies, as well as the determination of the authentic subjects of the national program / local curriculum, with the aim of adapting to the interests of the students.

Part of the study programs are also institutional practices that offer practical experience. These internships will train students to act in concrete cases where they will apply the skills and knowledge acquired during the study (law clinics and internships interspersed with institutions that have competences in the field of work regarding the Albanian context).

Mobility aims to allow all students enrolled in this Double Degree from both institutions to attend semesters at the partner institution, specifically the second semester of the final year or as described in the specific agreement. Students benefit from a certain number of credits that are integrated into their curriculum and diploma. The innovation includes the diploma defense process, which offers students the opportunity to complete the diploma topic during the mobility period with two supervisors: one from each University. Students respect the procedures and deadlines for submitting the topic at both institutions. The subject of the final degree at the end of the program is submitted to the home university. In cooperation with the partner university, an international jury is appointed to jointly evaluate the topic of the diploma. Each institution evaluates the final topic according to its own standards and according to the equivalence of the evaluation system. A copy of the final thesis will be sent to both institutions. The guarantee of the multidisciplinary approach of the programs allows the graduates to acquire advanced knowledge, at the methodological, cultural and professional level, which will allow them to develop solutions, even original ones, in relation to the problems appearing in the new European and international scenario.

The main objective of the exchange project is the student's benefit from a double degree, offered by the partner university and UAMD.

6.1 The specific objectives that the dual programs aim to achieve are:

- The needs of the labor market, in order to meet the needs of students.
- Unification of curricula with international educational plans in different fields of study.
- The specific and current need for the preparation of young professionals in matters of Europeanization and integration of Albania in the EU addresses the organization of such programs, where through bilateral cooperation, products can be achieved on a national and international level too.

- Improving synergies in the field of teaching and scientific research.
- Increased employment through a university qualification recognized in the global market.
- Increasing the attractiveness of the offer of study programs.
- Improving the University's ability to respond to the demand of the labor market.
- Maximizing the positive effects of internationalization activities.

6.2 Expected results:

- Achieving the opening of joint study programs, in all cycles of studies in the UAMD;
- Offering a double degree, competitive in the global market.
- The dual study program guarantees the preparation of students in accordance with the defined objectives and profile.
 - The duration of the studies gives the opportunity to obtain the required degree by two universities.
 - The needs of the labor market present a current and long-term demand for professionals in certain scientific fields under the conditions of the integration process of Albania in the EU and in wider dimensions.
 - Offering an alternative to a foreign degree for Albanian students who want to study abroad. In this way, studying in two countries at the same time constitutes an innovation not only for the academic and administrative staff who will be engaged, but also for the students who will graduate in this field.
 - Developing in students a greater international awareness and a more active engagement with global issues.
 - Strengthening the international cooperation and growth through the development of international contacts, exchange of students and researchers.

7. The importance of implementing such a project

The University continuously aims to achieve the highest contemporary national and international academic standards, and to support the educational aspirations and achievements of anyone seeking to benefit from higher education.

The demand for programs in different cycles of studies has shown a preference among applicants who have completed the annual quotas, as opposed to expressing their requests for new study programs. The diversity of the programs increases the possibility of each student to choose and operate in the labor market according to the training received and the requirements of the market itself.

These standards also include the joint programs, in the three cycles of studies in cooperation with the partner universities.

The demand for a study program of this importance is based on several factors:

1. *The organization of the curriculum of the study program as a bridge and cooperation between the two Universities, qualified academic staff, paves the way for a comprehensive integration of students in the mutual academic environment, guarantees the maximum quality in teaching and learning, increases the possibility of employment of students in the respective labor markets and increases the possibility of their employment in the European market. Students have the opportunity to follow a study program which guarantees: European/international standards in*

the academy, opportunities to study in English/foreign languages, academic exchanges, use of the best librarians in their field of study, internships at European, Albanian and international entities, institutions, etc. that lead to better employment opportunities. For European/foreign students, studying in these programs will bring them close to the history of Albania and the Balkan region, its continuous and long-term efforts for integration and cooperation with the EU and its member countries.

2. *A joint degree offers at the same time new facilities and opportunities for Albanian students.* They will have the opportunity to benefit from a recognized program of study in a European country and not only, and with it in the entire European and world market. This degree will be recognized by all the partner universities as well as the employment opportunities that this degree will offer.

3. *Maximum respect of the standards* - The curriculum in its content guarantees a maximum and comprehensive training of students on the fields defined in the international and European agreement, strengthening their knowledge in it. All these areas together with the optional subjects offered in our curriculum guarantee a general coverage of the historical, political and legal developments of the Balkan region as an integral part of the European continent and of European and international institutions or organizations.

4. This selection of subjects, the possibility of developing internships as part of the program and independent study on a the diploma topic creates absolutely a personal profile of the student, gives a legal-economic "value" to the university career of each student, combine the researched study with the fields of economic, legal activity, etc. This reformation aims the personalization and at the same time the absolute freedom of the student in his orientation towards the labor market.

5. The joint curricula, in contrast to the current programs of the three cycles of studies, guarantee *more opportunities for graduated students to be employed in the public and private sectors*, in central and local government institutions, to the European and International institutions, employed at international, European and regional organizations, without neglecting the domestic market and that of the partner country. In this way, this program guides the possibility of choice, that is, specialization.

6. *The possibility of confrontation* - This change is the fruit of an in-depth reflection between students and stakeholders. The education offer supported by the Departments is modulated and able to face the labor market without losing quality and the close connection with the Albanian academic tradition. A confrontation that is destined to be renewed, offering a flexibility that sums up the successive and continuous changes.

7. The labor market offers employment opportunities in both public and private sectors. In the public sector, there is always *a need for specialized and profiled students*. Likewise, the local government will open the doors to employee eager in absorbing EU funds and foreigner financing.

8. *In the private sector*, graduates have the opportunity to be integrated into the system of free professions or the non-profit sector such as: organizations, associations or international and regional foundations. In addition to the possibility of practicing professions closely related to their profile and field of studies, the sector of private entities is also an opportunity to employ all those students who want to focus their capacities in their employment experience in this direction.

9. *Students' perception.* According to INSTAT (Albanian institution of Statistics), the largest number of studies belongs to the branches of Business, administration and law, starting from the academic year 2014-2015 until 2019-2020. The high demand is related to the opportunities the job market offers for all graduates to follow their dreams.

10. The programs provide information on the subjects that can be offered during the *implementation of the common curriculum*, orienting them towards a more complete training both within Albania and at the partner university. Flexibility in following the program at home and abroad, the possibility of obtaining a specialization with European/international frameworks are important steps that lead to a job market with a well-defined academic profile.

11. *Age of access to the labor market*. According to these curricula, the probability of faster access to the labor market increases. Newly graduated students are professionally trained, ready to look for a job position and have in their hands a diploma recognized at the European level. When previously diplomas required an additional study to bring the graduate closer to the labor market or to guarantee maintaining and ensuring the continuity of work relationships, these programs are a guarantee and increased opportunities, they open the horizon for new labor markets or for new professions in accordance with the studies received.

12. *The possibility of continuing studies at a European/international university*. This curriculum guarantees the opportunity for the student to pursue studies at the partner University or to continue at UAMD with the full guarantee that he/she will receive a European study title after completing the studies. In this way, the student is guaranteed an international approach to the development of his studies with all the academic assets it contains, but at the same time it guarantees the continuation of the studies without additional financial costs, without disrupting the created *status quo* but with the benefit of an internationally recognized degree and the perspective it brings.

13. *Guaranteeing formative curricular practices, in the form of internships*, participation in international activities and projects, the possibility of involving students in different studies will create one more opportunity for a student who finishes an integrative formative curriculum to be ready for the labor market.

The academic curriculum offers an innovation for the Albanian reality, preparing and qualifying the future professionals towards new knowledge dimensions, the confront among institutions and way of thinking, prospectives and possibilities.

This affects the minimization of the *brain drain phenomenon* - which means the abandonment of one country in favor of another by professionals or people with a high level of education.

It also affects the maximization of *brain exchange*, which according to the OECD means the flow of intellectual resources between one country and another, with a balanced shift in both directions. In the case of the joint study program, studying abroad is considered a stage in the formative journey of a young person, but will not constitute the youth final destiny.

- The internationalization projects affects the enrichment of the academic offer with a double study program.
- Promotes and influences the growth of academic capacities through exchanges with professors of the program.
- The quality of scientific research increases.
- The needs of the labor market are reflected.

8. Benefits and impact of joint programs

The benefits of the project are multidimensional, students-academic staff-institution.

- The advantages derived from the possibility of obtaining a double degree are significant, since the student completes the specific studies with a qualification that facilitates access to the labor market without the need for a degree recognition.
- Moreover, the experience of living in the university reality in a foreign country remains invaluable for the cultural baggage which can positively influence the work environment.
- Two degrees obtained in a single study program increase the possibility of employment.
- A double degree allows the improvement of knowledge of a foreign language.
- Development or improvement of *Soft skills* which are highly demanded in the labor market.
- Benefits from financial support for students.
- Exchange of academic staff.
- Increasing the quality of performance.
- Increasing the reputation of the institution.
- Promotion of scientific research.
- Impact on the minimization of the *brain drain phenomenon*.
- Impact on the maximization of *brain exchange*.

Conclusions

The double degree represents a high level of internationalization of the university system as it aims to stimulate international cooperation in higher education in a structured way.

The institution's journey towards this major goal offers inevitable benefits of the internationalization process in improving the quality of teaching and learning and in preparing students for life and work in a globalized world.

This project aims to improve synergies in the field of teaching and scientific research; provides students with learning opportunities for greater openness and innovation; increase employment through a university qualification recognized in the global market; increases the attractiveness of the study program offer; improves the University's ability to respond to labor market demand; maximizes the positive effects of internationalization activities.

The joint programs guarantee: a double degree, competitive in the global market; developing students with a greater international awareness and a more active engagement with global issues; strengthening international cooperation and growth through international contacts and exchange of students and researchers; the future advancement in scientific research.

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ON SOME ISSUES OF ORIENTAL SUFFIXING ELEMENTS IN THE WORD-FORMATION OF ALBANIAN LANGUAGE

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Abstract.

The aim of this paper is the treatment in some aspects of the Oriental (mostly Turkish) suffixes that have entered with the loaned words and those that have been extended by analogy in the word-formation of Albanian language. They will be treated from their etymological aspect to the production capacity they have today in Albanian language. Other issues that will be touched on are the breadth of their use, their status in Turkish, the entry routes into Albanian, the interaction possibilities they have with the stems of Albanian words for the formation of new words etc. As

the focus of the paper comes the treatment of the phenomenon of the use of Turkish suffixes with stems that are not Turkish loans, such as *furraxhi*, *njerëzillëk*, *nevojëli* etc., thus creating a hybrid lexical structure. Descriptive and comparative methods are used to build this study.

Keywords: suffix, Albanian, Turkism, loans, word-formation.

1. Introduction

The long Turkish reign has left marks in a lot of spheres and has affected various Albanian cultural practices. The great influence on the language is inevitably observed in many different linguistic fields: lexicology, morphology, syntax, phonetics etc. Such long-term pressure has also affected the field of syntax, where various expressions and phraseology with a rigid structure have entered and are being used, contradicting the nature and structure of the Albanian language. An example of this influence is e.g. the expression: ‘*Për hair Kurban Bajrami*’ where among others the phrase ‘*Kurban Bajrami*’ is not used correctly. According to Albanian syntax the phrase must contain this structure ‘*Për hair Bajrami i Kurbanit*’ so, the determinant must be set after the subject in these kind of phrase uses. Another example of this influence in syntax is the example given by the scholar Vehbiu: "On the influence of Ottoman Turkish on the syntax of Albanian (starting from the syntax of phrases and constructions of the type ‘*bëj derman*’)" (Vehbiu, 2020). Not to mention the influence of the wide corpus in lexicology, where many loans have become part of the standard language and the Dictionary of the Albanian language. The high level of Turkish influence in lexicology is also observed by the various phrases of these elements (generally oriental origin, but which have entered from Turkish), and the people’s comfort condition in understanding them. There are sentences like this that are well understood by Albanian speakers even though there isn’t any lexical element from this language. Such sentences are with a structure like this: ‘*Allahu kabull namazin e sabahut*’ where there are none Albanian words, but the message is understood by the interlocutors. This expression can be easily replaced like many other expressions with full synonym level in Albanian: ‘*Zoti ta pranofte faljen e mëngjesit.*’ In this field we have contributions made by prominent foreign and local Albanianologists such as: Çabej, Xhuvani, Lloshi, Mayer, Xylander, Miklosich, Krasniqi, Veselaj etc. Turkish influence we have also in morphology of Albanian in the fact of the entrance of its affix morphemes to the roots and stems, thus producing words of hybrid bilingual grammatical structure. On what makes a word with hybrid bilingual structure: (see Jashari & Jashari, 2023). There are also inflectional morphemes such as *-llar* and *-ler*. In Bogdan's work, the first use of the ending "llār" appears in a single case. "... e nde atune ajo gielëma scije u kaa, se Pasciaλarevet, e Sangiachevet miscij kingiavet..." (Bogdani I,VI,15). ‘‘These endings have entered Albanian together with the loan words, they’ve not entered particularly. However, by analogy, have also been extended to some cases that do not find general use’’(Krasniqi, 2019: 371).

Regarding this phenomenon (the interaction of oriental suffixes with stems that are not orientalisms to create new words in the Albanian language) even the researcher, Gjorgji Bufli in his work "Interlinguistic phenomena in Albanian Turkisms" notices the existence of phenomenon reflecting examples of new words (adverbs) with the Turkish adverbial suffix *-çe* (see Bufli, 2014), and also offers some compounds with hybrid composition, like *gazepmadh*. Below we will also

deal with other suffixes that have this ability and will not limit the paper of examples in only a part of speech.

1.1 The most known Oriental suffixes in the derivation of Albanian language

There are a number of suffixes of oriental origin and especially Turkish in the word-formation of Albanian, but only some of them have a wider scope and production capabilities. It is also affirmed by other researchers that there was a diverse presence of suffixes, a much larger number than those active today, including those such as: -cu, -cü, -siz etc. ‘‘Turkish suffixes, -cı, -ci, -cu, -cü (-çi) and (-xhi) were very productive in Albanian language for the formation of active nouns but in the course of time they were substituted by Albanian suffixes’’ (Kadriu, 2014). Mostly of these morphemes, regardless of the oriental origin, have entered from Turkish under Ottoman pressure, and scholars agree that another hand they got from Baytajejan, writers who used such sentence structures. Generally, the most popular Oriental suffixes, which are active in the Albanian language and have an active status in production are: *-llëk*, *-qar*, *-xhi*, *-li*, *-hane*. ‘‘This, for the impact on word-formation, adding that apart from *-xhi*, there are other suffixes such as *-çi*, *-lli*, *-li*, *-çe*, *-qar*, *-llëk*, *-sëz* etc., which have also become productive and some have been specialized stylistically, enriching Albanian, especially colloquial Albanian’’ (Vehbiu, 2020). These suffixes and the words with them are used by famous Albanian writers such as: Qosja, Kadare, Agolli, Demaçi etc.

2.0 The Turkish suffix *-llëk* (*-lık*)

The suffix *-llëk* (in Turkish *-lık*) is a suffix that serves for formation of nouns of different types, like professions: *avukat-lık*; positions and rankings: *bakan-lık*, *başkan-lık*; abstract names and states: *arkadaş-lık*, *ayrı-lık*; when brought to color names, it makes names that indicate that color is commonly found: *beyaz-lık*, *kara-lık* etc. In Albanian, the morpheme has entered with loan words of the type like: *pashallëk*, *pishmanllëk* etc., which have both the root and the suffix with a common character: borrower. This group includes a wide corpus of words, among them: *pazarllëk* (Turk. *pazarlık*), *baballëk* (Turk. *babalık*), *agallëk* (*agalık*), *fukarallëk* (turk. *fukaralık*, *bakallëk* (Osm., T. *bakkalık*), *bejllëk* (Osm., T. *beylik*), *dembellëk* (Osm., T. *tembellik*), *kallabllëk* (Turk. *kalabalık*), *matrapazllëk* (Osm., T. *madrabazlık*) etc. However, the characteristic of this suffix in the Albanian language is the advancement in the spread to create new words in the Albanian language, being conceived with stems that are not loaned from Turkish. One such that is in the word *njerëzillëk* (humanity) or in some regions *njerëzillak*, where the stem of this word *njerëz* (people) is not a loan from Turkish. Other word with this hybrid lexical structure are the words: *fshatarllëk*, *pabesëllëk*, *poshtërsinllëk*, *qyqarllëk*, *treçillëk*, *kodoshllëk*, *lazdrimllëk*, *kurvellëk*, *prostitutllëk*, *magjupllëk*, *vëllazëriëllëk*, *viktimllëk* etc., where the stems of these words: *fshatar*, *poshtërsi* etc. are not from Turkish. Within this type, there are also phrasal formations attached to this suffix, formations of the type: *zotshhtëpillëk*, from the Albanian noun phrase *zot shtëpie*.

The reason for this conception we would see in the long and wide use of Turkish loanwords that have this suffix present, the aspect of a time and space segment. Also, as a suffix, has undergone a phonetic change *ë-a*, taking on a regional variant. In the north we encounter with the form ‘‘*llak*’’, *njerëzillak*, *pashallak*, *pishmanllak*, *baballak* etc., while in the south with the original loanword *-llëk* as in *pashallëk*. The largest percentage of entered words that contain this suffix is in Turkish

historicism, and terms from religious terminology. An example of the historicism *pashallëk* whose use dates from Ottoman: *pashallëk* (Hist) ‘the position or title of a pasha; region governed by a pasha’ 1875, Rossi (-llek); 1937, Leotti • Osm., T. *paşalık* ‘the quality, rank and function of a Pasha; territory ruled by a Pasha’ (NR 920). ♦ Der. of *paşa* (→ *pasha*). A/L Boretzky 1976: 103; Çabej 2002/VI: 152; Dizdari 2005: 753; Karaağaç 2008: 678; Topalli 2017: 1111. T/L Pakalın 1983/II: 758. [1665].

This suffix has a wide use for stylistic purposes in both spoken and written language.

The plural of the words containing this suffix is done by the palatalization of *-k* in *-g* followed by the Albanian inflectional feminizing ending *-e*, in the same time taking the nouns in the ambigender category *-llëqe* e.g.: *pazarllëqe*, *poshtërsinllëqe* etc.

2.1.1 The issue with the suffix *-lak*

It should not be confused with the suffix *-llak* (Turkish: *lak*), which is another suffix in the Turkish language and appears in other words to mark something else, but in the Albanian language we have a syncretization of these two suffixes, not giving them a unique value. The same words take both endings, in Geg dialect more as a variant with *-a -llak*, that refers to the suffix *-lak* while in Tosk dialect with *-ë, -llëk*, which refers to the suffix *-lik*. This mixture was made due to the characterization of the Albanian as a language with a phonetic pronunciation principle. An example of a word containing this suffix is down below: **sapllak* ‘ladle’ 1937, Leotti – **saplak* 1948, Mann [*sapllake* ‘tankard’ (Newmark)] • Osm., T. (dial.) *saplak* ‘a ladle, a longhandled dipper’ (Redhouse 1890: 1151), ‘cup, tankard’ (DS 1978/X: 3541). ♦ Der. of *sap* (→ *sapli*). A/L Mann 1948: 446; Dizdari 2005: 877; Topalli 2017: 1299. T/L Räsänen 1969: 401; Gülensoy 2011/II: 733. [1890].

3.0 Suffixoid element *-hane*

Is a suffixoid element for formation of nouns that mark places, locations etc. In New Persian we have as *-xāna*, like in the word *salla-hanë*, in Ottoman Turkish *sal-hane*, in New Persian *salx-xāna*, that has the meaning ‘slaughterhouse’ - the place to slaughter animals. “The formant *-hane* entered Ottoman Turkish as a word from the Persian “hana” and, serving as the second limb of the composites, became a special suffixoid or suffix to name the notion of place-service” (Veselaj, 1996: 85). Let's see its etymology view in this word: *sallahanë* ‘slaughterhouse’ 1937, Leotti – *sallhane* (Old) 1954, FGJSH – *sallahane* (Nst) 1928-30 (Mann) • Osm., T. *salhane* ‘slaughterhouse’ (NR 979). ♦ < NPers. *salx-xāna* ‘a slaughter-house’, also *salā-xāne*, *sallāx-xāne* (Junker-Alavi). A/L Mann 1948: 446; Boretzky 1976: 115; Dizdari 2005: 870; Karaağaç 2008: 723; Topalli 2017: 1297. T/L Räsänen 1969: 398; Stachowski 1998: 178; Rocchi 2017a/XI: 169; KEWT 292; Nişanyan (1680).

In Turkish we find it present in these types of words: *çayhane*, *dershane*, *kahvehane*, *yazıhane*, *marangozhane*, *ameliyathane* etc. Thus, the word-formation is simple as in the word *kahvehane* (coffeehouse): *kahve* (the coffee- the liquid that is drunk) + the suffixoid *-hane* = *kahvehane* – the place where that liquid is drunk. In Albanian with this suffixing element have entered the words *kasaphane*, *pazarhane*, *timarhane*, *terzihane*, *tabakhane*, *berberhane*, *divanhane*, *kushhane*, *taraphane* etc. I. e. generally it makes possible for the word to mark the place where that activity gets performed, e.g. *marangoz-hane* (premises, place where the activity of woodworkers is carried

out). In most cases, it is equivalent with the Albanian suffix *-tore*, such as *kebaptore: kebab+-tore, ëmbël +- tore = ëmbëltore* etc. As a variation of the suffix, there is also the form *-hanë*, but that does not affect the semantic side of the word, i.e. *barberhanë* etc. As a suffix that has interacted to create new words with stems that are not loans from Turkish, in a wider use are included words such as: *shqiptarhane* (from the stem *shqiptar* and the suffix *-hane*), *cullakhane, malësorhane, magjuphane, shkretinëhane, prostitut-hane mutsihane* etc. In all of these suffixal word-forming elements, different uses for stylistic purposes are noted. This element also has such features that it is used especially in the spoken language to give the sentence connotation of irony, sarcasm etc., e. g. uses like: "*E sa injorantin e kish kjo shqiptarhane!*", usage which aims to put the accent on the word used with the suffix *-hane*. "Actually, the word "hana", Turkish "hane" meaning "house, building" has managed to spread to several other languages, passing into the quality of a real internationalism, so did in Albanian"(Veselaj, 1996: 84).

So, the word **han hani** is used to name a hostel or "building near the road or in cities that served as a hostel for travelers and had room for their animals", the definition of which we have in FMGJSSH (2023).

As for this element that appears as a component in the word-formation of people's names of the type Mihane, Lejhane, Xhejhane used by Albanians, in the language they came from we are dealing with the suffixing element *han*, but without a pronounced *-e*.

Thus, these names in Turkish are written and pronounced Lejhan, Xhejhan etc., while in Albanian, even though the source is from here, they are written and pronounced as if they were with the locative suffix *-hane*, discussed above. Putting people names, which in the first meaning mark places, is common in all languages. These people's names have also come in the same way, finding use in languages in regions with Turkish as a language in contact.

4.0 The Turkish suffix *-li*

The Turkish suffix *-li* is a suffix used to form adjectives and has polysemantic features. "They create adjectives that add a sense of belonging to a place, such as: *mahalle-li, üniversite-li*. Found in adjective words stereotyped with roots and stems that are not commonly used: *elveriş-li, sevgili* etc." (Makuyapimelekleri, 2017).

In Albanian language loans with this suffix that have a wider use are words of type: *rahmetli, sevdali, sevgili, kimetli, qosheli, marakli, qejfli, zanatli, gërxheli, borxhli, osmanli, hatërli* etc. An etymology example of a word with full-loan character: *qosheli* (Colloq) 'with sharp corners/angles' 1866, Rossi – *qoshlli 1854, Hahn ('quadrangular') – *qysheli 1866, Rossi • Osm., T. *köşeli* 'cornered, angled' (NR 680). ♦ Der. of *köşe* (→ *qoshe*). A/L Miklosich 1884/II: 10, 1890/IV: 159; Meyer 1891: 229; Boretzky 1976: 110; Dizdari 2005: 816; Karaağaç 2008: 536; Topalli 2017: 1226. T/L Stachowski 1998: 101; Rocchi 2016/IV: 284 (1641).

While words with mixed word-forming structure, interacted with stems of words that are not Turkish loans are separated in groups. General words are included: *nevojë-li, komuna-li, turqe-li, teka-li, vesvese-li, hajgare-li* etc. In the order of these words with this suffix present in the stems of words that are not loaned from Turkish, there are also some other characteristic ones, with which demonyms are formed according to localities in Kosovo: e. g. *ferizajli* from the name of the city Ferizaj and the suffix *-li*, so '*ferizaj-li*' for the residents of the Ferizaj city. Others of this type are also: *kaçanikli, mitrovicali, kosovali, prishtinali, prizrenali, preshevali* etc. This way of word-

forming is also present in Turkish, so e.g. from the country Parga and the suffix in question create the name of the people who belong to that country (demonyms): *Parga-li*. The standardized plural in Albanian of words containing this suffix is done with the ending *-nj*, while as a dialect variant it's done also with the ending *-j*.

Another characteristic example that we have encountered, of this suffix with stems that are not Oriental loans is the word *brudali*, with a loan stem from German *bruda*, a word that is quite used in the spoken language in Albanian, especially in idiolects. This unusual combination of a German stem with Turkish suffix is created from Albanian migrants in German-speaking countries. We also have such a word structure in the word *kingllëk*, with the Turkish suffix *-llëk* and the English stem *king* which we find used in a Kosovar newspaper (The newspaper "Dita", 2014), with the full title ‘*Greva e urisë, ky kingllëk radhe*’.

4.1 The Turkish suffixes *-xhi* and *-çi*

The suffixes *-xhi* and *-çi* (in Turkish *-ci* and *-çi*) are the suffixes used for formation of words that usually denote professions and are used to be given as epithets with adjectival value. ‘One of the suffixes that has no meaning on its own and gives a new meaning to the word to which it is added is the suffix ‘-ci’. When this suffix is added to some words, occupational names are formed and can be written as –cı –cü –çi –çî’ (Erem, 2015).

In the group of words with this suffix are included different ones that have come direct from Turkish (with stems and affixes), and those words which are further formed with stems that are not Turkish loans. Even these suffixes are part of those that have evolved in extension and have been absorbed so well that they are also used in other word-formation manners. These two suffixes in Albanian do not have clear distinguishing boundaries due to the phonetic characteristics of the phonemes /ç/ and /xh/, although in Turkish they are two separate suffixes. So, in Turkish the word *saatci* in Albanian are used both forms *-xhi* and *-çi*: *sahatçi* and *sahatxhi*, the second one even more. So, most of the words of this group have undergone a phonetic change *-çi* to *-xhi*: *sahatxhi*, (Osm., T. *saatçi*) etc.

In the group of words loaned directly from Turkish with this suffix are included the words: *inatçi*, *dilinçi*, *sahatxhi*, *kundraxhi*, *hilexhi*, *kallajxhi*, *jorganxhi*, *bojaxhi*, *qelepîrxhi*, *qesexhi*, *bostanxhi*, *daulxhi*, *dyqanxhi*, *fallxhi*, *duhanxhi*, *jabanxhi*, *dallaverxhi*, *sakaqexhi*, *poterexhi*, *qoftexhi*, *qebapxhi*, *samarxhi*, *qelepîrxhi*, which exist with this form of word-formation in Turkish as well.

Etymological example of a complete loan word from Turkish: *sahatçi* (Colloq) ‘clock/watch repairer, watchmaker’ 1866, Rossi – *sahatxhi* (Nst) 1948, Mann – **saxhi* c1900, Arbanas – **sahatshi* 1916, Leotti – **saatxhi* 1937, Leotti • Osm., T. *saatçi* ‘watchmaker; watch repairer; watch seller’ (NR 966). ♦ Der. of *saat* (→ *sahat*). A/L Boretzky 1976: 114; Dizdari 2005: 859; Karaağaç 2008: 711; Topalli 2017: 1294. T/L Stachowski 1981/III: 46, 1996a: 137 (1641).

Some of the words that belong in the group of words that this suffix has interacted with stems that are not loaned from Turkish are: *zhurmaxhi*, *hekraxhi*, *hajgarexhi*, *humorxhi*, *mullixhi*, *plehraxhi*, *interesxhi*, *pajtonxhi*, *brushaxhi*, *teneqexhi*, *zhgunaxhi*, *thashethemxhi*, *bedihavxhi*, *shalaxhi*, *samarxhi*, *drogaxhi*, *mysteqexhi*, *fitnesshi*, *berllogxhi* etc. Within this group of words, a common productive way is when the suffix is attached to the names of animals, in order to indicate the profession based on these animals: such as *pula-xhi*, *lopa-xhi*, etc.

In addition to the suffix *-li*, this is also a suffix that is part of the formation of demonyms according to localities in Kosovo, such as *gjilanxhi* from the name of the city *Gjilan* and the suffix in question.

4.2 The suffix *-qar* (*-kār*)

The suffix *-qar* (in Turkish and Persian with original form *-kar*) is a suffix used for formation of qualitative adjectives. Although it appears from Persian with the form *-kār*, in the Albanian language it is an element that arrived from Turkish through loans. Its original form in Turkish and Persian is *-kar*. In the Albanian language, it has undergone a phonetic change, or has undergone the phenomenon of palatalization *k-q*, which is common for Albanian Turkism. This phonetic change is common from Turkish to Albanian, because we find it in almost all other loans, in all phonetic positions where the phoneme /k/ is present, such as: *qymyr* from Osm., T. *kömyr*; *qepenik* from *kepenek* etc.

The suffix *-qar* is a suffix which interacts morphologically with nouns. Adjectives formed by this suffix mark the person who contains the semantic features marked by the noun. So, e.g. from the noun *inat*, where the dictionary describes as: ‘‘zemërim; mëri’’ (eng. anger, resentment) (FMGjSh, 2023), so in ‘‘*inatqar*’’ - the individual who contains these characteristics. ‘‘A number of Turkisms are also close to this group, such as: *gjynahqar*, *hileqar*, *namusqar*, *tamahqar*, *zullumqar*, *ziliqar*, from which a suffix *-qar* is abstracted, with which words such as *grabitqar*, *ziliqar*’’ (Xhuvani & Çabej, 1962). ‘‘Further, the large group of nouns and adjectives in *-tar*, like *gjahtar*, *gjqatar*, *vjershëtar*, *pjesëtar*, *udhëtar*, *derëtar*, *luftëtar* etc., some of which are quite old in language’’ (Vehbiu, 2020).

We also have a variation of this suffix in Albanian, the form *-qur*, as it’s presented in the word *belaqur* for *belaqar*, used in some regions.

Further, we have an etymological view at the loan that contains this suffix: *tamahqar* (Colloq) ‘avaricious/greedy/envious (person)’ 1875 Rossi – **tamahjarë* 1827, Tosk Gospel (Xylander) – **tamaqar* 1866, Rossi – **tahmaqar* ‘ambitious’ 1809, Boçari • Osm., T. *tamahkâr* ‘stingy, avaricious, greedy’ (NR 1092). ♦ < NPers. *ṭama*‘-*kâr* ‘greedy, covetous; gluttonous, avaricious’. A/L Meyer 1891: 423; Boretzky 1976: 127; Dizdari 2005: 992f.; Karaağaç 2008: 811; Topalli 2017: 1444. T/L Stachowski 1998: 216; Rocchi 2017a/VIII: 105 (1533); KEWT 321.

5.0 Conclusion

In this paper, the scientific view was given in many aspects of some Oriental suffixing elements (two Persian and three Turkish) most prominent in the word-formation of the Albanian language. In the focus of the paper comes the analysis of cases when these suffixes have interacted with stems that are not Turkish loans in the creation of new words. We saw the main reasons for the abstraction of these suffixes in the Albanian language in a long time and space segment, but not skipping the other reasons that preceded and pushed this segment. In the paper, it was also mentioned how these suffixes have productive abilities in the Albanian, so they can be attached to different stems with loan or non-loan character, to form new words. A proof of their productive ability is the formation of words with this character late, decades after the end of the influence of the Ottoman Empire, words such as: *poshtërsinllëk*, *interesxhi*, *komunali* etc., where the stem of the word *komunali* (*komunë*) comes from a late terminology in the Albanian language, especially in the region of Kosovo where it is officially used, e.g. on the official website of the Ministry of

Education, the eKosova platform, there is a section called *komunali* (eKosova, 2020). We encounter this phenomenon also in other word structures, such as in the word *ferizaj-li*, where the stem of the word Ferizaj is born late. It is confirmed that the city had another name. These are facts that prove that most of these suffixes have active status in production in Albanian. But there are even internationalisms conceived with loans, which belong to the late globalization period of languages.

The other point emphasized in the paper concerns the nature of their user features, that is, their stylistic side. The characteristic of these suffixes was to a great extent the stylistic use, either for ironic reasons etc. This comes to us in a series of prominent Albanian authors such as: Qosja, Kadare, Agolli, Demaçi etc., where such suffixes are placed on words even unnecessarily, in order to reach the required stylistic level (see Qosja, 1976: p. 132).

Every day, the need for further studies of the oriental linguistic influence on the Albanian language is emphasized more and more. Studies which bring into detail the amount and corpus of Albanian words included with these suffixes and their look at the lexical aspects. Demiraj also calls for more in-depth studies and confirms the lack of them in this aspect. "Here it is not only a matter of clarifying in the best possible way the historical and social circumstances that have enabled the penetration of these loans as well as their number as accurately as possible over the centuries, but also to point out how these loans are still in active use in today's Albanian" (Demiraj, 2005: 19).

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The impact of education volunteer activities to development tourism in Kosovo

Abstract.

This paper is important component, because present the readiness of the citizens in connection me educative voluntary work as segment in the development of tourism through protection and promotion of cultural heritage in Kosovo. The development of Tourism as an important factor in the economy, this component has found great support in recent years, but during now there has not been a concrete platform how to frame readiness through voluntary work in the development of tourism.

To know more about our interest, a study instrument was administered in the Albanian language through the questionnaire with 300 respondents. Findings presented a low level of voluntary activities in the development of tourism through protection and promotion of cultural heritage in Kosovo. Results show the low readiness of public institutions to develop a concrete plan, while have a high willingness of the participants in the study to approach voluntary work during their free time. Also, the findings show, there is not a concept for the development of such platforms for citizens. In Kosovo most of the citizens are young, while and other age groups are also ready to offer voluntary activities to develop tourism as an important factor in the country's economy. Public institutions, both central and local level are encouraged to design programs to developing voluntary work and to help to development tourism while these programs directly influence the protection and promotion of cultural heritage in Kosovo.

Keywords: Education, Voluntary work, tourism development and promotion of cultural heritage.

2. Introduction

The end of the last war and during the administration transitional period from the international administration to the local institutions in Kosovo, not only political aspects related to status of the country but cultural heritage was also an important point in the negotiations process. However, in relation to the adaptation the cultural heritage infrastructure for tourism which benefit the citizens, one fact was present, neither the international administration nor the local government was properly invested in cultural heritage. But, this study will not be related to the form and manner of investments, but how were addressed the readiness regarding the application of voluntary work in the protection and promotion of cultural heritage in Kosovo. Several years of civil society initiatives to regulate the voluntary work component, in general terms, we can say that they have failed in Kosovo in terms of Cultural Heritage. All that happened was the drafting and approval of the Law on Youth Empowerment and Participation. as a document dealing with voluntary work exclusively in the youth sector (Bajrami, 2002; Jerliu, 2023; Ministry of Culture, 2023 Law on Youth Empowerment and Participation, 2009).

From statistics, Kosovo is one of the countries of the Western Balkans that registers an increase in the number of different visitors, who show interest in visiting countries with cultural wealth, therefore there is a need for the adaptation of the hosting infrastructure. Although tourism in Kosovo throughout history was not developed, since the conflict in the former Yugoslavia and the annexation of Kosovar rights by Serbia had created uncertainty, which affected the decline of interest and the creation of an unsafe environment, this situation changed after the war. After the war, we have the ranking of increasing numbers in relation to the interest in visiting new countries with rich cultural offers, today it has transformed tourism into one of the most important sectors in Kosovo, in which it is not much invested (Gashi, 2023; Zemaj, 2017).

2. Review of Literature

During the research, there are not many papers related to voluntary education and tourism, this two component are separate in most of time during the research work. Based on the actually study presented by various authors, tourism is a component which is of great importance in the economy of each country. However, the development of tourism is of great importance both for the citizen and for the strengthening of the state. Tourism as a component has a great impact on the economy of each country, as it helps economic development at least in a certain destination (Wall & Mathieson, 2006; Ukaj, 2010).

Since this component plays an important role, researchers have recommended that the involvement of the broad social spectrum would positively influence the preparation of tourist packages where everyone would benefit from both income and their commitment to various activities (Sharpley & Telfer, 2002) So, the commitment to the protection and promotion of the cultural heritage in Kosovo should be one of the determinations of the institutions in order not to suffer damage to the heritage in the country since it is an important asset for tourism in the country (GAP, 2016). In the exercise of its activity the Ministry of Culture, Youth and Sports and National Museum of Kosovo is responsible to implements the policies and strategies of the culture and ensures the implementation of legislation in the field of movable cultural heritage through the accomplishment of scientific and professional standards of research, collection, inventory, study, protection and preservation conservation and restoration , exposure and promotion of potential

facilities of material and non-material cultural heritage values (MCYS, 2020). If we analyse, we will see that the host community and the resources provided for tourism are the most important factors for the development of tourism (Getz, 2007).

2.1. Voluntary work

Even in spite of the rapid global developments, voluntary work continues to remain one of the offers of each citizen to help the community in the country. It often happens that we have promotion of other jobs that are part of paid contracts, but voluntary work promoted not much. From the studies that are being carried out, we say that this theme continues to be supported by people of good will. According to a research done, it appears that volunteering is becoming more and more popular in society due to the growing number of projects, organizations and volunteer networks. The volunteer work may be organized by natural and legal person, engaged for the good of society. (Çeku, 2013; Ministry of Culture, 2023 Law on Youth Empowerment and Participation, 2009).

2.2. Tourism Development and Cultural Heritage Promotion

The development of tourism and the promotion of cultural heritage are factors that are interrelated. In the global developments, we also have increased requests from customers to create satisfaction and rest at a time when work obligations have become a daily pressure on people. With new global developments, the degree of application of steps on tourism development has been raised, taking into account that this factor is an industry with rapid changes and competition, trying to adapt to the needs of customers to create satisfaction and comfort (Chang et al., 2014). So, it is the new global developments that enabled a greater surge in movements, creating space for progress in effective IT in the development of tourism, providing high quality services and ensuring customer satisfaction has been recognized as important factors in the success of tourism industry (Chen et al., 2011).

3. Importance of Study

3.1. Voluntary work in the development of tourism through the protection and promotion of cultural heritage in Kosovo

Kosovo is one of the countries of the Western Balkans that registers an increase in the interest of various visitors for the objects of cultural heritage. But until now, the institutionalization of voluntary work was only partially done through the Law on Youth Empowerment and Participation - volunteerism as a benefit for society and enabling young people to promote participation of youth in the decision making

process, without any difference, in the development of a democratic society and to increase their perspectives, to improve their professional skills and experiences (Article 1 and 14; Law No. 03 / L-145, 2009). As well as the Kosovo Youth Strategy 2013-2017, of the Ministry of Youth, Culture and Sports. In Kosovo, volunteerism as a phenomenon was developed all the time, but there was no treatment understanding it as a social definition (UNDP 2004, p.50). Based on the first initiatives, we say that we have a good infrastructure for continuing the drafting of new plans for the application of volunteering in the protection and promotion of cultural heritage in Kosovo.

4. Methodology

The study in question is based on quantitative data which were administered through a questionnaire which was distributed in electronic and physical form with 300 respondents. During the administration of the questionnaire in electronic form, the satisfactory level of respondents was not reached, so the physical format was also practiced through distribution. Data collection was carried out in 2022 and the first three months of 2023. The questions dealt with topics related to the impact of voluntary activities on the development of tourism through the protection and promotion of cultural heritage in Kosovo.

Table 1: The Participants' Demographic Characteristics

Demographic	Characteristics	N	%
Age	16–24	93	31
	30–44	153	51
	45–59	39	13
	60–65	15	5
Gender	Men	210	70
	Women	90	30
Marital status	Single	99	33
	Married	189	63
	Divorced	6	4
	Widowed	6	0
Education	High school	45	15
	Graduate	180	60
	Master's degree	48	16
	Other	27	9
Employment Status	Yes	210	70
	No	90	30

Source: From the respondents who have said answers

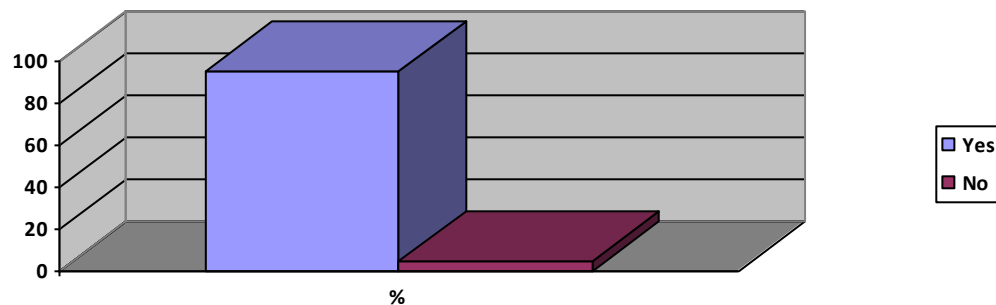
4.1. Analysis of Results

In the analysis of the study, it is confirmed that the development of tourism is an important factor in the economy, but there has not been a concrete platform in Kosovo, how to frame readiness through voluntary work in cultural heritage to develop it.

The findings present interesting results which are classified as hypotheses:

Hypothesis 1. Do you like voluntary work and would you engage?

Figure 1: Do you like voluntary work and would you engage?

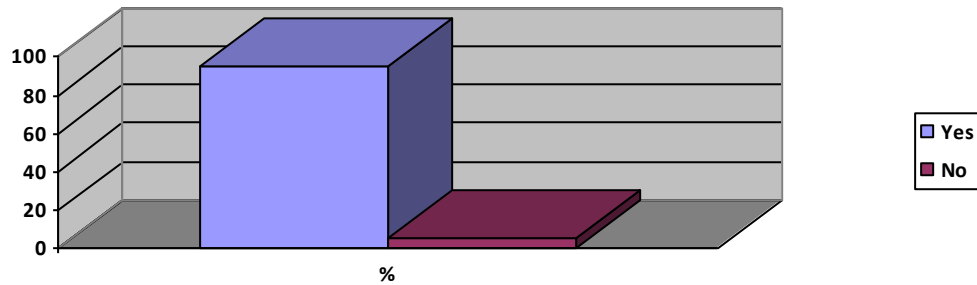


Source: The results from the answers of the respondents in the questionnaire

From the obtained results, we have 95% of respondents who stated that they like voluntary work and would engage if there are requests from the institutions.

Hypothesis 2. Do you think that Kosovo with its values in cultural heritage is and remains a very attractive place for all foreign visitors?

Figure 2: Do you think that Kosovo with its values in cultural heritage is and remains a very attractive place for all foreign visitors?

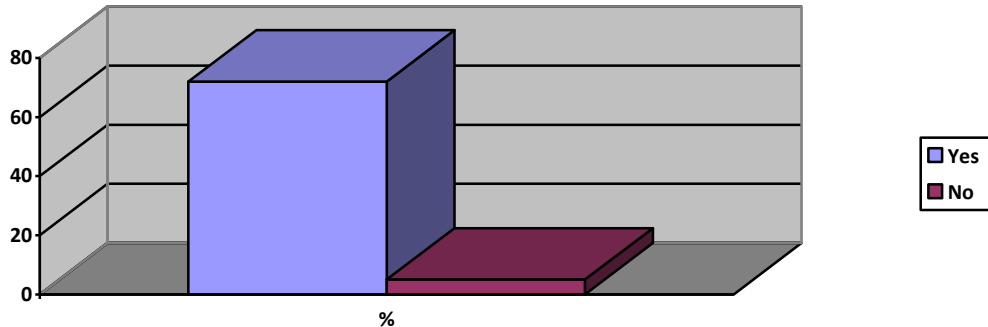


Source: The results from the answers of the respondents in the questionnaire

From the obtained results, 90% of the respondents who think that Kosovo with its values in cultural heritage is and remains a very attractive place for everyone.

Hypothesis 3. Do you know that the preservation, protection and presentation of Kosovo's cultural heritage is part of the strategic orientations and policies of the institutions of the Republic of Kosovo, especially the Ministry of Culture, Youth and Sports?

Figure 3: Do you know that the preservation, protection and presentation of Kosovo's cultural heritage is part of the strategic orientations and policies of the institutions of the Republic of Kosovo, especially the Ministry of Culture, Youth and Sports?

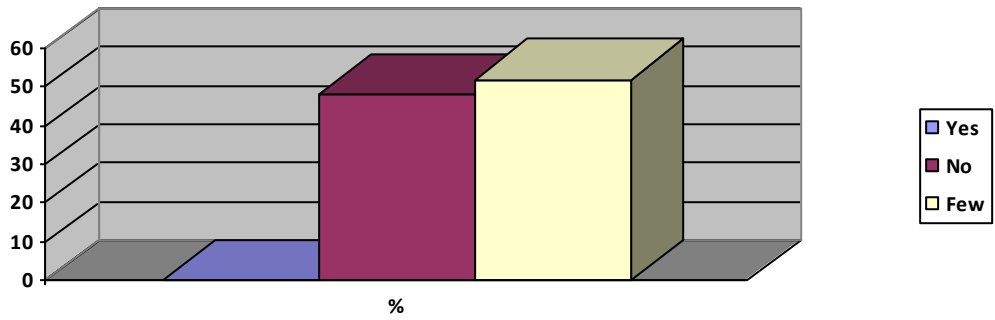


Source: The results from the answers of the respondents in the questionnaire

From the results, 72% of the respondents who think that the preservation, protection and presentation of the cultural heritage of Kosovo is part of the strategic orientations and policies of the institutions of the Republic of Kosovo, especially the Ministry of Culture, Youth and Sports.

Hypothesis 4 Are there voluntary initiatives in your community for the preservation, protection and presentation of cultural heritage in order to adapt the objects for visitors? Are you part of these initiatives?

Figure 4: Are there voluntary initiatives in your community for the preservation, protection and presentation of cultural heritage in order to adapt the objects for visitors? Are you part of these initiatives?

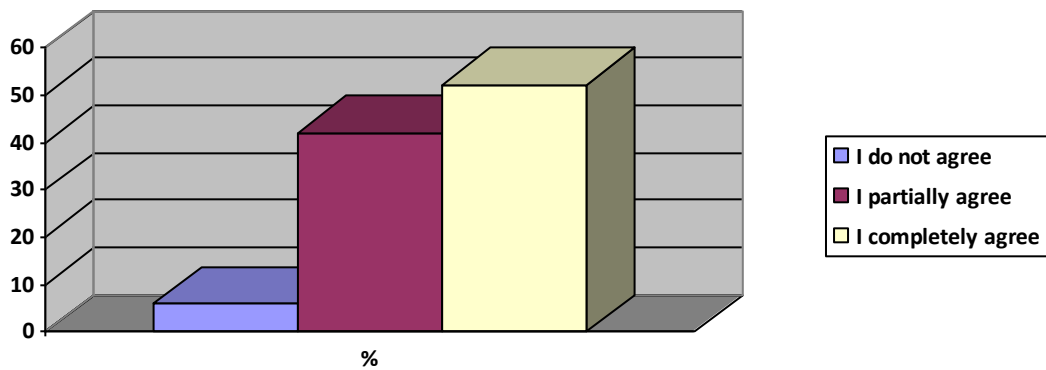


Source: The results from the answers of the respondents in the questionnaire

From the results obtained, 52. % stated that there are few voluntary initiatives in their community and those few are related to the preservation, protection and presentation of cultural heritage and the adaptation of objects for visitors.

Hypothesis 5. Do you agree with the position that volunteering in cultural heritage can further promote the promotion of cultural values in the country and stimulate interest in visitors?

Figure 5: Do you agree with the position that volunteering in cultural heritage can further promote the promotion of cultural values in the country and stimulate interest in visitors?

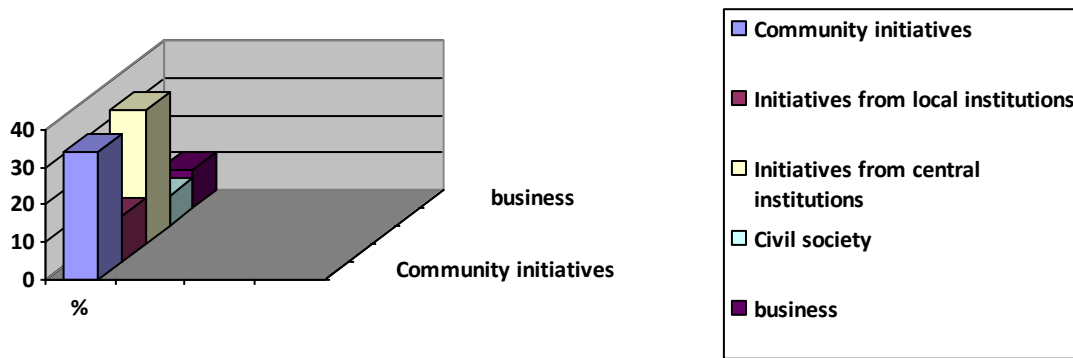


Source: The results from the answers of the respondents in the questionnaire

From the results obtained, 52.6% of the respondents stated that volunteering in cultural heritage can promote the promotion of cultural values in the country and the interest of visitors.

Hypothesis 6. Which of the following factors have a role in promoting volunteerism in the protection and promotion of cultural heritage for the purpose of stimulating the interest of visitors for visits?

Figure 6: Which of the following factors have a role in promoting volunteerism in the protection and promotion of cultural heritage for the purpose of stimulating the interest of visitors for visits?

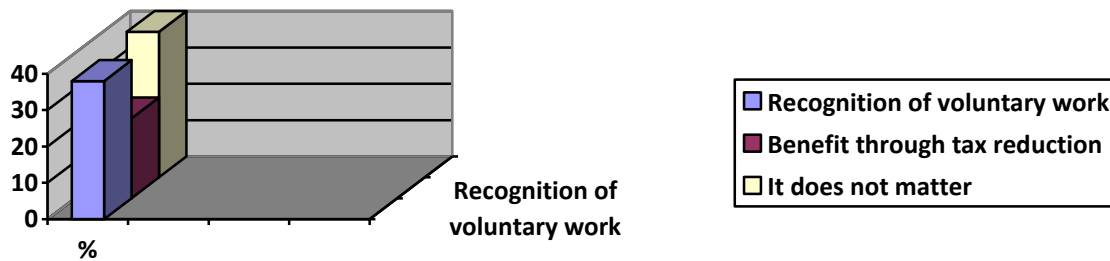


Source: The results from the answers of the respondents in the questionnaire

From the obtained results, 36.8% of the respondents stated that the initiatives are needed by the central institutions and 34 % from community.

Hypothesis 7. Which of the following factors will influence you to engage in voluntary work in cultural heritage?

Figure 7: Which of the following factors will influence you to engage in voluntary work in cultural heritage?

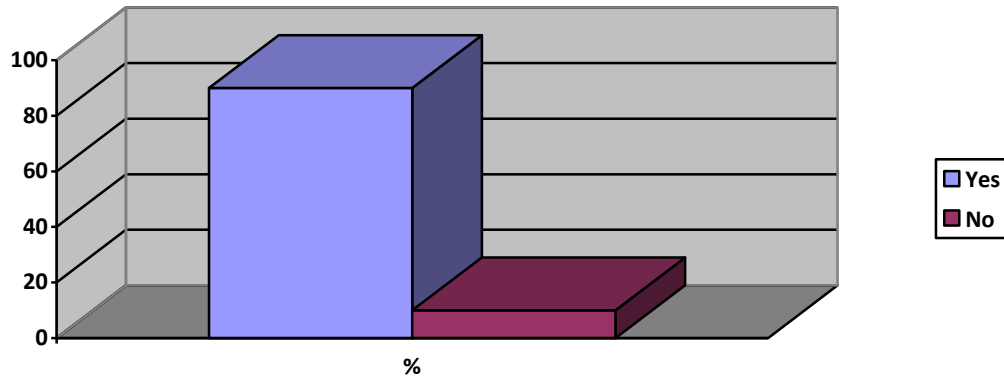


Source: The results from the answers of the respondents in the questionnaire

From the obtained results, 38% of the respondents stated that knowledge of voluntary work is an important factor to engage in voluntary work in cultural heritage.

Hypothesis 8. Does voluntary work affect the making of cultural heritage objects more attractive for visitors and does this affect the growth of tourism?

Figure 7: Does voluntary work affect the making of cultural heritage objects more attractive for visitors and does this affect the growth of tourism?

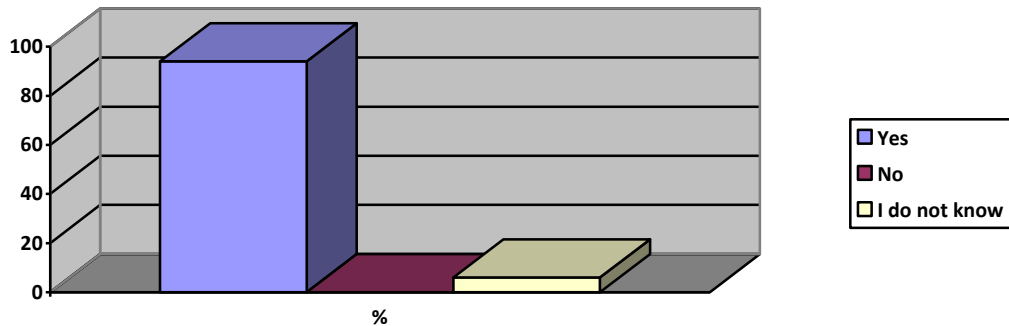


Source: The results from the answers of the respondents in the questionnaire

Out of 300 respondents, 270 or 90 % have declared voluntary work affect the making of cultural heritage objects more attractive for visitors and does this affect the growth of tourism?

Hypothesis 9. If voluntary work affects the growth of tourism, does the growth of tourism affect the economic growth of the country

Figure 7: If voluntary work affects the growth of tourism, does the growth of tourism affect the economic growth of the country?



Source: The results from the answers of the respondents in the questionnaire

Over 90% declared voluntary work affects the growth of tourism, does the growth of tourism affect the economic growth of the country

5. Conclusions

Based on the results, confirmed that voluntary work and development of tourism are important factor in the economy but during now has not found much support in recent years as a result of low interest from competent actors. This finding is justified by the fact that there has not been a concrete platform, at least in Kosovo, on how to frame readiness through voluntary work in the development of tourism.

Therefore, it is recommended:

- To increase the level of voluntary activities in general in Kosovo and in particular in the development of tourism.
- To have a platform on the implementation of voluntary activities related to the protection and promotion of cultural heritage in Kosovo.
- To increase the interest of public institutions to develop concrete plans regarding the components.
- To increase the willingness of institutions to offer voluntary work during free time.

From the findings, public institutions, both at the central and local level, are encouraged to design programs through which they would develop voluntary work and influence the development of tourism on the one hand, while on the other hand they would directly influence the protection and promotion of cultural heritage in Kosovo

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Milosao's songs: Homeland and love

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Abstract.

Jeronim de Rada brought a new spirit to Albanian literature. Being the first Albanian romantic, a good part of his works are about love. The main manifestation of his romanticism, therefore, is love, but in a broader sense: human love for each other, love for the homeland, for the compatriot, for the language. In this paper, we will elaborate on the theme of the poem "Songs of Milosao's" by De Rada, the theme of love for the homeland and the theme of human love. From the two aforementioned themes, two ideas arise: the assertion of the individual's right to be free in his feelings and the idea that the homeland can be liberated only by armed struggle. Precisely the

patriotic theme as well as that of love were the motivation for the drafting of this work, because his work still manages to have that function, to evoke that feeling of patriotism. With this paper, we aim to analyse Deradian's work and focus on two main topics. For the analysis of the work of De Rada's, we researched analytical, descriptive and research methods, to highlight the wealth of themes that De Rada dealt with in this work. As the central figure of Albanian romantic literature, De Rada enriched his literary work by bringing new elements to Albanian literature.

Keywords: homeland, love, conflict, motive, idea

3. Summary of the paper

In this paper, we will elaborate on two topics themes by the writer Jeronim de Rada, in the poem Songs of Milosao's: the theme of love for the country and human love. From the many studies done on the activity of the well-known poet Jeronim de Rada, we have seen that his work is rich and varied. De Rada, brought a new spirit to Albanian literature. Being the first Albanian romantic, a good part of his works are about love. The main manifestation of his romanticism, therefore, is love, but in a broader sense: human love for each other, love for the homeland, for the compatriot, for the language. His work was and is a motivation for all Albanians to love their homeland and be close to it, through his work, De Rada aimed to unite the Albanians, where he achieved this. Exactly, the theme of love for the country as well as that of love for women were the motivation for writing this paper, because his work still manages to have that function, to evoke that feeling of patriotism. For the analysis of his work, we used different literature sources. With this paper, we aim to analyse the work Deradian's and focus on the two aforementioned topics.⁴

1.1 The subject of the poem

De Rada published the work for the first time in 1836, with which a new period of Albanian literature was opened. This work gave De Rada's fame as an outstanding and talented young poet. The poem echoes the battles that took place in Scodra, the events are set in the 15th century, in the enlightened era of the "Great Weather". It consists of thirty songs. Two main themes are interwoven in this poem; the theme of love and the homeland, both of these go parallel to each other, not even sacrificing love for its sake to the homeland but not to leave the homeland aside for love. These two themes mainly correspond to two main conflicts, that are present in the work, where we have conflict of a social nature, which are the class prejudices that become an obstacle to the marriage between two young people in love. And the conflict with a psychological character, where the hero of the work, Milosao, must choose between love for the Kallogre's daughter, Rina, and love for the homeland.⁵

3.1.1 The motif of love and the patriotic motif

⁴ Kastrati, Jup, Jeronim de Rada, work 1, publishing house Naim Frasheri, 1987

⁵ Hamiti, Sabri, Romantic literary, publishing house Faik Konica, 2002

The motif of love occupies a special place in this poem. The poet sees love as a virtue, he has handled this motif very well, seeing that love brings spiritual happiness, for people, he has overcome every obstacle for the character's love to triumph.

Milosao and Rina belonged to different social classes, where exactly this becomes the reason that their love cannot be created without having an obstacle in the interior. Since Rina was poor, Milosao's mother did not want her near her son. The poet to eliminate class prejudices and for everyone to be equal, so that there are no prejudices that become an obstacle to love between young people, represents an earthquake that falls in Scodra, and everyone loses their wealth. And so one of the main obstacles disappears.

Milosao meets Kallogre's daughter, Rina, for the first time, in the itch and that's where love is born.

Enveloped and high

With old braid

Under a white lace,

*It was a girl in itch.*⁶

Here de Rada, presents us with first meeting of Milosao and Rina, showing us her appearance as a working peasant, with the physique of a noble Albanian woman, covered and tall.

1.1.2 In this poem, the patriotic motif of patriotism is clearly shown, he is present throughout the work. This motive can be seen in Milosao's love for his country, for compatriots, for the traditions of the Albanian people. The poet here presents Milosao as a patriotic hero who chooses to go to war to liberate his homeland. Milosao every time expresses his desire to fight for the country, a desire that was supported by his mother as well as by the people. Milosao's love for his country often seems to outweigh his love for Rina.⁷ In some songs, Rina, out of her great love for Milosao, begs him not to go to war but Milosao doesn't listen to her, he says that for his country he will shed a river of blood. Milosao never gave up on his homeland. His motto was "there is no personal happiness if there was no collective happiness"

Verses where Milosao's patriotism is expressed: *Arber's day came, we must die, in bed if not moaning, on the threshold of our homes!*⁸

Two ideas arise from the two aforementioned topics: the assertion of the individual's right to be free in his feelings and the idea that the homeland can be liberated only by armed struggle. This is the reason that De Rada himself calls this poem "double lyrical", being aware of the two concerns that gave him live.⁹ In Milosao's songs: work of the great Albanian writet, we learned a formula of the meaning of sacrifice. As well as the meaning of live. "I give my life for love. I give my love for my country". Life without love is live without meaning. Living without love lacks reason.

⁶ De Rada Jeronim, Milosao's songs, 1836

⁷ De Rada Jeronim, „Milosao's songs“ 1836

⁸ De Rada, Jeronim, "Milosao's songs", 1836

⁹ Kastrati, Jup, „Jeronim de Rada“, work 4, Rilindja, Pristina, 1980

4.The characters

Milosao- is the romantic hero, who comes from the aristocracy. It has a manly character and is dear characterized by a sense of patriotism, he is in love with the girl peasant Rina, and in the end triumphs over society's prejudices.

Rina- is a simple village girl, very shy because of her class position.

Although he belonged to the poor class and there were few opportunities for him to marry Milsoao, she eventually managed to be together with the one she loved.

The Great Lady - Milosao's Mother, stands out as a patriot but also as prejudiced against the differences of layers of society. She opposes Milosao's marriage with Rina because this the latter does not come from the same layer as them.

Leticia- was Milosao's sister, she does not participate much in the work, she is characterize by the great love she has for her brother. ¹⁰

2.1 Termination

In the end, the Poem written so precisely, where it shows the antiquity of the suffering Albanian people, with the obstacles to the enemies and in some cases where they were even in the present day with the obstacle of a love from family members, due to social classes, due to ethnicity, convey a message that a love should not be stopped for any reason, on the other hand, the main protagonist Milosao conveys the message that there can be no personal happiness without collective happiness.¹¹ He was the one who did not accept his own happiness without having the happiness of his compatriots. He was invincible in his mission and more strength and dedication he managed to overcome his enemies, maybe not the love he had for his wife Rina. The poem carries the victory over class prejudices and differences between social strata. ¹²

¹⁰ De Rada, Jeronim "Milosao's songs" 1836

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The Present and Future of the Metaverse: A Psychological Review

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Abstract.

The aim of this study is to analyse the Metaverse platform in terms of psychological factors and to shed light on its present and future from a different perspective. In today's world where technological developments are very intense, the much talked about Metaverse, which emerged in 2021, has been a subject of curiosity. In a different virtual world, the interaction, activity, and events between other avatars through a simulation of one's own body (avatar) have led people to use this platform. Considering that the concepts of Social Identity Theory, Conflict of Self Theory and Social Hereness are effective in this use, explanations have been made from these points. On the other hand, how the mental health of these platform users will be affected in the long term and the dimensions of positive and negative effects are also issues that need to be examined. Because there are serious risks such as addiction, risks of not being able to fulfil tasks or enjoyment when returning to real life, conflict with the environment, disruption of duties and responsibilities in life, and a decrease in self-esteem. Again, although the effects of virtual reality applications and tools on our mood and depression, anxiety, eating disorders and many other mental disorders have been researched to a certain extent, the impact of the Metaverse on these issues is not yet fully known. Clinical, cross-sectional, and longitudinal studies should be conducted to clarify all these situations and the results should be used objectively for this platform.

Keywords: *Metaverse, Avatar, Social Identity, Self-discrepancy, Psychology*

5. Introduction (TNR 12pt., bold)

Human beings have been experiencing dizzying technological developments in recent years compared to previous times. These developments have both positive and negative effects on

human life, and these effects attract the attention of not only science and engineering fields but also social sciences such as psychology, sociology and economics. One of these concepts, the Metaverse, which was introduced very recently, attracted great attention when it was introduced by Mark Zuckerberg in 2021. It is known that the concept of Metaverse was first used in the novel "Snow Crash" written by science fiction writer Neal Stephenson and translated into Turkish as *Parasit* (Stephenson, 2003). The Metaverse is defined as a highly complex digital environment that can offer users new means of communication while hiding their avatars (Sparkes, 2021). More broadly, the Metaverse involves people creating and interacting with avatars, which are virtual representations of themselves, and existing in a virtual universe where they can engage in many different types of activities. This space, which enables interactive presence in various fields such as social, educational, economic and entertainment, also incorporates technologies such as virtual reality (VR-Virtual Reality), augmented reality (AR-Augmented Reality) and artificial intelligence (AI-Artificial Intelligence), all of which are active in different fields. The psychological background of the platform, which attracts people with all these features, is also curious. Explanations have been made on the theories of social identity, social hereness and self-contradiction in terms of why people take part and spend time on this platform.

1.2 Theories that Explain the Metaverse Psychologically

5.1.1 Social Identity Theory

Social identity is the way people define themselves in relation to others. It encompasses various aspects of a person's identity such as gender, race, nationality, religion and interests. Social identity is shaped by social norms and expectations and can influence how people interact with others and how they are perceived by others (Hornsey, 2008). If we evaluate the Metaverse platform within the framework of this theory, on this platform, people exist with the avatar identity they create and can change this avatar with all body parts such as face, hands and the clothes they wear to the extent they idealize. In this way, by interacting with the avatars created by other people, they can build a different social identity than they would face to face. The reason why she is here may be the difference between the ideal self that she cannot reach at the moment and the ideal self she creates on this platform, which can also show the level of her self-esteem. In addition, with his/her real-life identity unknown, the person can act more comfortably and communicate some of his/her inner points to others.

1.1.2 Social Presence

The concept of social presence is defined as the degree to which interaction and satisfaction in an interpersonal relationship is recognized by the other person (Short, Williams, & Christie, 1976). Social presence has also become an important factor in online learning environments. Social presence refers to the degree of feeling, perception and reaction towards another element in a computer-mediated communication environment. A study found that the three dimensions of social presence - social context, online communication and interaction - are important in creating a sense of community among online learners. The privacy factor was also found to be important in students' level of comfort online. An increase in the level of online interaction is associated with an enhanced level of social presence (Tu & McIsaac, 2010). In the Metaverse platform, people can have social interactions and collaborate with other people through their avatars. They can also organize events such as conferences, exercises, concerts, etc. and increase their level of social presence.

1.1.3 Theory of Self-Contradiction

The Self-Contradiction Theory was proposed by Higgins in 1987. According to this theory, individuals compare their real selves (how they see themselves) with their ideal selves (how they want to be). The ideal self is a representation of the characteristics that the individual wants to have. This comparison between the real self and the ideal self can lead to negative emotions if there is a discrepancy between the two (Higgins, 1987). In the Metaverse, people can interact with others by creating avatars that are different from their current physical state. However, this freedom can also lead to new forms of self-discrepancy. For example, a person might create an avatar that represents their ideal self, but then feel inadequate or disappointed when they are unable to live up to that image in real life. Or they may feel pressure to conform to certain social norms or expectations within the Metaverse, leading to conflict between their true and supposed selves.

1.2. Metaverse and Neuroscience

Although Metaverse is similar to Augmented Reality (AR) and Virtual Reality (VR) applications, there are important differences between these structures. Metaverse connects the real and virtual worlds by integrating many technologies such as artificial intelligence, tangible interfaces, blockchain, internet of things and the information they contain with a large number of devices (Cerasa, Gaggioli, Marino, Riva, & Pioggia, 2022). The metaverse, like our brain, tries to predict the sensory consequences of users' actions by showing expected outcomes in the real world (Riva & Dakanalis, 2018). Predictive coding, a generally accepted idea in neuroscience, states that our brain actively creates an internal model (simulation) of the body and its environment (Riva, Baños, Botella, Mantovani, & Gaggioli, 2016). This model anticipates future situations in order to efficiently interact with the world and provides a hybrid experience that allows one to feel, behave and make decisions as if one were existing in that virtual universe (Hohwy, 2013).

According to the aforementioned neuroscience approach, our brain effectively produces an internal simulation of the body and the environment, but a malfunctioning simulation can also be a source of various mental health problems. For this reason, some authors have stated that caution should be exercised (Riva et al., 2018). Some authors have also stated that this platform may have a medical function and benefit. They suggest that the Metaverse could become a promising point for healthcare services with the correct establishment of the dual connections between the virtual and physical world (Riva, Di Lernia, et al., 2021; Riva et al., 2018; Riva & Wiederhold, 2022; Riva, Wiederhold, & Mantovani, 2021; Wiederhold, 2023). Recent advances in neuroscience suggest that a new conceptual framework suggesting that various mental health disorders are linked to these mechanisms, particularly the processing of bodily signals involving multiple senses, will play an important role in the treatment of these disorders (Blanke, Slater, & Serino, 2015; Riva et al., 2018).

1.3. Related Studies

It is argued that the Metaverse platform can be an advantage for mental health professionals and that this area can be preferred for time, space and economic reasons. Accordingly, through this platform, a mental health professional will be able to meet with a client from the other side of the world without being face-to-face, but as if they were in the same place. Again, in these cyber

spaces, clients will be able to choose the mental health professional they want and make an appointment (Situmorang, 2022).

A recent study in South Korea examined the social benefits of using Roblox and Zepeto, two popular metaverse platforms. The study found that young users' social presence in the Metaverse significantly influenced the amount of supportive interactions they engaged in, resulting in a positive perception of social self-efficacy. The study also found that social self-efficacy mediates the relationship between the amount of supportive interactions in the Metaverse and feelings of loneliness in young people (Oh, Kim, Chang, Park, & Lee, 2023).

A recent study examined tweets on the Twitter platform to understand the perception of the Metaverse and its potential impact on mental health. A methodology was developed by listing the mental health problems in accordance with DSM-5 and associating them with the Metaverse, and a sentiment analysis of the tweets was conducted. Tweets were rated as positive, neutral, negative or ambiguous towards mental health. The results showed that 32.1% of tweets suggested that the Metaverse could be used as a tool to improve mental health and well-being, while 29.6% of tweets indicated that there was no relationship between the Metaverse and its impact on mental health. On the other hand, 38.3% of tweets reported that the Metaverse could exacerbate pre-existing mental disorders, including depression, anxiety and PTSD. Some tweets expressed excitement about the potential benefits of Metaverse for those with conditions such as anxiety, shyness and autism, while others expressed concern about negative impacts on mental health, such as anxiety and depression. Finally, some tweets also emphasized the importance of prioritizing mental health in the development of the Metaverse (Krittanawong et al., 2023).

Since the impact of the Metaverse universe on mental health is not fully known, predictions are made based on studies conducted with VR. In one of these studies, more than 53 systematic reviews and meta-analyses supporting the use of virtual reality (VR) in anxiety disorders, pain management, and eating and weight disorders were presented. These studies provided evidence that VR is effective in the assessment and treatment of psychosis, addiction and autism (Riva, 2022). A review article of 82 studies using virtual reality (VR) interventions for mental health found that VR is effective in providing realistic responses to stimuli, particularly for anxiety, and is an ideal fit for pain management. However, the authors also emphasized the need for more studies on this subject due to the lack of studies examining depression and stress (Jerdan, Grindle, Van Woerden, & Kamel Boulos, 2018). Again, virtual reality exposure therapy has been found to be mostly useful in the treatment of pain, phobias and post-traumatic stress disorder (Deng et al., 2019; Georgescu, Fodor, Dobrea, & Cristea, 2020). Since 2000, numerous meta-analyses and systematic reviews have also supported recommendations for the use of VR/AR exposure therapies to address behavioral and cognitive problems, but as with other studies, more clinical trials are needed to determine effectiveness (Chitale et al., 2022)

6. Conclusion

Considering the studies conducted in the literature, as with every new technological development, the Metaverse platform has strong-weak, positive-negative features. It can be predicted that people will increase their sense of community and socialization levels due to features such as coming together quickly through this platform and being around common goals. The platform can also be used for training and exercises. However, on the other hand, there are also many uncertainties and negative aspects. The fact that this platform is ultimately managed by a company and its future is

unknown may create a sense of uncertainty in people. In addition, "Metaverse addiction" can be added to the types of internet and social media addiction that have been the source of many publications in the literature in recent years. It is also possible that the vivid, colorful, three-dimensional spaces, avatars and objects in this platform may be seriously appealing to people and they may enter a negative flow and break away from real life. If the person who needs to charge the VR device uses the device for long periods of time while being stuck to the power socket, he/she may experience not only physical symptoms such as eye, back and leg pain, but also difficulties in adapting to real life. It is also surprising to hear that a chip implanted in the brain can allow the sensation of tastes and smells in the virtual world. Because the risks that such an operation would bring to the human brain and body are unknown, and the benefit that the person would gain as a result of stimulating these centers in the specified way cannot be predicted. In fact, the answer to the question of whether this will lead to a serious discomfort is also unclear, since the person who gets used to these tastes and smells in the virtual world, and may even experience a feeling of satiety, does not experience a feeling of hunger when he/she does not return to normal life for a long time. It is also a matter of curiosity whether the person who gets used to these tastes and smells in the virtual world will experience insensitivity or inability to sense the tastes and smells in the real world.

Of course, it is thought that these physiological conditions will also have psychological effects. It should also be known that the person who can get so used to this platform will experience problems such as deprivation, inability to leave, increase in the duration of use and inability to control it, deterioration and conflicts with his/her close environment due to these reasons, disruption or disruption of his/her life such as work, education, course, etc. In addition to these issues, the person may also use the Metaverse platform as an escape mechanism. The person who has difficulties to overcome in life, goals to achieve and can develop if they achieve them, will be able to reach the pleasure they want without effort in the colorful and fascinating world of this platform. With the dopamine release that will result from this, the temporary and imaginary pleasure and happiness of the virtual world may hinder the lessons and development tasks that need to be learned in real life.

The shortcomings of the platforms within Metaverse and some of the events that took place there have also caused reservations. In 2021, on Horizon Worlds, a Metaverse virtual reality platform, a woman claimed that her three-dimensional avatar was verbally and sexually assaulted. The woman, who was the victim of the situation, stated that not only experiencing this situation, but also the support of other people on the platform made her feel isolated (Sparks, 2021).

For all these reasons, the psychological effects of the Metaverse platform should be monitored very carefully, especially by experts in the field, and the effects of the platform at this point should be discussed objectively. Of course, people's mental health should not be sacrificed to economic concerns and especially to the profit-oriented approach of the companies that own these platforms. People should not fall into the mistake of seeing human beings as mechanical beings that can be shaped by those who put forward behavioral theory in the past, and people should not be conditioned by classical and operant conditioning to become dependent and pure consumers by being conditioned to the assets and commodities in the virtual world. If this platform is to be used at all, it should be used for personal and socially beneficial purposes such as the diagnosis and treatment of mental problems and disorders. Otherwise, the same mistake will be made as in some other technological tools, and an addicted, hedonistic-hedonic, passive, disconnected from real life community may be formed. All these issues should be meticulously addressed in future studies.

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Education in Albania during 1991-2018

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ABSTRACT

Albania underwent a fundamental change during the 90s. Education was also affected by this change, and we can say it was a positive change, because now it was given a special importance, unlike what had happened before. During this period education had a great development. Based on this development, we decided to study education in Albania in two different periods of our country's history, the one before and after communism, more precisely we will focus more broadly

on the last 30 years. The data over the years were obtained from INSTAT and then processed in Microsoft Excel, where some issues have been selected and analyzed to show the changes in the number of registered students, graduates or the number of employees based on their educational level as well as to show the correlation between these issues. We will analyze these changes through descriptive tables, graphs and regression lines. Their analysis was carried out for the four levels of the education system of the Republic of Albania, namely in preschool, elementary school, high school and university education. At the end of this article, with the help of the linear regression line, we will analyze how these data will range in the following years.

Keywords: education, graph, student, correlation, prediction

Table of Contents

ABSTRACT.....	189
HYRJE	191
Education before the 1990s.....	191
Education after the 1990s.....	192
DATA ANALYSIS.....	192
RELATIONSHIP BETWEEN VARIABLES	193
Relationship between years and university enrollment.....	194
The relationship between years and employees with higher education	194
DATA FORECAST FOR THE FOLLOWING YEARS.....	195
CONCLUSIONS.....	196
REFERENCES	196

HYRJE

Education before the 1990s

In Albania after the war, as happened in other fields, some reforms were also undertaken in education. The first step taken in education was the courses against illiteracy, which were widely spread in every corner of Albania from 1945 to 1949. In 1949, the law on education was approved, according to which the ages up to 40 were forced to take the basics of writing and speaking. In 1955, it was publicly announced that illiteracy up to the age of 40 had been eliminated in Albania. After the war, with the establishment of the communist regime in Albania, Albanian education took a new form. Now the school was of the socialist type, which protected and fostered a socialist society. As a model, especially after 1948, with the breakdown of relations with Yugoslavia, the Albanian school was oriented by the Russian school. In the 60s, the second reform was marked and in 1963 the new law on the reorganization of the education system was issued. The law provided for the transition from the 7-year system to the 8-year system. The climax is reached with the third reform which was called "Further revolutionizing the school". This third reform had a profound impact on the school, which became extremely ideological. Literature and history were two of the subjects where the ideology peaked.[2]

Primary and 7-year education

The most developed link in the first post-war years was primary education. In the 1950s, the first 7-year schools were opened. In 1960-1961, it was reached a number of about 557, 7-year schools.

High school education

As for secondary education, in 1946-1947 only 6 gymnasiums were operating in Tirana, Korca, Gjirokaster, Shkodra, Durres and Vlora. As well as technical institutes in Tirana. Only one year later, the number of secondary schools reached 20. Secondary education was developed in the 60s and mainly vocational education, as the government was interested in producing secondary professional cadres that the country lacked.

Higher education

During the first phase, which lasted until the mid-50s, the foundations of the high school were laid. It begins in 1946 with the opening of the 2-year school named Pedagogical Institute of Tirana, which had as branches Albanian Language and Literature, History, Geography, Biological Sciences, Physics and Mathematics. After 1951, other 3- and 4-year Pedagogical Institute were opened, and continued until 1957. In the school year 1955-1956, the higher education system in the country included 6 4- and 5-year institutes with 22 faculties and about 1595 students. On June 3rd, 1957, by decree of the Presidium of the People's Assembly, the Public University of Tirana (USHT) was established. The public University of Tirana opened its doors for the first time on September 16, 1957. While in 1962, the Agricultural University of Tirana was also established in Kamez.[2]

Education after the 1990s

The current vision for the education system has put the student and his needs at the center, so that the next generation can benefit through this service, skills, habits and values that will help him individually to face the challenges of a globalized market, but that will also contribute to human capital, marking a new social progress.[3]

A successful feature of the educational system is decentralization, the autonomy of educational institutions. The latter has to do with the division of tasks, responsibilities, functions between different levels of government. Today, schools in Albania have more autonomy compared to many years ago, as the level of responsibility has increased, the capacities for planning and management have increased.[3]

DATA ANALYSIS

More specifically, we will analyze the data in the period after 1990 for the four levels of the system, namely preschool, elementary school, high school and university education. To present the changes in terms of the number of registered students, graduates or the number of employees based on their educational level, we will use descriptive tables and various graphs.

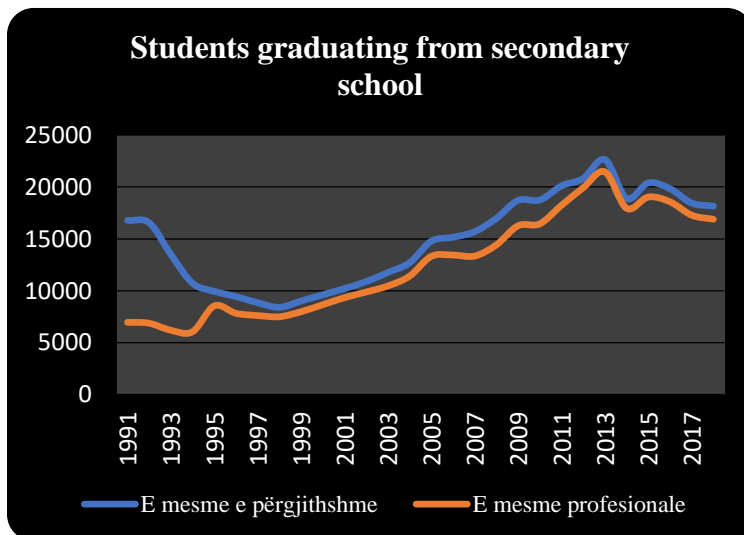


Figure 1

In Figure 1, we have presented a graph of data for students graduating from secondary education, which we have divided into two directions: 'General secondary' and 'Professional secondary'.

In 1991, the number of students graduating in vocational education was 6,973, while in general education 16,760, a difference of about 10,000 students. Meanwhile, in 2018, the number of graduates in professional education was 16,888, this figure is close to that of general education, which was 18,150. So, as can be seen from the graph, graduates in professional direction are increasing, this will mean that students have begun to value vocational training in high school as a good opportunity for the future.

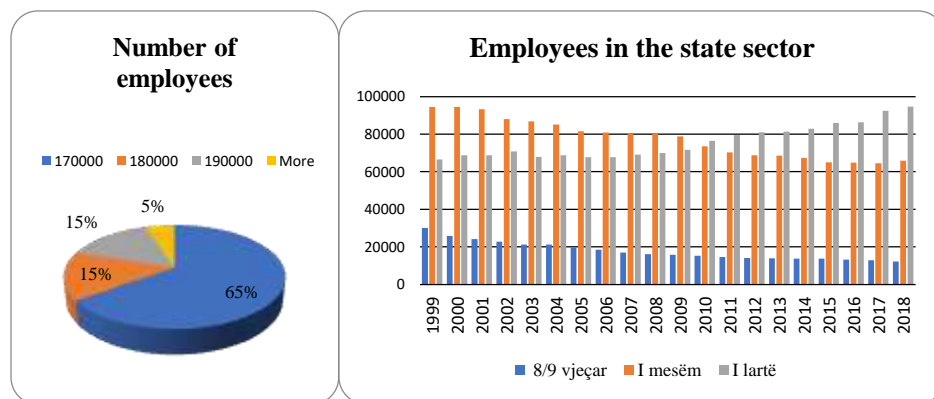


Figure 2

Figure 3

In figure 2, it can be seen that in most of the years, specifically 65% of them, the number of employees in the state sector reaches 170,000, a number lower than in other years, where about 30% of their employment peaked between 170,000 and 190,000. There were few years when employment peaked at more than 190,000.

The graph in figure 3 clearly expresses the influence of educational level on employment. Until 2010, the educational level of the majority of employees was secondary education. This shows that secondary education was highly valued in relation to employment. After 2010, the majority of employees are occupied by those with higher education, thus making higher education one of the most important factors in employment until today. Employees with 8/9 years of education occupy a very small percentage of the employed, which is expectingly decreasing because this level is considered non-formative to prepare students to be able to work.

RELATIONSHIP BETWEEN VARIABLES

By means of the dot cloud graph and the regression line, we will examine the relationship between years with students enrolled in university and employed with higher education.

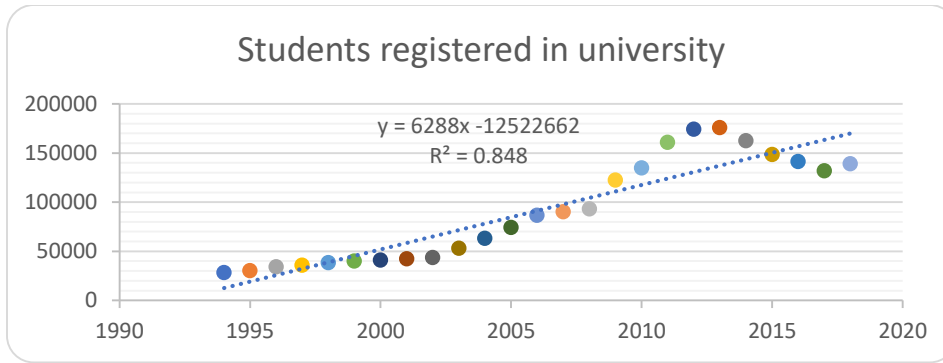


Figure 4

Relationship between years and university enrollment

In figure 4, the study was carried out through the linear regression line, which resulted in $y=6288*x-12522662$. This shows that the relationship between the number of registered students and the years is correct, specifically over the years the number of registered students will increase. Since the correlation coefficient is equal to 0.9, this relationship is strong.

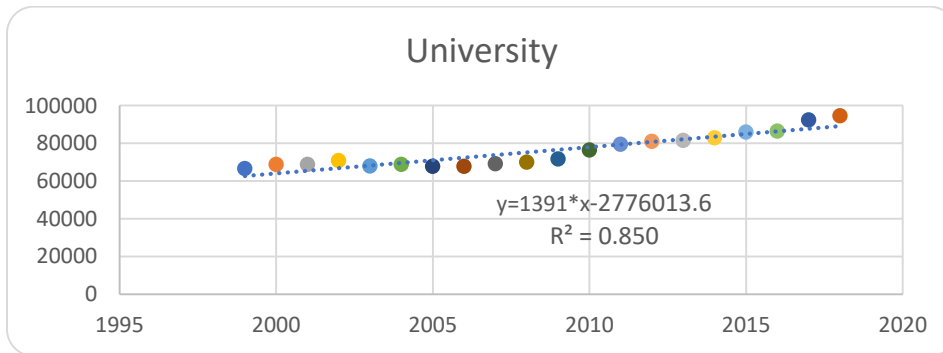


Figure 5

The relationship between years and employees with higher education

The graph above shows that the relationship between years of employment and employees with higher education is fair and relatively strong. So over the years, the number of employees with higher education increases almost uniformly.

DATA FORECAST FOR THE FOLLOWING YEARS

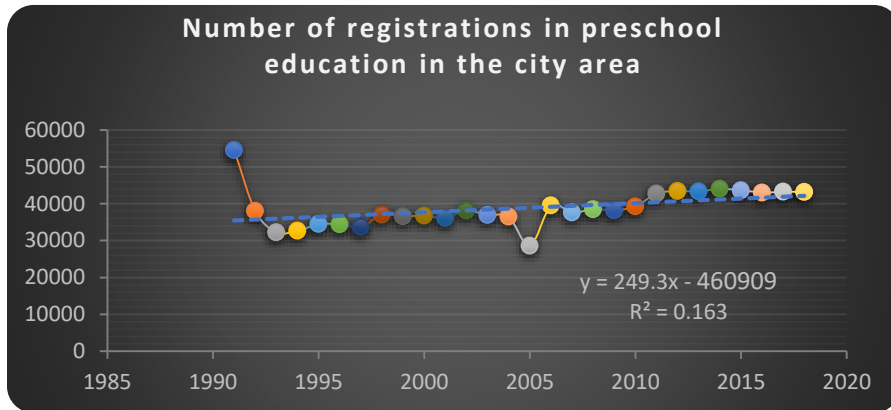


Figure 6

Preschool education is an important stage for children, which serves for their social formation but also as a preparation for the first grade. For this reason, we considered it important, the preliminary assessment of the number of registrations in preschool education in the city, based on the rate of change of the data until now. With the help of the linear regression line, we will check whether it will be an accurate approximation of the figures for the year 2019, for which the number of registrations is known, as well as judge the approximate number of registrations expected to be made in 2025 .

Through the linear regression line with equation:

$$y = 249.3 * x - 460909$$

we will calculate the number of children registered in the city for the year 2019. So we will calculate the value of y for $x=2019$, after the calculations it turns out that the number of registrations is 42427. Meanwhile, the exact number of registrations for this year is 38,868. We see that the difference between the observed value and the real value is not very large.

We will also estimate the number of registrations for the year 2025, using the regression line mentioned above. After the substitution, it turns out that this number will reach 43,923.

We should mention that these values also depend on external factors such as the number of births and population migration that can affect their increase or decrease.

CONCLUSIONS

Through this article, we managed to distinguish the changes in education mainly for the period after the 90s in several aspects, such as the importance and desire to be educated and to interact. We observed that, apart from some small fluctuations, generally the number of enrollments and graduations at all educational levels is increasing, especially in secondary education where a higher value is observed for vocational training as a good opportunity to the future.

Also, another phenomenon that appeared during the study was the increasingly high demand to hire people with a high level of education.

These, but also other conclusions that can be drawn from the article, are useful information to be used in some areas such as education, economy or even politics.

It is important to note that the higher the educational level of the inhabitants of a country, the more developed it is.

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The role of simple laboratory tests in the diagnosis of iron deficiency anemia in pediatric age

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Interdaction. Iron deficiency anemia is one of the clinical situations that accompany the lives of most of the parents of children aged 0-18 years. Iron deficiency anemia is not a pathology in itself, but a clinical situation accompanying another primary pathology.

Purpose. The purpose of this work is to evaluate and diagnose the presence of iron deficiency anemia in the pediatric age by means of simple laboratory tests.

Material and method: In the study, blood samples were taken from 60 children, 23 male and 37 female subjects, aged 1-14 years. With these samples, complete blood laboratory tests (hemogram) as well as biochemical tests such as Sideremia and Ferritin were performed. Laboratory tests showed:

1. 30 children were diagnosed with iron deficiency anemia
2. The average age of children diagnosed with iron deficiency anemia was 5.7 years
3. The female gender (18 or 60%) was more at risk of manifesting anemones in the pediatric age.
4. A visible change in hemoglobin level was observed (22.05%). between the group diagnosed with Iron Deficiency Anemia and the group of normal patients
5. The level of sideremia is relatively much lower in the group of patients with Iron Deficiency Anemia compared to the normal group (48.91%).
6. Ferritinemia among the groups was relatively lower (81.63%) in children with iron deficiency anemia.

Conclusion. The causes of iron-deficiency anemia in pediatric age are numerous, starting from the physiological situation due to growth, malabsorption due to accompanying infections or inflammatory pathologies, or genetic defects. Bearing in mind that iron-deficiency anemia damages the quality of life of children, the treatment it should be done only after its cause has been identified. Its diagnosis is made with simple, free and fast laboratory tests.

Key words. *Hemogram, Sideremia, Ferritinemia, Iron deficiency anemia, pediatric.*

Interdaction.

Iron is a mineral that the body needs for growth and development. It is the main component to produce hemoglobin, a protein in red blood cells that transports oxygen from the lungs to all parts of the body, and myoglobin, a protein that provides oxygen to the muscles. The organism maintains a balance between its use and its deposit in the organism. This hemostasis is essential for cellular hemopoiesis.

The requirements for iron from the body and the way it is used vary according to age groups. Iron deficiency is the depletion of total body iron, particularly of the iron stores of macrophages and hepatocytes. Because the largest amount of iron is consumed for the synthesis of hemoglobin (Hb) to produce 200 billion erythrocytes per day, anemia is the most obvious sign of iron deficiency, and iron deficiency anemia is often considered synonymous with iron deficiency.

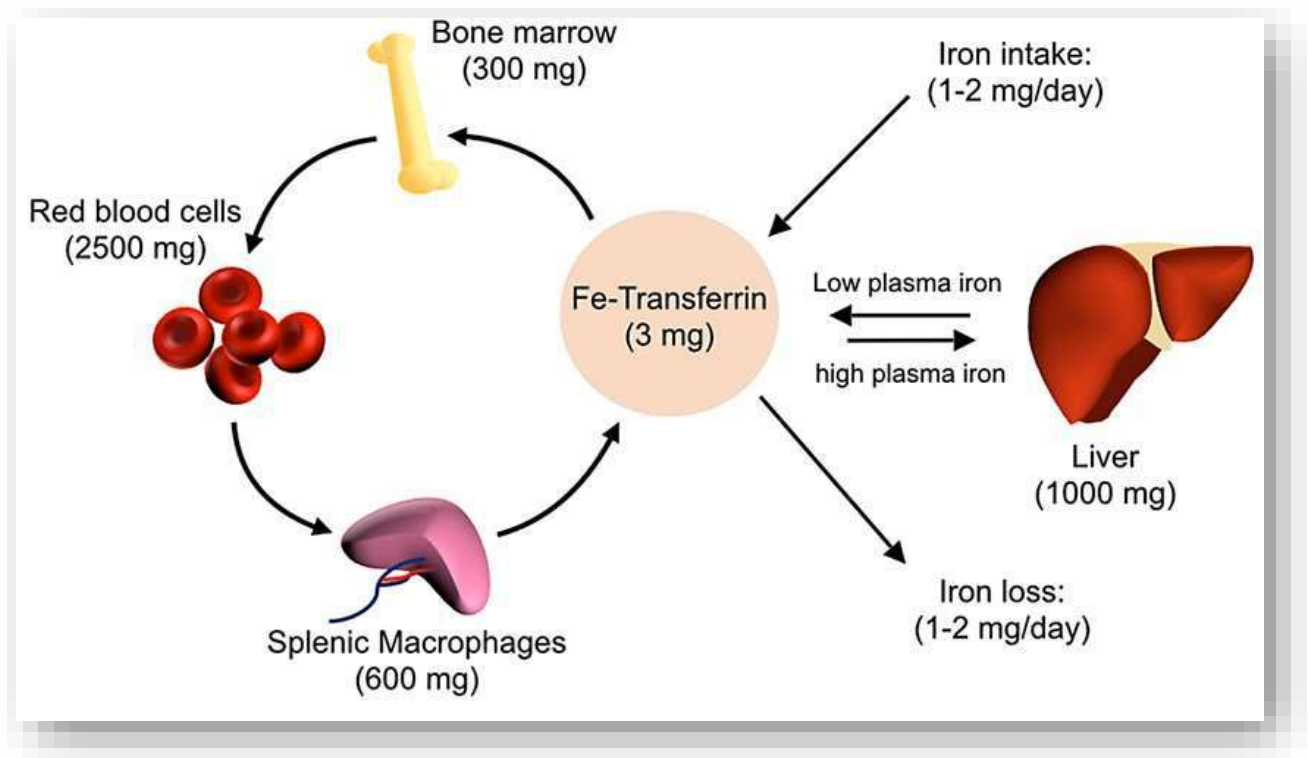


Figure 1. Iron homeostasis

However, iron deficiency is a broader condition that often precedes the onset of anemia or indicates deficiency in organs/tissues other than those involved in erythropoiesis, such as skeletal muscle and the heart, the latter highly dependent on iron for myoglobin and power generation to support the mechanics. shrinkage.

Iron deficiency is the most common nutritional deficiency worldwide and an important public health problem especially in developing countries. There are no clear data on how many individuals are affected by iron deficiency worldwide, but it is estimated that ID is present in the majority of preschool children and pregnant women in developing countries and in at least 30-40% in developed countries. developed. anemia is used as an indirect indicator of ID (1). According to World Health Organization (WHO) data from 2001, 30% of children aged 0 to 4 years and 48% of children aged 5 to 14 years are anemic in developing countries (1)

Epidemiology

According to the Global Burden of Disease Study 2016, iron deficiency anemia is 1 of the 5 main causes of years lived with the burden of disability and is the first cause in women.²

Adopting the limit recommended by the World Health Organization for anemia (Hb .13 g/dL in men, .12 g/dL in women, .11 g/dL during pregnancy), a worldwide study showed that in 2010, anemia still affected one third of the population, with approximately half of the cases due to iron deficiency.

The assessment is that; 1.24 billion individuals experience iron deficiency anemia, although with large variations from low-income to high-income countries.³

The global prevalence of iron deficiency without anemia remains elusive, although the suggested figure is at least double that of iron deficiency anemia.

The problem becomes even more important if we consider functional iron deficiency, which occurs when iron is difficult to mobilize from stores, as in chronic inflammation/infection or when robust erythropoietic expansion by exogenous or endogenous erythropoietin (EPO) causes an acute disproportion between demand and supply for iron.

Globally, iron deficiency anemia has medical importance and social impact, accounting for impaired cognitive performance in young children, 4 adverse pregnancy outcomes for both mothers and newborns, 5 reduced physical and work capacity in adults, and cognitive decline in the elderly.^(6,7) From the available data, the relative contribution of iron deficiency to these adverse outcomes is difficult to disentangle from that of anemia.

Etiology of iron deficiency

Iron deficiencies can be from:

- Acquired iron deficiency
- Genetics

Acquired iron deficiency

Iron deficiency accounts for 30% of cases, as a result of:

1. low intake of iron from food,
2. reduced absorption (atrophic gastritis,)
3. losses from the gastrointestinal tract

Iron deficiency anemia can be caused by:

1. Iron poor diet. Children get iron through food, but the amount taken is less than the needs of the organization, which is constantly growing. When the body goes through a growth spurt, it needs more iron to produce more red blood cells.
2. Problems with the gastrointestinal tract. Poor iron absorption is common after some forms of gastrointestinal surgery. When you eat foods that contain iron, most of the iron is absorbed in the upper part of the small intestine. Any abnormality in the gastrointestinal (GI) tract can alter iron absorption and cause iron deficiency anemia.
3. Blood loss. Blood loss can cause iron deficiency. Sources of blood loss may include gastrointestinal bleeding, menstrual bleeding, or injury.

Genetics of iron deficiency

Studies of blood donors have strengthened the hypothesis that genetic variants of iron genes, particularly Tmprss6 and HFE, reported to affect iron parameters(12,13) and hepcidin (14), may predispose or protect individuals from iron deficiency.

(15)In a new mouse model, genetic iron deficiency anemia was caused by loss of the sulfur assimilation pathway enzyme bisphosphate-39-nucleotidase (Bpnt1).

IRIDA11 is a rare recessive condition resulting from Tmprss6 mutations (6,9,10) leading to an inability to cleave the BMP coreceptor HJV and inhibit hepcidin.8 High hepcidin in IRIDA patients impairs iron absorption, opposing a essential compensatory mechanism to support erythropoiesis..

Individuals at risk

Reflecting the high requirements for iron:

- Babies born to healthy mothers have iron in their bodies from supplements taken by the mother during the last 3 months of pregnancy.
- Premature babies
- The American Academy of Pediatrics (AAP) advises that for the first 6 months you feed your baby only breast milk. But breast milk doesn't have a lot of iron, so babies who are exclusively breastfed may not get enough iron.
- preschool children (age, 5 years),
- young women with irregular menstruation
- women in the second/third trimester of pregnancy and after giving birth are the most affected groups.33,34
- teenagers are susceptible to iron deficiency due to rapid growth.
- Women are more affected by iron deficiency.

Diagnosis of iron deficiency

Clinical signs and symptoms of iron deficiency anemia are limited and often neglected. The most important, fatigue, is non-specific and usually accompanied by pallor of the sclera of the eyes, pallor of the skin, profuse sweating and lack of concentration.

The diagnosis of iron deficiency anemia is closely related to its clinical symptoms. Taking a careful anamnesis from family members as well as subjective clinical symptoms are important to orientate the performance of laboratory tests.

Laboratory tests that evaluate the situation of iron in our organism are:

1. Blood count
2. Number of reticulocytes in the blood film
3. Sideremia
4. Ferritinemia
5. TIBC

Hemogram is a simple, low-cost test that provides information on:

- the absolute number of erythrocytes
- amount of hemoglobin
- hematocrit level
- Erythrocyte constants (MCV, MCH, MCHC, RDW)
- Absolute number of leukocytes
- Leukocyte formulas (Neutrophils, Eosinophils, Basophils, Monocytes, Lymphocytes)
- Absolute number of platelets
- Platelet constant

In the diagnosis of iron deficiency anemia, we focus on the erythrocyte series. First, the level of hemoglobin and hematocrit is seen if they are abnormal for age and gender. The lower limits of normal for age and sex defined by the World Health Organization can be used, as they are practical and values lower than these limits are considered anemic.

Groups by age and gender	Hemoglobinë (g/dL)	hematokriti (%)
<i>Children aged 6-59 months</i>	11	33
<i>Children aged 5-11 years</i>	11.5	34
<i>Children aged 12-14 years</i>	12	36
<i>Girls over 15 years old</i>	12	36
<i>Boys over 15 years old</i>	13	39

Table 1. Lower limits for hemoglobin and hematocrit values specified by the World Health Organization by age and sex

In infants younger than 6 months, lower values are seen due to physiologic anemia, but hemoglobin is not expected to be lower than 9 g/dL in physiologic anemia in term infants unless there is another contributing factor .

An important role for the morphological diagnosis of iron deficiency anemia is played by the erythrocyte constants, which indirectly indicate the volume of the erythrocyte cell (MCV) but also

their color, which is a reflection of the amount and concentration of hemoglobin inside the erythrocyte (MCH), MCHC).

Mean erythrocyte volume MCV and MCH are parallel to each other; this means that microcytic erythrocytes are simultaneously hypochromic. If MCH is below 27 pg, it is low. The normal value of mean erythrocyte volume varies between 80 and 99 fL, but normal values according to age should be considered in children. Formulas that can simply be used in busy outpatient clinical practice are also present (Table 2). Here it is important to use the formula for the lower limit for children younger than 10 years, because the lower limit is 80 fL in children older than 10 years as in adults.

In iron-deficiency anemia, erythrocytes are microcytic and hypochromic, which are reflected by low values of the constants MCH, MCHC, MCV. Since we have great variability in the form and amount of hemoglobin, an increase in RDW values is observed.

Generally, two separate RDW results are noted on the complete blood count results; RDW-CV and RDW-SD. This arises from a statistical calculation difference. RDW-SD is the standard deviation of the erythrocyte and is the average of the deviations from the MCV of each erythrocyte; its normal range is 37-54 fL. RDW-CV is the coefficient of variability of the volume of distribution of erythrocytes and the expression as a percentage of the standard deviation of the mean volume of erythrocytes. RDW-CV is a more reliable measurement and is abnormal if it is >14. Moreover, erythrocyte distribution width is the first variable that changes in the complete blood count in iron deficiency anemia. In parallel, the first finding of IDA in the peripheral blood lamina is anisocytosis

Patients with Thalassemia Minor also have such a blood group, and the differential diagnosis can be done with hemoglobin electrophoresis, but it can also be done with simple ratios between the parameters of the blood count, such as the Metzner index, which focuses on a mathematical ratio between MCV/RBC. In this index, the importance is given to the number of erythrocytes, which is different in both of these clinical situations.

While the number of erythrocytes is increased in thalassemias characterized by inefficient erythropoiesis (production of erythrocytes is increased, but destruction occurs in the bone marrow before the cells enter the peripheral blood), it is reduced in iron deficiency anemia due to the production of insufficient.

While MCV is decreased in both thalassemia carrier state and IDA, erythrocyte count is decreased in IDA but increased in thalassemia carrier state. In this case, the MCV/RBC ratio is higher in IDA because the RBC is reduced and it is lower in the thalassemia carrier state because the RBC value is higher. As a result of this formula, which is called the Metzner index, thalassemia is considered when this ratio is below 13 and IDA is considered when this ratio is above 13.

The laboratory data from the hemogram for iron deficiency are;

RDW>14

RBC: low

Hb, Hct: low according to age and sex

MCV: low for age and sex

When specifying lower MCV limit: $70 + \text{age}$ (for >10 years)

(if MCV is <72, generally abnormal)
Upper limit of MCV: $84 + \text{age} \times 0.6$ (for > 6 months)
(if MCV>98: always abnormal)

MCH<27 p
MCHC<30%

Thrombocytosis

Rarely: thrombocytopenia, leukopenia

From the microscopic examination of the blood film, it is usually seen:

Hypochromia

Microcytosis

Anisochromy

Anisocytosis

Based on that hemogram data, other tests that evaluate the level of iron in the body should also be measured, such as:

- Serum ferritin level is the best indicator of body iron stores and the first biochemical variable to change in ID. A serum ferritin level below 10–12 µg/L strongly supports ID, but ferritin is an acute-phase reactant and should be kept in mind that it may increase in infection and inflammation.
- Plasma iron (Sideremia) decreases as iron in the body is depleted. Samples should be taken in the morning after an overnight fast, because its value shows variance during the day and is influenced by diet. The plasma iron level is not useful in the differential diagnosis from IDA because it is also reduced in anemia of chronic disease.
- Iron binding capacity (total iron binding capacity-TIBC) increased as serum iron decreased.
- The value obtained by dividing the serum iron value by the TIBC indicates transferrin saturation and is reduced to ID. Iron and TIBC are also acute phase responders and increase inflammation/infection

Great care must be taken when evaluating iron variables as iron deficiency develops in the body in three stages:

1. **Prelatent phase:** iron stores are decreased or absent, serum iron concentration, hemoglobin and hematocrit are normal. This stage of iron deficiency is manifested by the reduction or absence of iron stores in the bone marrow and the decrease in the serum ferritin level.
2. **Latent phase:** serum iron (SI) and transferrin saturation decrease in addition to reduced iron stores. Hemoglobin and hemocrit are within normal limits.
3. **Marked IDA:** In addition to depletion of iron stores, hemoglobin and hematocrit levels of serum iron saturation and transferrin are decreased.

All variables may not change at the same time due to the development of these stages in children with iron deficiency.

Materials and methods

60 children took part in the study. The participants in the study were 23 male and 37 female subjects of the age group from 1-14 years. For each patient, 5 ml venous blood samples were taken with a vacuum system with gel tubes (CLOT ACTIVATOR Lot AG2502) and K3EDTA for the hemogram.

Collection and processing of samples

Each volunteer underwent the phlebotomy procedure for blood collection. Blood was collected from forearm veins using a 21G vacuum system. All samples were identified and homogenized at least five times. The tube we use for measuring whole blood is the tube with K3EDTA (ethylene diamino tetraacetic acid), which we do not centrifuge, but it is easily homogenized several times before measurement.

The tube we use to perform ferritin, sideremiss and TIBC analyses, is the tube with gel or glass beads. Each sample was allowed to coagulate for 30 minutes at a temperature of 18-25°C. All tubes were centrifuged at 1500g/3500RPM for 10 minutes at 18 -25 C.

Laboratory devices

The measurement of complete blood was carried out in an automatic analyzer with 18 parameters and 3 WBC MEK 6410 populations.



Figure 2. Hematology autoanalyzer

The Sideremiss test was performed in the MINDRAY BS-230 Biochemical Autoanalyzer with the colorimetric End Point measurement method with chromazurol.



Figure 3. MINDRAY BS-230 Biochemical Autoanalyzer.

Figure 4. The principle of the Sideremise measurement method

PROCEDURE			
Wavelength:	623 nm (620 – 640)		
Lightpath :	1 cm		
Temperature:	25/30/37°C		
Reading:	against blank reagent		
Method:	End Point		
Sample/Reagent	1/20		
pipette:	blank	sample	standard
Reagent (A)	1000 µl	1000 µl	1000 µl
water	50 µl		
sample		50 µl	
standard			50 µl
Mix, incubate for 4 minutes at 37°C or 8 minutes at 20-25°C, read the absorbance of the sample (Ax) and the Standard (As).			

Ferritinemia was measured in the Mini VIDAS device with the enzyme-linked fluorescent immunoassay (ELFA) method.



Figure 5. Mini VIDAS

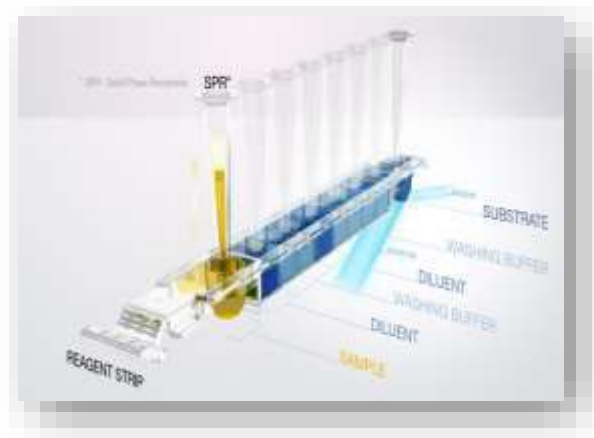


Figure 6. ELFA method

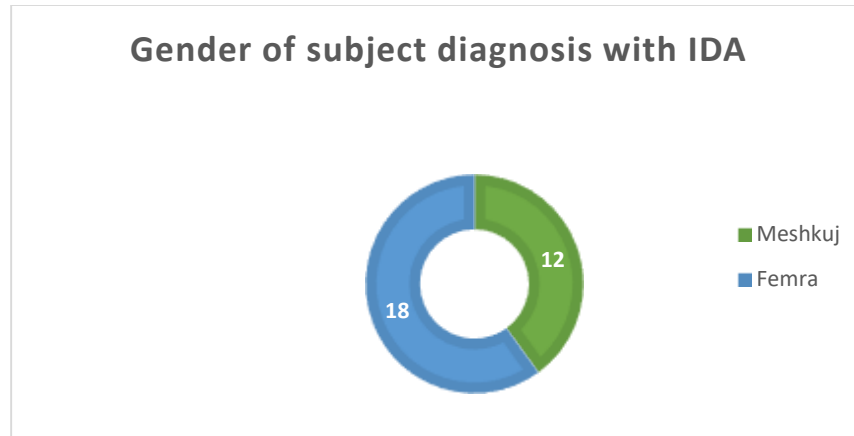
The results of the work

After measuring the hemogram, we found 30 patients with normal hemograms and another 30 with microcytic hypochromia. The laboratory data of the groups were compared between them to identify the laboratory parameters that are important in the diagnosis of iron deficiency anemia.

Results of the group diagnosed with Iron Deficiency Anemia

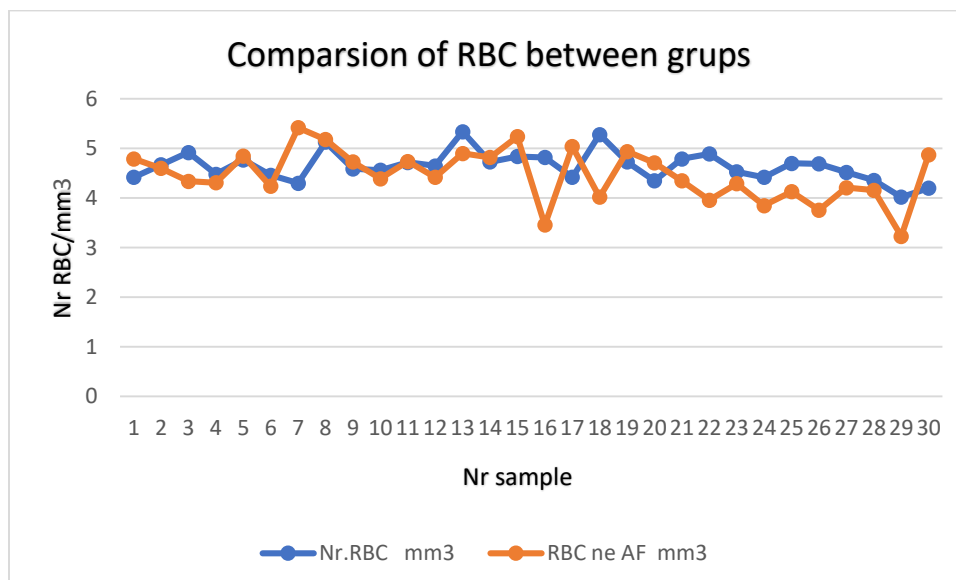
Table no. 1. Presents the number of diagnosed cases by gender

<i>Gender of diagnosed subjects</i>	<i>Number of diagnosed patients</i>
<i>Male</i>	12
<i>Females</i>	18
<i>Total</i>	30



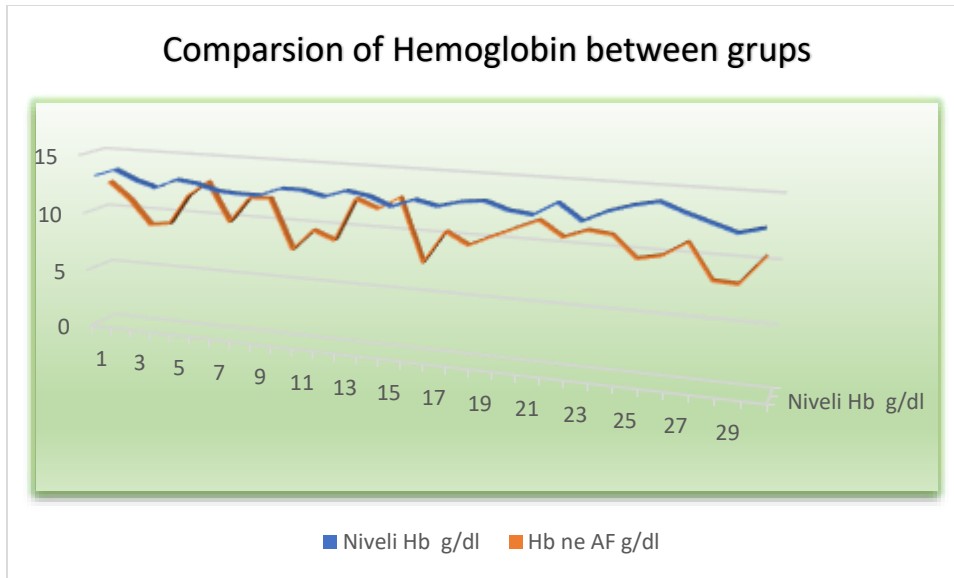
Graph no. 1. It shows the distribution in % of subjects diagnosed by gender.

As noted, the female gender predominates (60%) of cases diagnosed with iron deficiency anemia



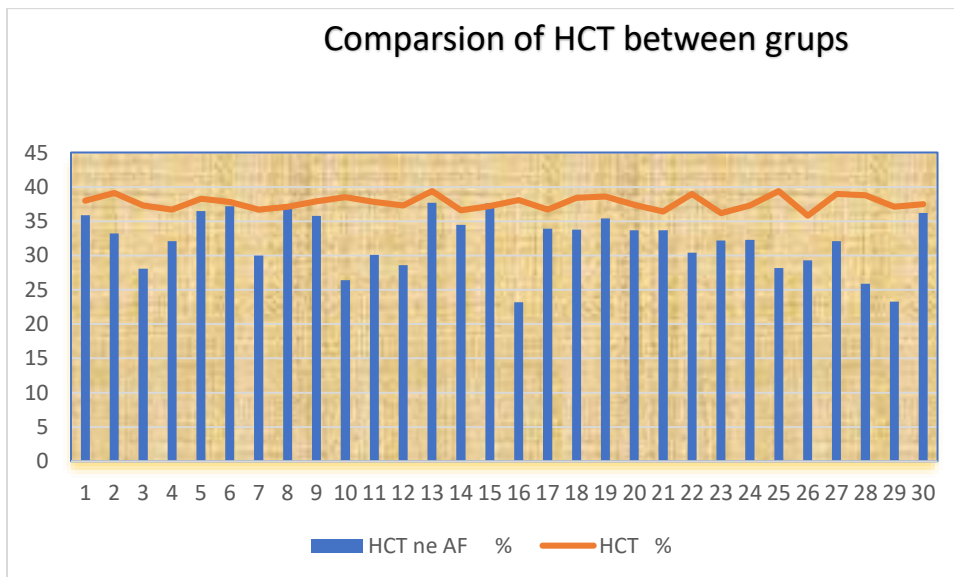
Graph no. 2. Comparison of the number of erythrocytes between the two groups

From the graph it can be seen that the difference in the number of erythrocytes between the groups is very small (the average difference in the number is $4.47 \cdot 10^{12}/\text{mm}^3$ compared to $4.64 \cdot 10^{12}/\text{mm}^3$ with the control group. This shows that the number of erythrocytes is not a significant indicator for the diagnosis of iron deficiency anemia.



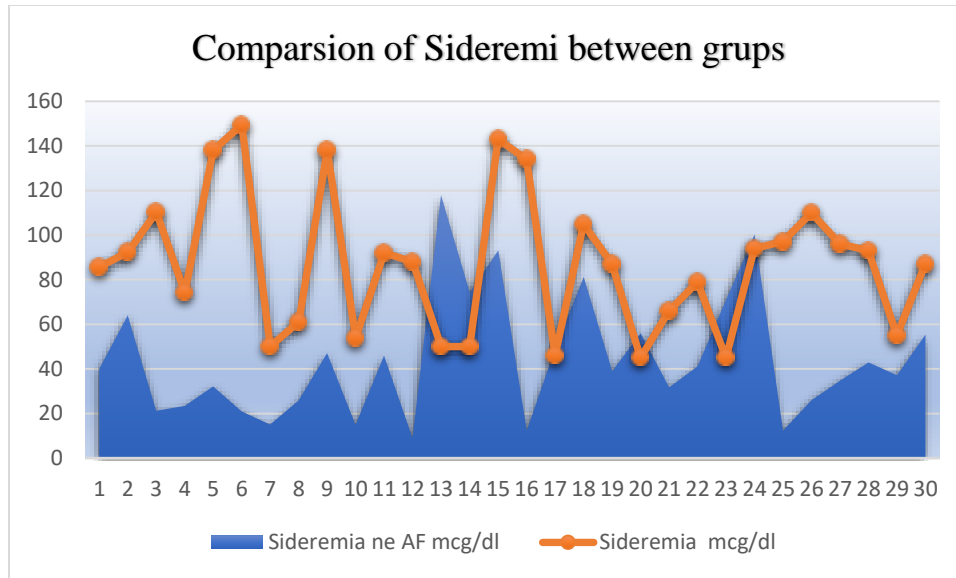
Graph no. 3. Comparison of the hemoglobin level between the two groups

Graph no. 3 shows a significant difference in the level of hemoglobin between the groups. The average ratio between Af/normal group is 10.40/13.60 or (22.05%). This difference shows once again that the level of hemoglobin is an important diagnostic indicator of iron deficiency *anemia*.



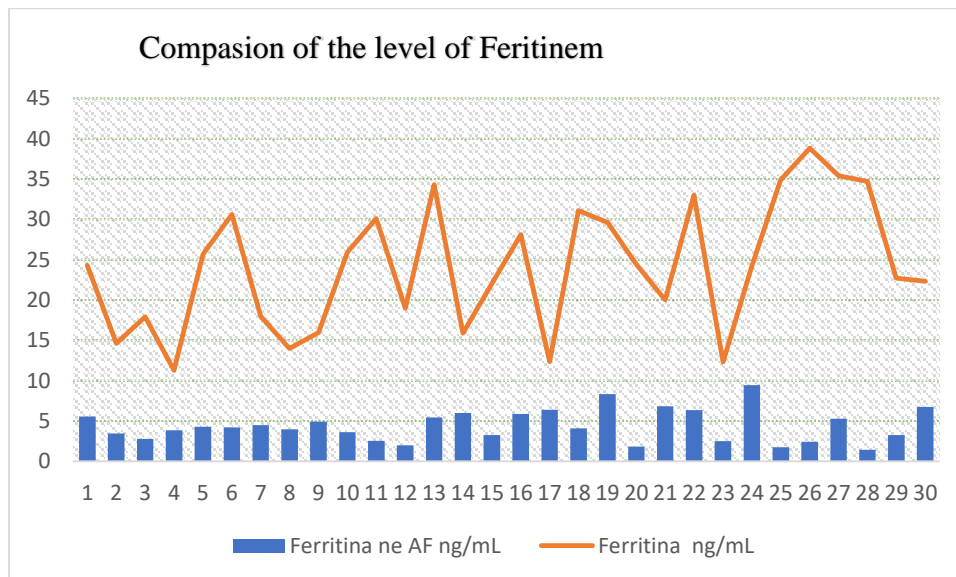
Graph no. 4. Comparison of the HCT level between the two groups

From graph no. 4. It can be seen that the level of hematocrit in patients with Iron Deficiency Anemia is lower compared to the level of hematocrit in the control group, which once again verifies this indicator as a reliable site for diagnosing Iron Deficiency Anemia. The average ratio of HCT-IDA/HCT = 32.15/37.71 or (14.74%).



Graph no. 5. Comparison of the level of Sideremise between the two groups

From graph no. 5. It is noticed that the level of Sideremia is relatively very low compared to the control group. This difference is 44.51 in IDA/ 87.17 or (48.91%). Such a change is an indicator of specificity in the diagnosis.



Graph no. 6. Comparison of Ferritinemia level between two groups

In graph no. 6, a visible difference in the ferritin level between the groups can be seen. The ratio Ferritinemia IDA/Control is 4.43/ 24.12 or (81.63%).

To show the statistical relationships between the hemogram parameters and the biochemical and hormonal tests, the data were processed in SPSS VERSION 21

Correlations

		Age of subjects in the study	No. of erythrocytes
Age of subjects in the study	Pearson Correlation	1	.100
	Sig. (2-tailed)		.446
	N	60	60
No. of erythrocytes	Pearson Correlation	.100	1
	Sig. (2-tailed)	.446	
	N	60	60

Table 2. Presents the static relationship between Age - No. of RBC. The table shows that there is no statistically significant relationship between them. $P=0.446$.

		Age of subjects in the study	HCT
Age of subjects in the study	Pearson Correlation	1	.416**
	Sig. (2-tailed)		.001
	N	60	60
Hematocrit	Pearson Correlation	.416**	1
	Sig. (2-tailed)	.001	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3. Presents the static relationship between Age-Level of HCT. The table shows that there is a significant statistical relationship between them. $P=0.001$ which shows that the hematocrit varies according to the age of the patients.

Correlations

		Age of subjects in the study	The value of Sideremia
Age of subjects in the study	Pearson Correlation	1	.239
	Sig. (2-tailed)		.066
	N	60	60
The value of Sideremia	Pearson Correlation	.239	1
	Sig. (2-tailed)	.066	
	N	60	60

Table 4. Presents the statistical relationship between Age - Sideremise Level

From the table it can be seen that there is no significant statistical relationship between them. P=0.066.

Correlations

		Age of subjects in the study	Ferritin
Age of subjects in the study	Pearson Correlation	1	.300*
	Sig. (2-tailed)		.020
	N	60	60
Ferritin	Pearson Correlation	.300*	1
	Sig. (2-tailed)	.020	
	N	60	60

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5. Presents the static relationship between Age - Ferritin. The table shows that there is a significant statistical relationship between them. P=0.02. This proves that ferritinemia levels change with age.

Correlations

		hemoglobin	Sideremia
hemoglobin	Pearson Correlation	1	.631**
	Sig. (2-tailed)		.000
	N	60	60

Sideremia	Pearson Correlation	.631**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Table 6. Presents the static relationship between Hemoglobin - Level and Sideremia
The table shows that there is a significant statistical relationship between them. $P=0.000$.

Correlations

		Hemoglobin	Feritin
hemoglobin	Pearson Correlation	1	.591**
	Sig. (2-tailed)		.000
	N	60	60
feritin	Pearson Correlation	.591**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7. Presents the static relationship between Hemoglobin - Ferritinemia Level
The table shows that there is a significant statistical relationship between them. $P=0.000$

Correlations

		Hemoglobin	Age
Hemoglobin	Pearson Correlation	1	.441**
	Sig. (2-tailed)		.000
	N	60	60
Age	Pearson Correlation	.441**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Table 8. Presents the statistical relationship between Hemoglobin – Age

From the table it can be seen that there is a significant statistical relationship between them. $P=0.000$

Conclusions

From this study it results that;

1. The average age of patients affected by iron deficiency anemia was 5.7 years.
2. The gender most affected by iron deficiency anemia is the female gender, 60% of the subjects in the study.
3. The variability of the Hb level between the groups is 22.05%.
4. The variability of the HCT level is 14.74% between the groups.
5. The variability of Sideremi level between groups was 48.91%.
6. Ferritinemi level variability between groups was 81.63%.
7. The static relationship between Age - No. of RBC is negative $P=0.446$.
8. The static relationship between Age - HCT level is a strong statistical relationship of $P=0.001$, which shows that the hematocrit changes according to the age of the patients
9. The static connection between Age - Level of Sideremi is an unimportant connection. $P=0.066$
10. the static relationship between Age – Ferritinemi level is a statistically significant relationship $P=0.02$. This proves that ferritinemia levels change with age.
11. The statistical relationship between Hemoglobin - Level of Sideremi. From the table it can be seen that there is a significant statistical relationship between them. $P=0.000$.
12. The statistical relationship between Hemoglobin - Ferritinemi level. From the table, it can be seen that there is a significant statistical relationship between them. $P=0.000$
13. The statistical relationship between Hemoglobin - Age .From the table it can be seen that there is a significant statistical relationship between them. $P=0.000$

Discussions

This study showed once again the importance of ferritin in the diagnosis of iron deficiency anemia as an important primary indicator compared to Sideremi.

It was also emphasized once again the criteria for diagnosing anemia (decrease in the level of hemoglobin below 10g/dl in pediatric age) accompanied or not with changes in the number of erythrocytes.

In the morphological classification of anemia, the erythrocyte constants play an important role, which define it as microcytic hypochromic anemia. It is important to emphasize the fact that these

findings were calculated from the level of hemoglobin and Hct and the absolute number of erythrocytes. These factors are interfered by the age factor.

Taking into account the average age of the patients who manifested more iron anemia, we can hypothesize that the main factor in the appearance of this anemia may be the insufficient intake of foods rich in iron during this phase. Since it is known that children of this age group are inclined towards the selection of foods that they consume during the day.

Another problem that arises in relation to nutrition is the fact that in this age group children spend most of their time in nurseries or gardens where the variety of food and their quantity may be limited.

Also, in this age group, most children have milk as their favorite food, which inhibits the absorption of iron in the body.

Another problem that can cause this anomaly in the amount of iron are gastrointestinal infections that can come from *Gardia Lambia* or a food intolerance problem that will be treated in later studies.

A special importance is given to the examination of the food diet in this age group, as well as the awareness of the population to take iron supplements according to the orientation of the World Health Organization.

The diagnosis of iron deficiency anemia should be based not only on the blood count but also on other hormonal tests such as ferritinemi or biochemical tests such as Sideremi, therefore it is important to make the population aware of the protocol for the diagnosis and monitoring of iron deficiency anemia.

Finally, it is important that before starting the treatment with iron preparations, the cause of this anemia must be found because the correction in such a case would not be sufficient and valid.

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Ciphering identities: The role of graphometry and graphology in forensic analysis

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Abstract

The disciplines of graphometry and graphology are pivotal in the realms of forensic science and personality analysis. Graphometry is concerned with identifying authors through handwriting analysis, while graphology offers insights into an individual's personality traits. These disciplines have historical roots, particularly within anthropological schools like Lombroso's 1805 work, which explored the biological underpinnings of criminal behaviour.

Moreover, psychoanalysis suggests that subconscious impulses are reflected in handwriting, enabling in-depth personality analysis. These disciplines play a vital role in verifying document authenticity, matching threatening messages to suspects, and providing a window into an individual's personality and motivations.

Research underscores the uniqueness of both handwriting and personalities, even among identical twins, rendering personality imitation improbable. The effectiveness of graphometry and graphology hinges on the expertise of analysts and the availability of sufficient material for comparison, as demonstrated by cases like Dreyfus, where meticulous attention to detail was paramount.

Keywords: graphometry, graphology, handwriting, forensic technique, signature

7. Introduction

The dynamics and unstoppable developments of the last few centuries, particularly the development of technology, have had an impact on the decline in people's trust in the words spoken and the actions taken, as well as the rise in awareness campaigns that involve "swallowing" knowledge and skills from a variety of fields in order to "save" from deception and to emerge "victoriously" in the sociological arena.

Individuals often attribute multiple interpretations to spoken words, socially acceptable conduct, or gestures, leading to ambiguity. Consequently, extensive research and ongoing analyses aim to decipher the non-verbal languages of shame. These include behavioural patterns, attire choices, vocal tones, postures, facial expressions, and the positioning of hands and feet. These silent languages serve as potent means to communicate genuine thoughts and the identity of the speaker. Notably, writing also stands out among these expressive forms, contributing significantly to the intricate tapestry of non-verbal communication.

When faced with written papers or letters as evidence, forensic techniques rely on two auxiliary disciplines, namely graphometry and graphology, to determine the identity of a culprit. Graphometry and graphology seem similar at first glance since they both deal with the examination of writing. Still, there are just as many differences as similarities between these two fields. So, the question is, even if these sciences are similar, what unique functions do they play in forensic procedure, and why is it better to use both of them instead of just one? Our investigation into the subtle uses of graphometry and graphology in forensic analysis begins with this question.

Based on the similarities and differences between graphometry and graphology, this work is divided into two main portions. Part one explores graphometry, including the identification of the distinctive characteristics of writing and emphasises the need of signing. Next, the second part goes into further detail on graphology, explaining how it examines writing and how it goes about comprehending the writer. Graphometry and graphology have different roles and uses in the field of forensic investigation, and this two-part method seeks to provide an in-depth examination of both.

8. Current interest, problem formulation and research questions

Graphometry and graphology are two entirely different fields with rather different purposes by nature. Graphometry is the methodical study of letter shapes and sizes with the goal of identifying basic differences between different writers or even revealing situations in which two manuscripts, despite their apparent differences, have basic characteristics that point to a shared writer. This question becomes especially relevant in cases where these similarities are purposefully concealed behind intentional textual changes. Graphology, in contrast, delves further into the stylistic and semantic subtleties of written letters, utilising the writing's content to infer personal information about the writer. Its goal is to use handwriting to identify and illuminate a person's personality.

Despite their unique complexities, both of these fields carve out a position for themselves in the field of criminalistic technique. The former helps identify distinguishing characteristics by making it easier to detect technical differences between two or more biblical compositions. Conversely,

the latter broadens its applicability by using handwriting analysis to reveal the motivations behind criminal acts. More explanation of these points will be provided in the talk that follows.

The questions raised in this paper are:

- 1. Does graphometry help in identifying the author of the criminal offense, in case the document is printed?**
- 2. How much does graphology help in this case?**
- 3. If two people cannot have the same handwriting, is it possible for two people to have the same personality? And finally,**
- 4. How efficient are these two sciences for forensic technique?**

The collected data was systematically examined in order to respond to all of the previously listed questions. A thorough exposition of each scientific discipline was given separately as a preliminary to this. Graphometry and graphology have become increasingly important in the larger framework of forensic research, and this first clarification was a necessary first step towards drawing definitive conclusions.

9. Graphometry

“Graphometry” has its linguistic origins in the French language, notably in “graphométrie,” where “métrie” denotes metric and “grapho” refers to the graphic or grapheme component. By analysing the etymology, it may be concluded that graphometry is the scientific study of handwriting constants by the methodical measuring of different components in a document. Basically, graphometry is limited to examining subtleties in the biblical text and measuring particular elements quantitatively so that they can be compared to equivalents in other manuscripts. In critical forensic situations, this analytical method helps identify possible writing style forgeries and assigns authorship of a certain manuscript to a suspected person.

Graphometry, as articulated by Kao (1986) is an interdisciplinary domain specifically geared towards the scientific scrutiny of the handwriting process, its resultant product, and other graphic skills. Alternatively, Brenner (2000). defines graphometry as a methodical approach to characterizing handwriting through the precise measurement of proportional values pertaining to the angles and the ratios of heights and widths of individual letters. Notably, research within the realm of graphometry, as expounded by Van (2006), invariably encompasses the analysis of handwriting movement in various manifestations. This multidimensional perspective underscores the nuanced and comprehensive nature of graphometry in its exploration of the intricate dynamics involved in the act of writing.

The history of graphometry has come before a number of other paths, the calligraphic path being the most ancient theory in the field of handwriting analysis (Begeja, 2001). According to the calligraphic viewpoint, knowledge was lost by a comparison of the inside and outside of letters, explaining the distinction between different writing markings. By contrast, the decision made by graphometry determines equivalency using information obtained from careful measurements of comparable manuscripts, which differs from the standards used in calligraphy (Begeja, 2001). This difference emphasises the methodological differences between the classical calligraphic approach and graphometry, highlighting the empirical and quantitative basis of the former.

As a mark of individuality, handwriting denotes a particular quality that is peculiar to every individual. Individual handwriting styles are intrinsically unique due to their peculiarities; each person writes with a unique style. Even while there are some traits that they may have in common, it is unlikely that they will be exactly alike, especially if different writers produced completely different texts. If there are any similarities in some writing characteristics, it may be because learnt styles had an educational impact on students when they were being taught handwriting. The penmanship cannot, however, be perfectly congruent. As such, it is conceivable to suggest that handwriting possesses a distinctiveness similar to fingerprints. Therefore, just as a person's fingerprints define their originality, so too can their writing style act as a distinguishing characteristic, supporting the idea that each person can be recognised just by their handwriting.

In order to determine and then assess the similarity of manuscripts, the graphometry paradigm makes use of identifying markings, which are similar to those that are used in the field of graphology. This convergence emphasises a common methodology across the two fields, wherein characteristic markers are utilised to identify and assess similarities between individual scripts. The similarity in how identifying marks are applied highlights the relationship between graphometry and graphology and shows how they work together to compare and comprehend written sentences.

3.1. Identification signs of writing in graphometry

The term “signs” is often used in relation to those distinguishing characteristics that are useful for differentiating between different manuscripts, explaining the subtleties of particular writing styles, and helping to identify the author who is being examined. These distinguishing characteristics, which appear as observable remnants or manifestations, capture the peculiar writing habits that are peculiar to each individual. It distinguishes between two types of signals: content-based indicators that focus on the semantic aspects of the written expression, and graphic indications that relate to the writing's visual components. This analytical framework acts as a fundamental distinction, enabling a thorough comprehension of the various aspects contained within the domain of mark identification in the context of handwriting analysis.

3.1.1. Graphic signs

Drawing upon the insights of Begeja (2001), the identification of an individual is facilitated through an array of graphic signs, broadly categorized into general and special signs. General signs encompass parameters such as graphic maturity, letter size, alignment (the proportional relationship between width and height of letters), slope (the orientation of vertical axes in relation to the baseline), connection (the continuity of writing without lifting the writing tool), pressure (the intensity of manual force during writing), topographic arrangement of the text (expressions manifesting in text placement and linguistic usage), positioning of text on paper (geometric configuration of text), line placement, numeral placement, and the underlining of words within sentences.

A meticulous examination of text placement on paper extends beyond geometric shape to include nuanced observations such as the location of the date (whether it is positioned at the upper sides, upper middle, or lower sides), the placement of the title, and the proximity of the signature in relation to the last line. These intricate details contribute to the comprehensive catalogue of general signs, forming a robust basis for the identification and differentiation of individuals through their handwriting characteristics. The qualities explained, as well as the previously mentioned ones, are

intrinsically non-reproducible because of the complex interaction between physiological and psychological elements linked to the demands of the high-need activity, conditioned responses, dynamic stereotypes, and the second-signal system (Begeja, 2001). The particular combination of these elements gives the writing traces a unique quality that makes replication of them impossible. The irreversible individuality of handwriting is forged within this nexus of cognitive, physiological, and reflexive dynamics, underscoring its intrinsic uniqueness and resistance to imitation.

The second category of graphic signals consists of distinctive signs that identify peculiar characteristics exclusive to certain writing styles (Begeja, 2001). These unique indicators, expressing unique qualities, are difficult to replicate in any other writing. There are numerous such indicators in a manuscript; these vary between different texts and are ascribed to things like letter placement, character complexities, and general stylistic subtleties. Thus, it would be appropriate to refer to these unique indicators as persistent departures inherent in a specific writing style.

Under the special signs rubric, a more detailed classification appears, including letter construction, hand movement trajectory in letter cluster construction, the exact starting and stopping points when performing letters or their component parts, the technique of starting and stopping movement when completing a letter, the proportionality of sizes and slopes, the spacing between letters and between letters, the nature of inter-element connections within and between letters, and the hand's disengagement before or after certain letters. This distinction captures the nuances inherent in the creation and performance of written forms, reflecting the complex range of individualised elements that contribute to the distinctive signature of each handwriting style.

When one looks at the cues that are present in the writing itself, a hierarchy becomes apparent. This hierarchy includes things like language, style, professional jargon, dialectal peculiarities, barbarisms, and orthographic accuracy. Within the domain of content-based signals (as proposed by S. Begeja), the emphasis goes beyond language elements to include the explanation of ideas expressed and the techniques used to express these ideas. This multimodal analysis of content-based signs contributes a layer of semantic inspection to the entire knowledge of individual writing expressions, hence enhancing the scope of handwriting assessment.

4. Signature

Regarding the signature as a means of self-identification, different people have different signature styles depending on how important the document is. While a less formal style might be used for everyday signature situations like checks or package receipts, a formal style might be saved for important papers like wills (Mohammed, 2019). Text-Basic, Mixed, and Stylized categories are used to distinguish between several signature styles (Mohammed, 2019). According to N. Korajlic and D. Muharremi (2009), the signature functions as a unique form of personal identification and is comparable to a “type of fingerprint.” The accuracy and validity of the signature-based identification method are maintained despite its vulnerability to fraud, highlighting its acceptability within the identification paradigm.

There are two approaches of signature identification: static (studying the geometry of the signature) and dynamic (studying the geometry of the signature, speed and direction) (Korajlic & Muharremi, 2009).

5. Graphology

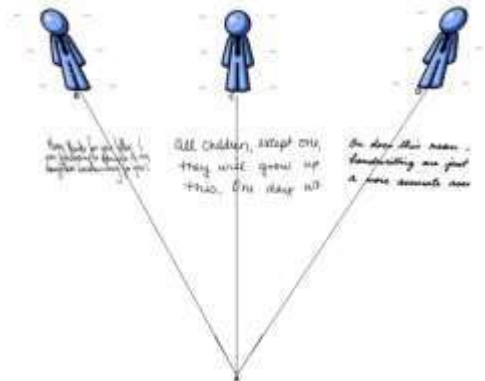
Graphology, as opposed to graphometry, takes on the role of an artistic discipline that interprets a person's personality through their handwriting (Brenner, 2000). This paradigm benefits from the historical figures' philosophical viewpoints. The Chinese philosopher Kuo Jo-Hsu said, "Handwriting inevitably shows whether it emanates from a noble mind or from a vulgar person." He lived in the fourth century BC. Japanese philosopher Okakura, meantime, asserted that "writing expresses a whole life." The fourth-century BC philosopher Aristotle also considered the relationship between writing and cognition, concluding that "writing is a symbol of speech, and the second a symbol of mental experience." Writing was considered a sacred endeavour by many civilizations throughout history, notably the Egyptians. After the Romans used graphology for centuries, many other cultures and civilizations began to use it as a means of understanding the person behind the writing. It is clear that graphometry and graphology are not the same thing: the former measures the components of handwriting, whilst the latter uses handwriting as a means of communicating and explaining the subtleties of a person's personality. This distinction draws attention to the variety of goals and applications that are encompassed within the fields of graphometry and graphology.

The word graphology is derived from the Greek language and means writing and study. The term graphology was used for the first time by abbot Michonne in 1872 (Begeja, 2001), who is also considered to be the "father of graphology". In addition to calling graphology a pseudoscience, there are also those who say that graphology is a tool to know oneself and the people around, or even that graphology is the psychology of writing.

5.1. The identifying signs of writing in graphology

Similar to graphometry, identifying signs within graphology are present, albeit with a distinctive divergence in the interpretation of their significance. While the identifying signs remain congruent with those in graphometry, the graphologist endeavours to expound upon the writer's personality through a nuanced analysis of elements such as letter height, inter-letter and inter-word spacing, and the angle of letter formation. Notably, some graphologists posit that the alignment of handwriting and an individual's posture may convey equivalent meanings. For instance, leftward slanting handwriting is associated with a person of cold character; a horizontally aligned script suggests neutrality, while a rightward slant indicates an approachable and friendly disposition. This intersection between graphology and posture interpretation adds a layer of complexity to the analysis, showcasing the multifaceted nature of personality assessment through handwriting.

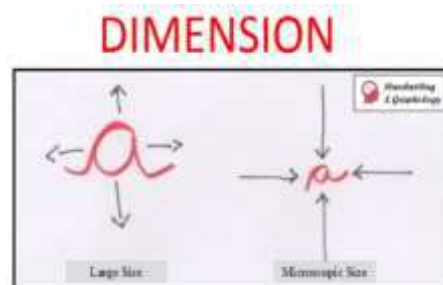
Figure 1: The slant of the writing



5.2. Analysis of writing in graphology

According to Mariana (2022), Muñoz Espinalt describes the ovality of the letter “a” as a “personality synthesis,” arguing that it functions as an expressive medium for people’s most private emotions and captures their most unified and desired interests. On the other hand, M. Xandró presents a different viewpoint, claiming that the ovality of the letter “a” represents our own ego and goes into the domain of our firmly established and limited interests (Mariana, 2022). These differing opinions highlight how complex graphological analysis is, with different researchers attributing different psychological and personality meanings to minute differences in handwriting features.

Figure 2: Dimensions of the letter a

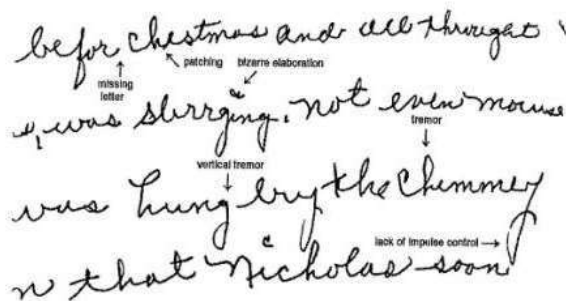
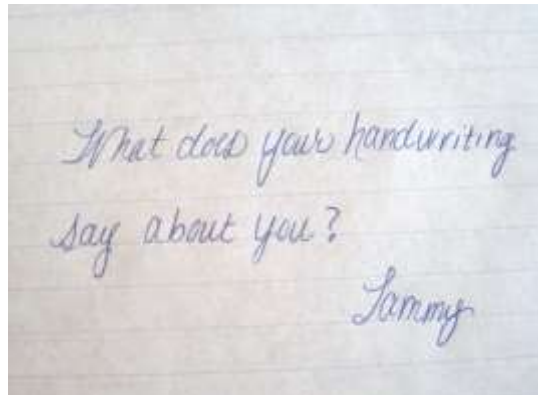


The variety of handwriting styles leads to the classification of multiple varieties, such as angular, round, and “u”-shaped. Handwriting that is circular is a sign of a limited outlook and a tendency towards a weak personality. On the other hand, writing that is angular conveys a wild and tough personality. Moreover, handwriting size is a communicative component; larger handwriting conveys a need for attention, whereas smaller print (less than 2.5 mm) is associated with a more reserved and introverted personality. The complex relationship between personality qualities and handwriting styles that has been studied in the discipline of graphology is highlighted by this association, which offers detailed insights into a person’s behaviour and disposition through the analysis of written expression.

So, as we can see, graphology pays attention to the identifying signs of writing, with the aim that through them it can reach conclusions about the personality of the author of the manuscript, that’s why they call it the psychology of writing.

Some graphologists go even further, stating that through handwriting you can tell if the writer is honest or dishonest. In honest people, the writing is clear and legible. There is uniformity of style - especially within the middle area. The baselines are even and the pressure is strong and steady. There is a lack of embellishments. Slope is stable as are size and span (Amend, Karen Kristin & Ruiz Mary Stansbury, 1980).

Figure 3: A type of handwriting



The aforementioned scholars posit that individuals with dishonest tendencies exhibit discernible manifestations of emotional disturbance or nervous tension. These manifestations manifest in their writing through erratic changes in slope, pressure, size, and spatial relationships. At times, when attempting to conceal dishonest intentions, the individual may compensate by exercising control, a phenomenon evident in the manifestation of signs of rigidity across these four fundamental areas. This complex interplay between deceptive inclinations and the subtle intricacies of handwriting underscores the potential for graphological analysis to discern underlying psychological states in individuals with fraudulent tendencies.

Figure 4: Erratic changes

6. Signature

It is recognised that a signature can change throughout the course of a person's life due to their developing maturity. However, the painstaking attention to detail that graphometry and graphology provide indicates the presence of enduring distinguishing characteristics. Notably, certain components remain consistent across time, including the size, the slope, the stylized first letter, and the last letter's extended tail. This finding emphasises how some characteristics of handwriting remain constant despite more general changes that could take place in an individual's signature over time.

Figure 5: Signature



Those who are stable frequently have signatures with a small difference between the first capital letter and the following letters. On the other hand, Mariana (2022) points out that a signature that is larger than the text that goes with it communicates a sense of imagined superiority over others. Even though the signature usually resembles the handwriting overall, there are several exceptions that need to be noted when the signature may not match. According to graphology, the signature represents subconscious components entangled with the "Ideal Ego," departing from the larger written text that captures the person's current feelings, ideas, and actions (Mariana, 2022). This careful examination reveals the several levels of meaning that are included into signing, representing the conscious and subconscious selves.

7. Statistics from the Forensics Agency of Kosovo for the years 2020-2022

- In 2020 – 36 cases with 86 conflicting evidence (handwriting & signature).
- In 2021 – 53 cases with 483 conflicting evidence (handwriting & signature)
- In 2022 – 54 cases with 1520 conflicting evidence (handwriting & signature)
- As for the year 2022:
- During 2022 – 80 cases with 153 documents (evidence) 133 forged documents
- During 2022 – 54 cases with 1520 testimonies (handwriting & signatures)

The final findings are given according to FAK's internal procedures.

8. Conclusion

The inherent differences between graphometry and graphology, as explained thus far, highlight the importance of each. The former uses proficiency in handwriting analysis to make it easier to identify the author in criminal investigations, while the latter provides information on the personality attributes of the person. The notable development of the anthropological school of criminal law coincident with the graphological trend is worth mentioning. The founder of this school, Lombroso, examined criminality from a biological perspective and proposed the idea of the “born criminal” in his influential work “The manual to graphology” published in 1805 (Begeja, 2001). This historical junction underscores the diverse methodologies utilised to comprehend criminal behaviour, including the forensic examination of handwriting and the more expansive biological viewpoints embodied by the anthropological school. The theory of psychoanalysis suggests that our repressed natural desires remain in our subconscious and unintentionally impact our current circumstances. The ability to write the subconscious down using graphic exams has made it possible to conduct a thorough and in-depth analysis that reveals a person’s personality, ego, desires, fixations, and paranoias like reading from a book. By utilising the distinctive features found in graphometry, it is possible to verify the legitimacy of handwriting found in suicide cases or to prove that a suspect’s handwriting resembles threatening handwriting. At the same time, graphology unmask the complexities of handwriting and provides a deep analysis that provides a complete picture of the person’s mental state.

The professionalism of the writing analyst and graphologist must come first when responding to the questions that were outlined in the introduction. It is crucial to understand that, even with the best of intentions to change one’s handwriting, there are certain characteristics that clearly identify a person. Graphometry and graphology continue to play vital roles even in situations where the script is printed and lacks freehand nuances. This is due to the indications’ persistent character, especially when it comes to the writing’s content—word choice, spelling, dialect, professionalism, and so forth. These inherent components are not easily altered, which guarantees their eternal existence. That being said, if there is enough evidence for a comparative study, the author of a letter can be discovered by means of a thorough assessment of its content.

A noteworthy conclusion that arises from in-depth investigations and handwriting examinations is that no two monozygotic twins have the same writing style. If we think of writing as an expression of the subconscious language, then people cannot have the same personality unless they are quite similar. Although it is possible to imitate someone’s writing to some degree, it is impossible to imitate someone’s personality. In terms of graphometry and graphology’s effectiveness, it depends on how well-versed the specialists are in these fields. Identifying markings and psychological nuances require a high level of skill from practitioners in these areas due to their sophisticated comprehension and appropriate interpretation. Take the case of Dreyfus as an example, where several expert views were obtained. A specialist said that the document was the product of imitation, but a third maintained that Alfred Dreyfus made an effort to change his handwriting. It turned out later that the manuscript was, in fact, a fake. The effectiveness of graphometry and graphology is inextricably linked to the availability of a sufficient amount of data for comparison and the analyst’s ability to notice minute details, as this case highlights. These sciences are not as accurate or reliable if the analyst is not able to carefully examine and decipher little nuances in the handwriting samples that are being examined

Table of Contents

Abstract	216
1. Introduction	217
2. Current interest, problem formulation and research questions	217
3. Graphometry	218
3.1. Identification signs of writing in graphometry.....	219
3.1.1. Graphic signs.....	219
4. Signature	220
5. Graphology	221
5.1. The identifying signs of writing in graphology.....	221
5.2. Analysis of writing in graphology	222
6. Signature	224
7. Statistics from the Forensics Agency of Kosovo for the years 2020-2022.....	224
8. Conclusion	225
Bibliography	228
Table of Figures	228

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Table of Figures

<i>Figure 1: The slant of the writing</i>	222
<i>Figure 2: Dimensions of the letter a</i>	222
<i>Figure 3: A type of handwriting</i>	223
<i>Figure 4: Erratic changes</i>	223
Figure 5: Signature	224

The Impact of Technology in Education

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Abstract

The purpose of this paper is that every day that passes, a technological change is happening not only in education but in every sphere of life. With its development, the way of managing our time is becoming easier for us, it has helped us a lot in the process of learning to understand literature where from the traditional approach with a pencil and a piece of paper we have moved to the button stage where with a "Click" we are changing the world. The use of technology in teaching is to ensure a process with good quality and efficiency in learning. First in this paper we can see how the technological evolution has influenced teaching in higher education in Kosovo, secondly I will deal with the traditional and modern approach in the teaching process, thirdly the use of educational educational platforms and platforms with artificial intelligence from students, also some statistics to see the positive and negative impact of technological development.

Keywords: : *Technological change, Education, learning, Artificial Intelligence, statistics.*

Table of Contents

INTRODUCTION.....	230
LITERATURE REVIEW	231
WHAT IS INFORMATION TECHNOLOGY?	232
WHAT IS ARTIFICIAL INTELLIGENCE?	233
TESTING HYPOTHESES AND INTERPRETING RESULTS	236
CONCLUSIONS	239
References.....	241

INTRODUCTION

The influence of information technology on teaching in higher education has been significant in Kosovo as it is in most other countries. The use of information technology has brought about significant changes in the way teachers teach and how students learn. The work begins with a discussion of the most protected learning models. Considering that education has used technology to expand and develop various processes of the Education System for more than a century, it is not surprising that the advent of new technology has increased interest in acquiring knowledge with different methods of presentation of knowledge. Information technology has become an important part of our lives and has changed the way we communicate and work in all areas of life. (D. Haddad Sonia Jurich, 2002)

Today, technological-based education is accessible in universities in developed countries. Intelligent schools have taken a leap into virtual learning. Online distance learning and training are among the new forms of education in the new century. Having evolved learning environments in the early 21st century, individuals and societies placed heavy responsibilities on the shoulders of

educational institutions and their traditional structures from their growing need for education (M.Artan, 2002)

In higher education in Kosovo, information technology has made teaching easier and more accessible for students and professors. The use of information technology in teaching affects the communication between students and teaching, increases student engagement during learning and increases the effectiveness of teaching. In our lifetime, information technology is one of the main aspects of our lives, and education has not been exempt from this change. The use of information technology in teaching in higher education in Kosovo has become a global trend, as it has a large number of benefits. In Kosovo, the use of information technology in teaching is becoming increasingly common. If the use of information technology in teaching is successful, it can affect the communication between students and teachers by enabling a regular dialogue between them. This can help create a better relationship environment between them and build a balance between the demands of learning and the expectations of students.

LITERATURE REVIEW

ICT integration in education generally refers to technology-based teaching and learning processes that involve the proper use of technology in schools. Williams considers using any of the ICT tools such as the Internet, CD ROMs or other software, for example MS Excel to assist instructions, such as ICT integration. Integrated or technology-based learning and learning has been found to offer various exciting ways, which include educational video, stimulation, data storage, database usage, mind mapping, guided discovery, thoughtstorm, music and the world wide network (www) leading to the making of the most exciting and meaningful ICT learning process in education is any technology that deals with sharing knowledge or, In other words, a means of communication in the teaching and learning process. Technology, in the context of education, according to Churchill & Francis is understood as a set of tools and resources that reinforce the physical and intellectual capacity of individuals. (Warwick P Kershner R, 2008) (M.D, 2003) (2016)

Effective ICT integration is found to have significant impacts on students when they become confident after engaging with ICT tools and, most importantly, working together with teachers as co-students. The co-learning aspect informs about the integration of ICT as an effective learning tool towards increasing student learning through the creation of an environmentally focused student within the school. Kim, investigating students' skills for ICT integration increases, stresses that effective ICT integration promotes critical thinking and problem solving skills of students that enable a successful life. (Grabe, M. Grabe, C, 2017) (Kim, 2009)

WHAT IS INFORMATION TECHNOLOGY?

Information technology refers to the knowledge process and methods of its application, processing, transferring and making information on the go. Information technology (IT) refers to the use, development and management of computer systems, software, networks and electronic systems to store, process, transmit and receive information. It includes a wide range of technologies, tools and techniques that enable the creation, manipulation, storage and communication of digital data. (Adem Karahoca, 2012)

Information through the larger communication systems as a goal should be pursued. But developing countries, in addition to difficult access to technology, are facing structural and behavioural problems associated with it. The efficiency in these technologies depends on the political, cultural, economic, technical factors and the level of software progress and the quality of its institutionalization and use. (Jarice Hanson Uma Narula, 1990)

Information class technologies facilitate students' access to information to improve the availability or reality of learning materials. Unlike automated classes that improve the efficiency of information, the goal here is to make available new, qualitatively better information that otherwise would not be. Learning networks, hypermedia, simulations, and virtual reality are the information-class technologies. databases, access to a wide variety of software for manipulation and analysis of data and so on . (William R, King, G. Premkumar, K Ramamurthy, 1990)

Although universities create and acquire knowledge, they are rarely successful in applying that knowledge to their activities. In fact, academic institutions typically stall businesses with approximately a decade in adoption of new technologies (US Congress, 1988). This is certainly true in terms of the application of information technology (IT) to the learning process: blackboarding and chalk remain the main teaching technologies in many schools businesses even while the merits of information technology to improve communication, efficiency and decision-making in organizations are recognized and embedded by IS researchers. However, as business schools experience increased competitive pressures, information technology is an area that schools can be used to distinguish or compete with or, more importantly, be used as the catalyst for transforming educational processes. IT is not a wonderful but unpredictable tool for mitigating educational impairment, but as an effective means of enabling deliberate changes in teaching and learning processes. Some business schools have already begun building classroom facilities that include information technologies in the hope of improving learning and teaching processes. For example, the University of Maryland hosts an electronic classroom that enables groups of students to work together during communication in an electronic and anonymous manner. At Harvard Business School, there was a pilot program conducted where each student's dorm room was equipped with a personal computer connected to the network to share printers and laser scanners shared living spaces Interactive computer applications and simulation exercises were used to

complement traditional case study preparation. Students had access to digitized videos in factories, production processes, marketing campaigns, and interviews with protagonists from random study firms, allowing students to "visit" factories were studying and 'meet' key players in the case" before going to class. Students also had access to Mainstream News, a consolidation of mainstream news from leading magazines and newspapers worldwide, and a wealth of economic and financial data from commercial providers to add industry analysis (D.A, 1993) (Alavi, 1994) (Jouhara Al Habsi Ali Salim Al Kalbani, 2023)

WHAT IS ARTIFICIAL INTELLIGENCE?

AI can lead to ethical concerns, including privacy violations and data misuse. (Nguyen, 2021). Artificial intelligence and machine learning, a method of AI, make it possible to build special-purpose machines to perform useful cognitive tasks, in some cases better than humans. Early AI systems were rule-based "expert systems," where a computer program simply followed a set of specific instructions on how to behave in a given situation. Recent AI advances enable much more sophisticated systems. Machine learning allows algorithms to learn from data and develop solutions to problems. These increasingly intelligent machines can be used for a wide range of purposes, including analyzing data to find patterns and anomalies, predicting trends, automating tasks and providing the "brain" for autonomous robotic systems. Current AI systems are "narrow", however, in that their expertise is limited to a single domain, compared to hypothetical "general" AI systems that could apply expertise more broadly. Machines—at least for now—lack the general-purpose reasoning that humans use to flexibly perform a variety of tasks: making coffee one minute, taking a phone call from work the next, putting on a child's shoes the next, and putting her in the car to school (Paul Scharre, 2018)

. In the early days of AI being used by digital platforms, these technologies were just one of the tools in the toolbox. Very small fractions of processes can be handed over to AI applications, but even then, their use can provide tangible business benefits. This is well illustrated by the following quote from eBay Analyst Day. "To deliver the highest quality product-based search, what we do at Shopping.com is structure the unstructured. it is a key part of our competitive advantage. We combine the best of human and artificial intelligence. First, we start with human intelligence, to structure and group data. We then apply machine learning technologies and algorithms that increase quality and ensure cost scalability." Such narrow applications of AI, which are focused on efficiency and scalability, continue to be a vital part of the operations of digital platform companies today. In a 2016 letter to shareholders, Amazon CEO Jeff Bezos revealed that machine learning drove Amazon's algorithms for "demand forecasting, product search ranking, product and deal recommendations, trade placements, fraud detection, translations " After the initial wave of artificial intelligence applications focused on internal efficiency, platform companies explored the possibilities of using these (and other) innovations in new business opportunities. Machine learning clearly entered the research and innovation agendas of these companies. "That's why we send our company's Neil Armstrongs, our world-class engineers, psychologists, ethnographers, physicists, chemists, vision specialists and design gurus to the farthest reaches of the sci-fi world

to think and apply science. rigorous for computer vision, machine learning, user interfaces and language processing. These inventors are creating technologies that have a horizon of 10 years or more.” (Robbie Bach, Microsoft Corporation – President, Entertainment and Devices Division, Microsoft at the CEA International Consumer Electronics Show - January 6, 2010).The scale of AI applications and workloads has grown steadily. In particular, machine learning was used, for example, by Google to optimize ad auctions and detect fraudulent clicks on ads. Later, for example, building contours and road signs

recognition, both powered by image recognition and added to enrich Google Maps. Additionally, Google and Microsoft have moved to machine learning as an important element of their search engine ranking algorithms. All these applications

Artificial intelligence on a large scale raised machine learning to be a

important part of the application portfolio, thereby boosting the infrastructure of these companies. This was an important step, since infrastructure-as-a-service will later become one of the core elements of the AI-Offerta platform. "The fact that we have a very diverse set of first party workloads including machine learning is what keeps it honest in terms of the infrastructure that we need to build to serve ourselves and then do it in available as a third-party infrastructure.” (Satya Nadella, Microsoft Corporation - President, Server and Tools, Microsoft at the Citi Technology Conference, September 5, 2012). A detailed account of the main events goes beyond the scope of this paper. However, it is important to recognize that many digital platform companies not only invested in research, development and improvement of internal operations, but also looked for ways to produce AI. Relatively immediately after or in parallel with major announcements regarding internal developments, product launches followed (Mucha Tomasz and Seppla, 2020)

METHODOLOGY OF SCIENTIFIC RESEARCH

This research project was realized using the quantitative method. With quantitative data, questions will be drawn up for data collection. It can be said that the methodology is based on which the project is drawn, as well as individual positions and conclusions are drawn. The tool used in this research is the questionnaire, structured with a total of 16 questions where closed questions were. The data collected for this research are primary data where their results will be analyzed through various statistical tests.

Secondary data are obtained from various sources of literature and articles based or focused on information technology.

The research questions and hypotheses of this paper are:

The research questions are:

- 1.** How can information technology be integrated into teaching in higher education in Kosovo?
- 2.** How does the use of Information Technology affect the quality of teaching in higher education in Kosovo?
- 3.** How does the use of Information Technology affect communication between students and teachers in higher education in Kosovo?

Hypotheses

H1-The use of information technology in higher education teachers in Kosovo affects the increase of student engagement during teaching.

H2-The use of information technology in teaching affects the improved quality of teachers in higher education in Kosovo.

H3- The use of information technology in teaching affects the improved communication between students and teaching in higher education in Kosovo

TESTING HYPOTHESES AND INTERPRETING RESULTS

In this part of the paper we will test the hypotheses. During the testing of hypotheses, such as Chi Square, Correlations, Paired Samples, Anova, as well as Factorial analysis and Besushmeris. For testing hypotheses we will use primary data collected from the questionnaire that is distributed to students of different universities. This data will be tested on the SPSS program and will test their results.

The first hypothesis

H0-The use of information technology in higher education teachers in Kosovo does not affect the increase in student engagement during teaching.

H1-The use of information technology in higher education teachers in Kosovo affects the increase of student engagement during teaching.

Table 1 Chi Square

Test Statistics

	Do you agree with this statement The use of information technology (ICT) affects the engagement of students in higher education in Kosovo	How often do you use information technology (ICT) tools during the course of your study?
Chi-Square	64,863a	62,863b
df	4	3
Asymp. Sig.	,000	,000

a. 0 cells (0,0%) have expected frequencies less than 5. The minimum expected cell frequency is 20,4.

b. 0 cells (0,0%) have expected frequencies less than 5. The minimum expected cell frequency is 25,5.

We tested the first hypothesis with the Chi Square test where according to the results of the value of significance (Asymp.Sig), P-value $0,00 < 0,05$ can be found to accept the alternative hypothesis that it is understood that the use of information technology in teachers in higher education in Kosovo affects the increase of student engagement during teaching.

The second hypothesis

H0-*The use of information technology in teaching does not affect the improved quality of teachers in higher education in Kosovo.*

H2-*The use of information technology in teaching affects the improved quality of teachers in higher education in Kosovo.*

Table 2 Correlations

Correlations^b

	Do you agree with this statement The use of information technology (ICT) affects the motivation of students to learn	Do you agree with this statement Information technology (ICT) affects the education of teachers
Do you agree with this statement The use of information technology (ICT) affects the motivation of students to learn	1	,399** ,000
Do you agree with this statement Information technology (ICT) affects the education of teachers	,399** ,000	1

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=102

In this analysis we see the data at 0.00 <0.01 reliability level, but there is a weak correlative correlation between variables

The third hypothesis

H0- *The use of information technology in teaching does not affect the communication between students and teaching in higher education in Kosovo*

H3- *The use of information technology in teaching affects the improved communication between students and teaching in higher education in Kosovo*

Table 3 Paired Samples Test

The third hypothesis of this paper has been tested with the Paired Samples Test. With the significance

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Do you agree with this statement Information technology (ICT) affects the quality of teachers - Do you agree with this statement The use of information technology (ICT) affects the engagement of students in higher education in Kosovo	-,153	1,039	,051	-,253	-,053	-3,013	417	,003

being less than 5% 0.03 then the alternative hypothesis is accepted. So

The use of information technology in teaching affects the communication between students and teaching in higher education in Kosovo

Table 4 Paired Samples Correlations

Paired Samples Correlations			
	N	Correlation	Sig.
Pair 1 Do you agree with this statement Information technology (ICT) affects the quality of teachers & do you agree with this statement The use of information technology (ICT) affects the engagement of students in higher education in Kosovo	418	,392	,000

The correlation between these two variables is weak but the significier is at the level of reliability

CONCLUSIONS

In this research paper, the topics of the impact of information technology were addressed in teaching in higher education in Kosovo. Finally, the impact of information technology on teaching in higher education in Kosovo is extraordinary and has changed the course of the teaching process. The use of technological tools and resources has helped improve students' access to learning materials and create a more attractive and interactive learning environment.

Improving communication and cooperation between teachers and students has helped create a supported and attractive environment for all participants. The use of virtual platforms and communication apps has facilitated real-time communication and brought a sense of closeness, even at physical distance.

In the end, wider access to rich sources of knowledge has become a major advantage for students. They can browse, study and develop their knowledge through the internet and virtual library resources. This has opened the doors of knowledge for students, enabling them to expand their horizons and build new knowledge.

Although the impact of information technology on teaching in higher education in Kosovo has brought new challenges, it has helped improve the quality of teaching and prepare students for the challenges of the labor market. In addition, it is important to continue using information and communication technology in order to improve teaching and knowledge development in higher education in Kosovo.

To meet the full potential of information technology in teaching, it is necessary that higher education institutions in Kosovo continue to invest in technological infrastructure, teacher training and establishing regular policies for the use of information technology in the teaching process.

- Information technology has changed the course of teaching in higher education in Kosovo. The use of technological tools and resources has improved students' access to learning materials and made learning more interactive and attractive.
- Information technology has improved communication and cooperation between teachers and students. The use of online communication platforms has facilitated real-time communication and created a sense of closeness among all participants.
- The impact of information technology in teaching has brought new challenges, such as organizing time, dedication of students and necessary security. However, he has also opened up new opportunities for access to education and knowledge development in higher education in Kosovo.

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Addressing regional and gender disparities in access to science education and research opportunities in Nigeria

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Abstract.

In Nigeria, there exist significant differences in science education and research possibilities, which are driven by various factors including regional and gender dynamics. This study investigates the scope and foundations of educational inequality by employing text analysis on various sources such as educational papers, policies, and published research outputs. The initial results suggest notable disparities, particularly in the Northern regions and among female populations. The textual data reveals discernible influences, including socio-cultural norms, infrastructure challenges, and economic factors. The existence of these gaps has significant implications for the trajectory of individual career pathways as well as the overall scientific advancement of Nigeria. In order to promote a more comprehensive scientific environment, it is imperative to implement initiatives that specifically target these existing disparities. The strategies that are advised include the improvement of infrastructure, the creation of instructional materials that are sensitive to gender, and the implementation of educational campaigns tailored to specific regions.

Keywords: Nigeria, science education, gender disparities, text analysis, regional disparities.

Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO) highlights the crucial importance of science education in developing the intellectual and cognitive abilities of individuals in a society. According to UNESCO, science education is not just a means of passing on knowledge, but rather a force that stimulates critical thinking and problem-solving abilities (UNESCO, 2017). This viewpoint is in line with the changing requirements of the worldwide environment, where the capacity to adapt and possess strong analytical skills are crucial for successfully dealing with intricate difficulties.

In a rapidly advancing world of technology and ever-emerging challenges, having a scientifically knowledgeable population becomes a valuable advantage. UNESCO acknowledges that science education provides persons with the ability to understand, assess, and actively contribute to resolving current concerns. This holds significance that goes beyond personal empowerment; it serves as a fundamental basis for the overall advancement of societies in the presence of ever-changing and interrelated global challenges.

Research, especially in the fields of science and technology, complements education and acts as the driving force behind a nation's progress in innovation, economic development, and improved quality of life. The World Bank recognizes the crucial role that scientific advancements play in stimulating economic development (World Bank, 2019). The results of research play a crucial role in making significant advancements in important fields like medicine, agriculture, and energy. This has a widespread positive impact on societies as a whole.

- **Medicine and Healthcare:** The utilization of scientific research has played a crucial role in the advancement of life-preserving drugs, medical innovations, and therapeutic procedures. Advancements in genomics, such as breakthroughs in the field, have cleared the path for customized medicine, fundamentally transforming healthcare and enhancing patient results (Baker, 2018).
- **Agriculture:** Advancements in agricultural research have resulted in improvements that boost crop productivity, reduce the effects of pests and diseases, and encourage environmentally friendly farming methods. Consequently, this aids in ensuring an adequate supply of food and sustains the means of subsistence for a vast number of individuals (FAO, 2019).
- **Energy:** Progress in energy-related research is vital for expanding the range of energy sources, enhancing efficiency, and tackling environmental issues. The advancement of renewable energy technologies serves as a prime example of how scientific investigation can propel a shift toward sustainable and ecologically sound activities (IEA, 2021).

Within the framework of economic growth, countries that place emphasis on and allocate resources to scientific research establish a conducive environment for fostering innovation. Consequently, this stimulates investments, nurtures the expansion of enterprises based on information, and improves overall economic competitiveness at an international level.

Due to the diverse and significant impacts of science education and research on societal progress, it is imperative for governments aiming to compete on a global scale and achieve sustainable development to prioritize investment in these areas. Countries that disregard or allocate insufficient resources to science education face the danger of lagging in the competition for groundbreaking advancements and may encounter difficulties in tackling intricate issues, such as public health emergencies and environmental preservation.

The thrust of this paper is to investigate political influences on Nigeria's science and technology funding decisions. The rest of the paper shall be concerned with the Historical context; objectives of targets of science and technology; political influences on funding; the impact of historical trends in science and technology funding on research and development in Nigeria; political influences on funding decisions in science and technology; and conclusion and recommendations.

Theoretical Framework

Social Capital Theory, formulated by sociologists Pierre Bourdieu and James Coleman, offers a comprehensive framework for understanding the significance of social connections and networks in enabling access to resources, opportunities, and knowledge. From a theoretical standpoint, the concept of Bridging Social Capital is highly significant, especially when it comes to addressing inequalities across various groups, such as urban and rural communities or different genders (Bourdieu, 1986; Coleman, 1988). An example of how Bridging Social Capital might be utilized is by facilitating linkages across regions that have unequal access to educational resources (Coleman, 1988). This part of the idea aims to connect urban and rural areas, fostering interactions and cooperation. Its goal is to address the disparities in infrastructure, educational facilities, and science education possibilities. For instance, collaborations between urban schools and rural schools can enable the transfer of resources, experience, and assistance, guaranteeing that students in both environments have fairer opportunities to receive high-quality science education. The concept of Bridging Social Capital is also applicable to tackling gender inequality in science education. The approach aims to foster relationships among individuals of different genders in order to dismantle preconceptions and establish an inclusive atmosphere that motivates and supports all genders in their pursuit of scientific studies and research (Bourdieu, 1986). Collaborative endeavors, mentorship initiatives, and networking occasions can significantly contribute to establishing links between male and female students, instructors, and professionals in the realm of science. The basic concept of Bridging Social Capital revolves around fostering trust and cooperation across heterogeneous groups (Coleman, 1988). In the realm of science education, trust plays a crucial role in establishing conducive circumstances for the exchange of knowledge and the mobilization of collaborative endeavors to address systematic inequalities. Establishing reliable partnerships between educators in urban and rural areas can facilitate the exchange of effective methods and the formulation of tailored approaches that address the distinct requirements of each environment. Bridging Social Capital also mitigates resource inequities by promoting the exchange of information and support among diverse groups (Bourdieu, 1986). An example of this is the establishment of a cooperative network connecting urban and rural schools, which can facilitate the exchange of teaching materials, provide access to online resources, and enable coordinated endeavors in obtaining funding for science programs. This cooperative approach helps to create equal possibilities and guarantees that students from different regions have equitable access to comparable educational options.

Overview of Disparities

The analysis of disparities in science education and research opportunities in Nigeria provides a comprehensive assessment of the current gaps, highlighting the complex interaction between regional and gender factors. This section seeks to provide a contextual framework for the wider inequities and establish the foundation for a comprehensive examination of particular difficulties related to regions and gender.

Northern Regions: The educational situation in the Northern areas of Nigeria is marked by noticeable differences, highlighting the substantial obstacles that impede the progress of science education. Ogunleye's groundbreaking research in 2018 brings attention to the area, uncovering a significant scarcity of well-qualified scientific educators. The limited availability of teachers leads to a significantly larger teacher-to-student ratio compared to the national average. As a result, the quality of customized attention and mentorship is degraded in this environment (Ogunleye, 2018).

The lack of skilled scientific teachers is only one aspect of a complex situation; deficiencies in infrastructure worsen the educational gap in the Northern areas. The World Bank's comprehensive Education Sector Review for Nigeria in 2020 reveals that only 40% of schools in these locations have access to functional science laboratories. This number demonstrates the tangible obstacles that hinder hands-on and practical learning experiences, which are essential for a strong science education (World Bank, 2020).

The consequences of infrastructure inadequacies are significant, directly affecting the caliber of science education provided to pupils in the Northern areas. Insufficient resources impede students' involvement in scientific investigations and the actual implementation of theoretical information, hence obstructing the cultivation of essential abilities. Furthermore, the scarcity of resources is a substantial challenge for educators aiming to create a thorough and stimulating learning environment.

These issues have a significant impact on science teaching in the North, creating a difficult situation that extends beyond individual classrooms. The region's insufficient infrastructure and lack of trained educators restrict Nigeria's ability to cultivate scientifically knowledgeable people, thus impeding both individual academic progress and the general scientific progression of the country.

Southern Regions: The educational environment in the Southern parts of Nigeria presents a more positive outlook compared to the Northern regions, notwithstanding the presence of intrinsic inequities. Adeyemo's seminal research in 2019 offers a comprehensive examination of the regional dynamics, elucidating the disparities in infrastructural development and emphasizing the intricate educational landscape of the South (Adeyemo, 2019).

Adeyemo's research is crucial, highlighting a favorable element in the Southern regions. Around 70% of schools in these regions possess fully operational science laboratories, indicating a more favorable setting for hands-on application of scientific principles and experiments. The significance of strong infrastructure in promoting practical learning experiences, which is a crucial aspect of a comprehensive science education, is emphasized by this figure (Adeyemo, 2019).

Although the Southern regions may have a relative edge in infrastructure development, it is still crucial to implement customized solutions to effectively tackle specific difficulties. The South benefits from economic growth, urbanization, and historical investment patterns, which contribute to its comparatively positive conditions.

Gender Disparities

Female Populations in Science Education: The differences in science education across genders are evident and have significant consequences on the academic and professional paths of female students. The current report by the Federal Ministry of Education (2021) presents a worrisome scenario, indicating a significant disparity in gender representation, with barely 30% of girls enrolling in science programs throughout Nigeria. This number emphasizes the immediate necessity to tackle obstacles that impede women's involvement in scientific fields.

The enduring gender disparities are not solely quantitative; they are firmly rooted in societal norms and stereotypes that influence educational decisions. Adeyemo's influential study in 2019 explains how sociocultural influences serve as significant obstacles, shaping the academic choices made by female students (Adeyemo, 2019). The influence of societal norms and gender biases continues, sustaining disparities in science education based on gender.

Table 1: Gender Disparities in Science Program Enrollment

Gender Percentage Enrolled in Science Programs

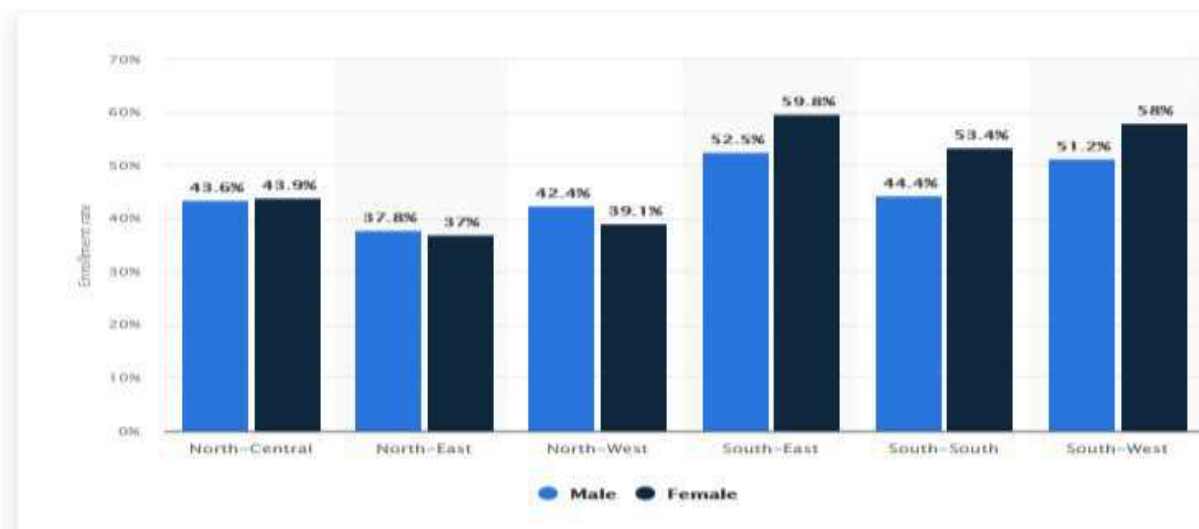
Female 30%

Male 70%

Table 1 demonstrates the gender discrepancies in enrollment in science programs, highlighting a significant gap that necessitates specific interventions for female students.

The lack of female representation in science education is indicative of the systemic obstacles that impede their active involvement. The challenges encompass a wide spectrum, including societal norms that discourage women from pursuing science, as well as inadequate availability of resources and mentorship opportunities. The ramifications go beyond individual educational experiences, influencing the diversity and inclusivity of the scientific community as a whole.

Table 2: Gross enrollment rate in private and public lower secondary schools in Nigeria as of 2018, by zone and gender



Source: Statistica (2019)

In 2018, the gross enrollment rate in middle schools in Nigeria was 54.4 percent. The Southeastern states recorded the greatest percentages, with 52.5 percent for males and 59.8 percent for females. Specifically, Imo and the Federal Capital Territory (FCT) exhibited the highest rates across the entire country. Furthermore, the results indicate significant disparities between the Northern states and the Southern states. The gross enrollment rate quantifies the overall enrollment rates of students across all age groups, while the net enrollment rate specifically focuses on students inside the designated age range for a particular educational level.

Table 3: Nigeria’s Global Gender Gap Index and Ranks 2014/2023

Year	Rank	Index
2023	130th/146 Countries	0.637
2022	123rd/146 Countries	0.639
2021	139th/156 Countries	0.627
2020	128th/153 Countries	0.635
2019	-	-
2018	133rd/149 Countries	0.621
2017	122nd/144 Countries	0.641
2016	118th/144 Countries	0.643
2015	125th/145 Countries	0.638
2014	118th/142 Countries	0.639

Source: Dataphyte (2023)

The indices of Nigeria have consistently fluctuated between 62 and 64 percent throughout the ten years under examination. Nigeria's economic opportunity and participation score in the 2023 global gender gap report was 0.715, ranking it 54th worldwide. The worldwide ranking for educational achievement was 137th, with a score of 0.826.

Examining Regional Variations in Access to Science Education

Ensuring fair and just science education is crucial for countries aiming for all-encompassing progress, and Nigeria is not an exception to this. The country is currently facing the ongoing issue of regional differences in science education, which is a complex problem influenced by various factors such as socioeconomic situations, infrastructure development, cultural norms, and government policies. Given the diverse geography and economic structures of our country, it is crucial to examine the differences in scientific education access across areas in order to develop effective measures for reducing these inequalities.

- **Infrastructure Disparities:** The uneven allocation of educational infrastructure is a significant element that contributes to regional differences in science education in Nigeria. Rural areas sometimes face resource constraints, resulting in a notable lack of essential facilities necessary for effective science instruction (Ukeje & Bajah, 2013). In these places, the availability of well-equipped science laboratories, qualified science professors, and modern classrooms, which are crucial elements of a strong educational framework, is typically limited. This shortfall starkly contrasts with the relatively fortunate urban areas, where educational resources are more plentiful and sophisticated.

The statistics highlight the magnitude of this division. Based on statistics from the Federal Ministry of Education, it was found that in 2013, just 30% of rural schools in Nigeria had

operational scientific laboratories, which is significantly lower compared to urban schools where the percentage was 80% (Federal Ministry of Education, 2013). Furthermore, there is a notable scarcity of proficient scientific educators in rural regions, resulting in a teacher-to-student ratio that is considerably greater than the national average.

The lack of sufficient infrastructure in rural areas hinders the quality of science education to a great extent. The lack of well-equipped laboratories impedes practical learning experiences, while a scarcity of qualified science teachers decreases the overall caliber of instruction. The presence of advanced technology resources in modern classrooms is crucial for creating a favorable environment for contemporary science teaching. However, the lack of such resources in rural areas worsens the educational gap.

Moreover, the discrepancy between educational infrastructure in urban and rural areas sustains a cycle of inequity. Students residing in metropolitan regions, where they have access to exceptional facilities, are more prone to cultivating a robust groundwork in science education, so granting them enhanced prospects for subsequent academic and professional accomplishments. In contrast, students residing in rural areas encounter significant challenges due to inadequate facilities that restrict their access to the hands-on parts of scientific investigation. The geographical location in remote areas presents difficulties in attracting skilled teachers and establishing the required infrastructure for effective science teaching.

Ogunleye's (2018) research emphasizes the significant variations in education across different geographical areas. In distant areas, the ratio of teachers to students is considerably higher than the national norm, leading to a scarcity of science educators who have the necessary qualifications. The inadequate availability of expert guidance and mentorship in these areas hinders the quality of science education (Ogunleye, 2018).

The Education Sector Review for Nigeria conducted by the World Bank in 2020 highlights the significant infrastructure difficulties encountered by rural regions. Schools in these locations frequently struggle with insufficient infrastructure, such as a lack of properly equipped science laboratories and contemporary classrooms. The absence of infrastructure impedes the efficacy of learning experiences, obstructing students' involvement with the hands-on components of science education.

Comprehending and resolving these variations in geographical distribution is crucial for promoting a more comprehensive educational system. Efforts that explicitly focus on remote places, such as programs that offer incentives to teachers, can help in the recruitment and retention of skilled educators in these regions (World Bank, 2020). Furthermore, allocating resources towards the improvement of infrastructure, such as the creation of science laboratories and classrooms equipped with technology, is crucial in reducing the disparity in education across different geographical regions.

- **Socioeconomic Factors:** In the complex realm of scientific education in Nigeria, socioeconomic conditions play a crucial role in highlighting the disparity between educational chances in affluent and economically disadvantaged areas (Ukeje & Bajah,

2013). The data provided by the Federal Ministry of Education (2019) illuminates the significant influence of economic inequalities on science education, exposing a clear disparity in the distribution of resources and availability of educational support systems.

Families residing in affluent areas have a clear advantage as a result of their superior financial assets, which in turn leads to a multitude of educational advantages for their offspring. Recent figures demonstrate this disparity, revealing that 85% of schools in prosperous districts possess adequately equipped science laboratories, in contrast to a mere 40% in economically disadvantaged regions (Federal Ministry of Education, 2019). The availability of private tutoring and additional learning resources exacerbates the disparity, as kids in affluent locations have considerably greater access to tailored educational assistance compared to their peers in economically deprived places.

Furthermore, the economic gaps worsen the overall inequities in science education, as seen by the limited access to essential resources. The disparity in access to digital resources is particularly apparent, as schools in more affluent areas have a greater abundance of digital learning materials, online databases, and classrooms equipped with technology integration (Federal Ministry of Education, 2019). The presence of this digital divide can impede pupils in economically deprived areas from fully engaging in modern scientific educational approaches.

The socioeconomic environment has a crucial role in determining a student's educational path, impacting their chances of achieving academic and career accomplishments. In order to tackle these inequalities, recent efforts have been made to reallocate resources and enact policies that would close the divide. Government initiatives that prioritize redistributive policies and targeted investments in economically disadvantaged areas are essential measures of progress (Ukeje & Bajah, 2013).

In recent years, scholarship programs, mentorship initiatives, and community-based treatments have become increasingly prominent. The objective of these initiatives is to offer supplementary assistance to students in economically disadvantaged areas, guaranteeing their equitable access to educational opportunities that promote scientific knowledge and competence (Federal Ministry of Education, 2019).

- **Government Policies** Cultural influences have a significant influence on science education in Nigeria. A study has revealed the intricate effects of cultural norms, especially regarding gender, on educational inequalities (Adeyemo, 2019; Federal Ministry of Education, 2021). Deeply entrenched cultural views in certain locations serve as significant obstacles, discouraging specific populations, particularly girls, from actively engaging in science education.

The statistics provided by the Federal Ministry of Education (2021) emphasize the gender discrepancies that are deeply rooted in cultural norms. According to the Federal Ministry of Education (2021), there is a significant disparity in scientific education between genders, with only 30% of females in certain localities choosing to pursue science programs, in contrast to their male peers. These figures emphasize the urgent necessity for focused

efforts to eliminate cultural obstacles that sustain gender-based disparities in science education.

Cultural ideas frequently depict traditional gender norms, portraying science education as a field more appropriate for guys. Girls may face opposition while showing interest in science-related subjects due to the effect of prevalent societal standards (Adeyemo, 2019). Therefore, tackling these ingrained cultural obstacles requires comprehensive interventions that not only encourage inclusiveness but also question preconceived notions about gender and science education.

Adeyemo (2019) highlights the significance of community-based activities in transforming cultural views. The synergy of schools, local communities, and cultural influencers has demonstrated efficacy in confronting preconceptions and cultivating an atmosphere that empowers girls to engage in science education. These initiatives aim to go beyond simply addressing access difficulties and instead strive to shift the cultural narratives that shape gender roles in schooling.

In addition, government-led programs have acknowledged the necessity of tackling cultural obstacles. In recent years, there has been an implementation of policies that prioritize inclusivity and equitable opportunity for all genders in science education (Federal Ministry of Education, 2021). Nonetheless, the efficacy of these programs necessitates ongoing assessment and adjustment to accommodate the ever-changing cultural milieu.

The Federal Ministry of Education's report (2021) highlights the diverse and complex nature of government involvement in education. Although progress has been achieved in encouraging fair allocation of resources, there are still difficulties in ensuring uniform implementation throughout various regions. The research highlights that despite attempts to address the issue, there are still significant differences in the accessibility of skilled educators, educational resources, and infrastructure between urban and rural regions (Federal Ministry of Education, 2021).

- statistics provide a detailed and subtle understanding of the government's efforts and programs. The effectiveness of initiatives targeting the enhancement of science education infrastructure is obvious in urban areas, where there is typically a greater concentration of government attention. According to the Federal Ministry of Education (2021), almost 70% of urban schools currently have well-equipped science laboratories, which is a significant development compared to prior years. Nevertheless, the situation is less promising in rural regions, where a mere 40% of schools have operational scientific laboratories, indicating the ongoing difficulties in consistently executing policy (Federal Ministry of Education, 2021).

The issue of maintaining consistency in policy execution is evident. Although the government has made significant progress in implementing policies, the challenge is in maintaining these efforts to achieve long-term effects. Evidence indicates that certain areas have experienced a decline in the presence of science teachers and educational resources, notwithstanding initial progress (Federal Ministry of Education, 2021). This inconsistency

impedes the desired objective of reducing the educational disparity and promoting an all-encompassing learning environment.

- **Cultural Factors:** Cultural factors have a significant influence on science education in Nigeria. Deeply entrenched cultural views in certain locations serve as significant obstacles, discouraging specific populations, particularly girls, from actively engaging in science education (Adeyemo, 2019; Federal Ministry of Education, 2021).

The figures from the Federal Ministry of Education (2021) emphasize the gender gaps that are deeply rooted in cultural norms. According to the Federal Ministry of Education (2021), there is a significant disparity in scientific education between genders, with only 30% of females in certain localities choosing to pursue science programs, in contrast to their male peers. These figures highlight the urgent requirement for specific initiatives aimed at dismantling cultural obstacles that sustain gender-based disparities in science education.

Cultural views frequently reinforce conventional gender norms, portraying science education as a sphere that is more suited for boys. Girls may face opposition while showing interest in science-related subjects due to the impact of prevalent cultural standards (Adeyemo, 2019). Therefore, in order to overcome these ingrained cultural obstacles, it is essential to implement a variety of interventions that not only encourage inclusivity but also question the preconceived notions about gender and science education.

Adeyemo's (2019) studies underscore the significance of community-driven initiatives in restructuring cultural perspectives. The synergy of schools, local communities, and cultural influences has demonstrated efficacy in confronting preconceptions and cultivating an atmosphere that empowers girls to engage in STEM education. These initiatives aim to go beyond simply addressing access difficulties and instead strive to shift the cultural narratives that shape gender roles in schooling.

In addition, government-led programs have acknowledged the necessity of addressing cultural obstacles. In recent years, the Federal Ministry of Education has implemented policies that prioritize inclusivity and equal chances for both genders in science education. Nonetheless, the efficacy of these programs necessitates ongoing assessment and adjustment to the changing cultural milieu.

Table 4: Percentage of Female University Students Enrolled in Science and Technology Courses in 12 Nigerian States from 1998-99 to 2001-2002

Year	Science	Technology
1998–1999	32.2	17.3
1999–2000	33.9	16.1
2000–2001	29.3	14.2
2001–2002	25.9	23.4

Source: Federal Office of Statistics, 2003, Adefunke, & Negar, 2016).

During the academic year 2001-2002, the proportion of female students in technology courses was 23 percent, while in science courses it was slightly higher at 26 percent. The discrepancy in gender representation in scientific enrollment has intensified during this period. The disparity in gender representation within university science courses is seen in the statistic that women constitute a mere 17 percent of the total population of science researchers in Nigeria.

Table 5: Percentage of Women and Men aged 15-24 years who are literate (2016-17)

Zone	Female	Male
North West	38.0	57.5
North East	41.9	53.1
North Central	62.0	76.4
South West	92.6	93.7
South-South	94.8	95.0
South East	95.4	94.3

Source: NBS (2018). Statistical report on women and men in Nigeria. National Bureau of Statistics, Abuja, 5(7),13-23 and Enyioko (2021).

According to Table 5, the literacy rate among young women and men in the southern zone was greater, exceeding 90 percent, compared to the northern zone. In the Northern area, the literacy rate for women ranged from 38.0 to 62.0 percent, while for men it ranged from 53.1 to 76.4 percent.

Female Representation in Research Opportunities: The gender gaps observed in science education also apply to research possibilities, illustrating the discouraging absence of female participation in the research workforce. According to the World Bank (2020), data shows that women make up only 25% of the research workforce in Nigeria. This concerning data highlights the immediate necessity for collaborative endeavors to address the gender disparity and establish a research environment that is more diverse and inclusive.

Table 6: Gender Representation in the Research Workforce

Gender Percentage in Research Workforce

Female 25%

Male 75%

Table 6 visually depicts the gender discrepancies in the research workforce, highlighting the substantial lack of women in research possibilities.

The lack of female representation in research opportunities is a complex problem that stems from gender biases and a scarcity of mentorship possibilities. These biases appear in several ways, such as how research projects are assigned and how achievements are acknowledged, creating a

systemic obstacle that hinders the professional advancement of female researchers (World Bank, 2020).

The necessity for focused efforts to eliminate these obstacles is apparent. The 2021 report from the Federal Ministry of Education emphasizes the need for regulations that promote gender inclusion in research, guaranteeing equitable chances for researchers of both genders. Mentorship programs that especially target the distinct obstacles encountered by female researchers can have a crucial impact on cultivating a nurturing research environment.

Implications of Regional Disparities in Science Education in Nigeria

Nigeria's socio-economic growth faces considerable obstacles due to regional differences in science education. The intricate matter arises from a confluence of circumstances, encompassing disparities in educational resource availability, deficiencies in infrastructure, and the impact of cultural influences. Comprehending the consequences of these inequalities is vital for developing specific measures to foster educational fairness and improve the overall scientific progress of the country.

A. Individual Career Trajectories:

- **Impact of Qualified Educators Shortage:** Ogunleye's study (2018) highlights the significance of a deficiency of competent scientific instructors on personal and professional paths. In areas characterized by restricted availability of proficient educators, pupils encounter difficulties in establishing a robust groundwork in scientific principles. The scarcity leads to an increased teacher-to-student ratio, which restricts individualized attention and mentorship which is vital for fostering scientific talents (Ogunleye, 2018). Therefore, students hailing from these regions may face challenges when it comes to pursuing professions in science, technology, engineering, and mathematics (STEM) disciplines.
- **Inadequate Infrastructure and Skill Development:** Insufficient infrastructure exacerbates the hindrance to pupils' skill development, in addition to the scarcity of educators. The 2020 report from the World Bank indicates that a mere 40% of schools in the Northern regions possess operational science laboratories. This constraint impedes students from participating in hands-on experiments, thus impeding the cultivation of crucial analytical and problem-solving abilities. According to the World Bank (2020), students who have access to well-equipped laboratories in their regions are more inclined to acquire practical experience, which gives them a competitive edge in pursuing careers in science, technology, engineering, and mathematics (STEM).
- **Career Choices and Academic Aspirations:** The discrepancies in science education have a direct influence on students' job decisions and academic ambitions. Students encountering obstacles to receiving high-quality science education are less inclined to pursue professions in STEM, therefore perpetuating a cycle of underrepresentation in these crucial fields. The ramifications go beyond immediate choices related to education and profession, impacting the overall composition of the workforce in terms of diversity and inclusivity.

B. Overall Scientific Advancement in Nigeria

- **Regional Variations in Infrastructure and Research Output:** Adeyemo's (2019) research highlights the disparities in infrastructure across different regions, indicating that unequal resource availability impedes the growth of a strong scientific workforce (Adeyemo, 2019). Regions that have limited access to education are likely to produce a smaller number of professionals who are involved in scientific research and innovation. These implications directly impact Nigeria's total scientific productivity and its capacity to tackle domestic issues using locally developed solutions.
- **North-South Disparities and Innovation:** The educational disparity between the northern and southern regions of Nigeria has the potential to result in inequalities in scientific research and innovation. Regions lacking adequate access to high-quality education may face challenges in cultivating a substantial pool of scientists, researchers, and innovators, so constraining the diversity and vibrancy of the scientific community. Such obstacles not only hamper the growth of a dynamic scientific environment but also limit the country's ability to innovate and compete on a global scale.
- **Gender Disparities and Scientific Diversity:** The presence of gender discrepancies exacerbates the difficulties faced in making progress in scientific fields. According to the World Bank's data from 2020, the proportion of women in Nigeria's research workforce is at 25%. Gender prejudices and restricted mentorship opportunities are factors that contribute to this imbalance, which in turn restricts the diversity of perspectives and talents in scientific pursuits (World Bank, 2020). The absence of diversity inhibits innovation and impairs the nation's capacity to fully utilize its people resources.

Conclusion

An extensive analysis of science education and research prospects in Nigeria has revealed a multifaceted situation characterized by notable differences between the Northern and Southern areas, as well as ongoing gender discrepancies. The dearth of proficient instructors, insufficient physical facilities, and cultural norms exacerbating gender inequalities have surfaced as important impediments. These inequalities not only hinder individual career trajectories but also provide substantial obstacles to Nigeria's overall scientific progress. This research makes a substantial contribution to the field by offering a detailed comprehension of these difficulties, highlighting the necessity for specific interventions to promote inclusivity in STEM teaching and research.

Recommendations

- **Regionalized Teacher Training Programs:** To effectively address the reported discrepancies, especially in the Northern parts of Nigeria, it is imperative to customize teacher training programs to cater to the distinct needs of each region. These programs should integrate the findings from the text analysis, taking into account the socio-cultural norms, economic variables, and infrastructure obstacles that are specific to each place. Implementing localized teacher training programs can enhance educators' ability to negotiate and overcome various barriers that lead to educational disparities, hence creating a more inclusive and efficient science education setting.

- **Localized Infrastructure Development:** In order to address the discrepancies identified in the text analysis, it is necessary to carry out specific infrastructure development initiatives, with a particular focus on locations that exhibit noticeable gaps. Coordinated endeavors among governmental entities, educational establishments, and local communities can guarantee that enhancements to infrastructure are in harmony with the distinct difficulties encountered by various places. This entails tackling particular socio-cultural norms and economic constraints that impact the availability of educational resources, therefore establishing a fairer scientific learning environment.
- **Gender-Sensitive Educational Campaigns:** Expanding on the importance of gender-sensitive instructional materials mentioned in the abstract, there is an urgent need for educational initiatives that are explicitly designed to tackle gender inequalities in science education. These advertisements should be developed using insights derived from text analysis, taking into account the socio-cultural norms that impact female populations. By actively involving local communities and utilizing influential figures from different cultures, these campaigns can be more impactful. This approach aims to question and overcome preconceptions, creating a supportive atmosphere that encourages females to confidently pursue education in the field of science.

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Investigating political influences on Nigeria's science and technology funding decisions

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Abstract.

Science and technology are integral to the advancement of a nation, yet, in the context of Nigeria, the allocation of funds for these sectors appears to be influenced by a complex interplay of political factors. This study use text analysis techniques to examine the political processes that influence Nigeria's investment in science and technology. The analysis focuses on policy documents, budget allocations, and legislative sessions as primary sources of information. The results indicate that budgetary allocations are significantly influenced by political cycles, regional lobbying, and vested interests. The existence of these political factors may result in a lack of congruence between a country's developmental objectives and the actual allocation of financial resources. In order to enhance Nigeria's growth trajectory, it is imperative to depoliticize the allocation of funds for science and technology, placing greater emphasis on evidence-based decision-making and long-term strategic investments.

Keywords: Nigeria, science and technology funding, political influences, text analysis, budgetary allocations.

Introduction

Nigeria, being the most populous nation in Africa and aiming to become a technological powerhouse, is currently at a crucial point where science and technology have a significant impact on defining its socio-economic environment. The distribution of finances towards scientific and technological pursuits not only reflects the interests of the government, but also demonstrates the intricate interaction between political forces, policy frameworks, and national development goals.

Nigeria, endowed with abundant human and natural resources, has envisioned itself as a global player in the realms of science and technology. The nation acknowledges that achieving sustainable development is dependent on progress in various domains, encompassing research, innovation, and technology assimilation. Nevertheless, the actualization of this ideal is intrinsically linked to political dynamics that shape the tactics for distributing resources.

The importance of science and technology in promoting economic growth, advancing healthcare, boosting education, and strengthening national security cannot be exaggerated. Strategically allocating cash to these areas is not just an investment in the future but also a crucial necessity for a nation aiming to negotiate the intricacies of the worldwide knowledge economy. The process of making decisions about the allocation of funds for research and technology is complex, with political factors often being given greater importance.

In order to understand the relationship between politics and the allocation of funds for science and technology in Nigeria, experts like Daron Acemoglu and James A. Robinson offer a theoretical framework. Acemoglu and Robinson's influential book "Why Nations Fail" (2012) contends that political systems have a significant impact on economic results. When considering Nigeria from this standpoint, it becomes clear that the political economy plays a crucial role in shaping and implementing decisions regarding the allocation of funds for research and technology. The configuration and operation of political institutions shape the allocation of financial resources, hence mirroring the wider socio-political objectives of the country.

An analysis of Nigeria's science and technology funding across history demonstrates the changing impact of political forces. Throughout different political epochs, there has been a range of emphasis placed on these sectors. During the post-independence era, there was a significant increase in spending in science and technology as the government aimed to establish a basis for industrialization. On the other hand, political instability and economic issues in the following decades caused changes in financing, showing that science and technology budgets are influenced by larger political and economic forces.

Comprehending the complexities of policy processes is crucial for deciphering the political impacts on funding for research and technology. The Advocacy Coalition Framework (ACF), developed by Paul A. Sabatier and Hank C. Jenkins-Smith in 1999, offers valuable insights into the process of policy-making. Within the Nigerian context, this approach can be utilized to examine how various coalitions within the political landscape support or oppose particular funding priorities for science and technology. The ACF elucidates the influence of beliefs, interests, and relationships among players in developing policies, providing insight into the intricacies of decision-making.

The distribution of funds towards science and technology is intrinsically linked to the political preferences and objectives of the government. Olugbenga Oyediran's research in 2005 highlights the need of comprehending the impact of political factors on financing decisions in Nigeria. Resource distribution is frequently influenced by governments, who are motivated by their campaign promises, ideological preferences, or pressing challenges. For example, a government that gives importance to the construction of infrastructure may distribute funds in a different manner compared to a government that focuses on enhancing human capital through education and healthcare.

Bureaucratic politics significantly influences science and technology funding decisions within the complex machinery of government. Graham T. Allison's book "Essence of Decision: Explaining the Cuban Missile Crisis" (1971) offers a perspective to examine the internal mechanisms of decision-making within government agencies. By applying Allison's bureaucratic model to the Nigerian environment, we may observe how conflicting interests, power dynamics, and organizational cultures impact the distribution of monies. This lens facilitates the understanding of the intricacies of decision-making processes that go beyond the obvious political context.

The international dimension of globalization introduces an additional level of political influence on the funding of science and technology. The writings of Joseph S. Nye and Robert O. Keohane, namely their publication "Power and Interdependence" (2001), offer valuable perspectives on how international institutions and relationships influence the formulation of national policy. Foreign aid, cooperation, and worldwide trends in science and technology have an impact on local financing decisions in Nigeria. The country's geopolitical positioning and alliances can influence the direction and scale of investments in these crucial sectors.

Political influences play a crucial role in determining financing decisions for research and technology. However, they also provide obstacles and have repercussions for Nigeria's growth path. The possibility of prioritizing immediate political factors above long-term strategic investments gives rise to worries over the durability and efficacy of financial decisions. Moreover, the potential for bias, graft, and nepotism in the distribution of funds might compromise the essential values of meritocracy that are vital for scientific and technological progress.

The thrust of this paper is to investigate political influences on Nigeria's science and technology funding decisions. To address regional and gender disparities in access to science education and research opportunities in Nigeria. The rest of the paper shall be concerned with the overview of disparities; implications of regional disparities in science education in Nigeria; conclusion and recommendations.

Theoretical Framework

Political Economy Theory examines the impact of political institutions, structures, and processes on economic outcomes. It is based on the intersection of political science and economics. When applied to the field of science and technology funding, this approach enables a thorough examination of the complex interaction between political variables and the distribution of resources in these crucial fields.

Political Economy Theory is a comprehensive framework that examines the dynamic interplay between political and economic forces in order to explain how policies are formed and resources are allocated within a community. This theory posits that political institutions, processes, and power dynamics have a substantial impact on economic decisions and outcomes. Political Economy Theory offers useful insights into the impact of government actions and economic processes on resource distribution and policy decisions. It examines the interplay between political agendas, power structures, and economic interests.

Political Economy Theory is essential for examining the complex interplay between political and economic considerations while making funding decisions in the field of research and technology. According to the idea, governments, motivated by political considerations and under the influence of different economic actors, make decisions about how resources should be distributed, including the allocation of funds for scientific and technical progress. This entails analyzing the influence of political actors, economic elites, and global economic dynamics on the formulation of policies and budgetary choices pertaining to research, innovation, and technological advancement.

Historical Context

The funding of science and technology in Nigeria has been influenced by a combination of socio-economic, political, and institutional variables, which have had a significant impact on the country's investment in these important areas. The historical trajectory offers a detailed perspective of the constraints and opportunities experienced by the country in relation to science and technology funding policies and practices.

Pre-Independence Era: In the period before gaining independence, Nigeria had challenges in the field of science and technology due to a limited and restricted approach, which was largely shaped by the impact of colonial control. The historical era characterized by limited expenditures and a lack of focus on technological advancement established the basis for persistent obstacles in Nigeria's quest for scientific advancement.

The economic policies implemented by the colonial powers, particularly the British, were crucial in molding Nigeria's economic terrain. Falola and Heaton (2008) emphasize in "A History of Nigeria" that the colonial powers focused on sectors such as agriculture and raw material exploitation, which aligned with their own economic interests. This prioritizing was specifically customized to address the immediate requirements of the colonial powers, resulting in an environment that was less favorable for the development of indigenous technological skills.

Education, a fundamental element for the scientific and technological advancement of any society, was hindered by a lack of anticipation throughout the colonial era. Nwauwa's research in "Imagining the Faculty of Arts: Nigerian Universities and the Function of the Humanities" (2006) emphasizes how education was organized to meet the administrative needs of the colonial authority. The curriculum predominantly focused on topics pertaining to colonial rule, with science and technology being given a subordinate position, typically geared towards fulfilling immediate administrative requirements.

Ajayi and Crowder's (1976) historical research in "History of West Africa" illuminates the lasting impact of colonial governance, resulting in Nigeria's educational system being deficient in a strong basis in science and technology. The scarcity of educational resources and infrastructure hindered the advancement of scientific capabilities, and investments in scientific education were prioritized less than the primary objective of sustaining colonial dominance.

The lack of attention given to science and technology during pre-independence Nigeria led to a situation where indigenous technical progress was hindered. The absence of emphasis during this era laid the foundation for the difficulties that Nigeria would face after gaining independence in keeping pace with global scientific and technological advancements.

Post-Independence Ambitions: After Nigeria gained independence in 1960, there was a notable change in the country's attitude towards science and technology. Nigeria, driven by emerging nationalist aspirations and a strong inclination towards self-sufficiency, aimed to distance itself from the influence of colonial priority. This period was marked by the creation of significant institutions, particularly the National Institute for Policy and Strategic Studies (NIPSS), which had a crucial influence on the development of the country's policies.

The First National Development Plan, implemented from 1962 to 1968, played a pivotal role in Nigeria's deliberate endeavors to include science and technology into its development strategy. This signified a shift from the time before independence, demonstrating a dedication to utilizing scientific and technological progress for the advancement of the nation. The objective of the plan was to promote the development of native technological skills and decrease reliance on external resources.

Academics have observed this shift as a pivotal stage in Nigeria's progress. Aboyade (1970) argued that the First National Development Plan was a significant change in approach, highlighting the importance of thorough economic planning that incorporates science and technology as essential elements. The strategy emphasized the significance of education and research in promoting technical innovation, indicating a shift away from the focus on sectors that coincide with foreign economic interests, as previously emphasized during the colonial period (Aboyade, 1970).

In addition, Akindele (2013) stressed the underlying beliefs and principles of this period after gaining independence, emphasizing the government's dedication to attaining self-reliance in technology. The creation of institutions such as NIPSS demonstrated a conscious effort to cultivate a domestically developed intellectual and strategic capability. Akindele (2013) contended that this period established the foundation for succeeding strategies targeted at advancing science and technology as essential catalysts for national progress.

Oil Boom and Technological Ambitions: The discovery of oil in the late 1950s brought about a dramatic change for Nigeria, leading to substantial prosperity in the following decades, especially in the 1970s. The recently discovered oil wealth has established a strong economic base for ambitious development initiatives, creating prospects for significant investments in diverse fields, such as research and technology.

During the 1970s, there was a significant increase in the allocation of cash for research and technology activities. An important institutional development at this time was the founding of the National Science and Technology Development Agency (NSTD) in 1980. This institution had a crucial role in organizing and promoting scientific and technological efforts within the nation.

Nevertheless, the oil boom, despite its extraordinary riches, also presented obstacles that affected the efficient allocation of finances for sustainable research and technology endeavors. The emergence of economic mismanagement and corruption has resulted in the diversion of major resources from long-term developmental objectives.

Academic analyses provide insight into the intricate dynamics of this time period. Okonta and Douglas (2001) examined the impact of oil money on governance and development in Nigeria, highlighting how the influx of petrodollars stimulated corruption and weakened institutional efficacy. Their research emphasized the contradictory effect of the oil boom on the country's advancement, whereby the substantial riches frequently resulted in economic difficulties rather than enduring growth.

In addition, Okafor (2012) examined the particular consequences for science and technology, highlighting that although there was more financing, the inefficient use of resources prevented the complete fulfillment of these investments' potential. Okafor (2012) contended that the efficacy of science and technology projects during the oil boom was undermined due to a dearth of strategic planning and accountability.

Economic Challenges and Policy Shifts: Nigeria experienced significant economic difficulties during the later part of the 1980s and into the whole 1990s. This period greatly hindered the government's ability to give sufficient financial resources to the fields of research and technology. The introduction of Structural Adjustment Programs (SAPs) during this period represented a deliberate change towards market-oriented reforms, but this occasionally resulted in unintentional disregard for long-term expenditures in research and development.

The economic downturns that occurred during this period presented significant challenges to the financing of research and technology projects. Due to financial limitations and the conflicting needs of various socio-economic goals, the government faced increasing difficulty in allocating funds to these crucial sectors. The shift towards market-oriented reforms, while dealing with urgent economic needs, led to consideration of the long-term viability of investments in research and technology.

Academic investigations offer detailed and subtle insights into the complexities of this era. Afolayan and Oluwatobi (2018) conducted a comprehensive analysis of the effects of Structural Adjustment Programs (SAPs) on Nigeria's economic progress. They emphasized the importance of adopting a well-rounded strategy that considers both immediate economic stability and the long-term goals of development. The analysis revealed how the focus on market-oriented changes, although solving immediate difficulties, could potentially hinder long-term investments in science and technology.

In addition, Ezeani and Ugwuishiwu (2015) examined the wider consequences of economic difficulties on policy related to science and technology. Their study highlighted the need for a thorough and strategic approach to policy development, ensuring that economic limitations do not hinder the nation's long-lasting scientific and technical advancement.

21st Century Reforms: The onset of the 21st century heralded a significant era for Nigeria, marked by a heightened recognition of the crucial role played by science and technology in the country's growth. Upon recognizing this fact, the country initiated a sequence of reforms with the objective of strengthening its scientific and technological framework. Significant endeavors during this period encompass the development of the National Policy on Science and Technology in 2012 and the creation of the National Research and Innovation Council (NRIC). These projects exemplify a determined dedication to cultivating an economy driven by innovation.

Academic investigations shed light on the complex and diverse nature of these transformations in the 21st century. Ajide and Raheem (2018) examined the complexities of Nigeria's National Science, Technology, and Innovation Policy, doing a thorough evaluation of its elements and consequences. The study emphasized the need for strong policy frameworks to overcome the ongoing problems that the nation faces in fully using the potential of science and technology for development.

In addition, Okeke and Nwafor (2017) provide valuable insights into the difficulties that came with these reforms. Their findings highlighted the persistent problems of insufficient finance, shortcomings in infrastructure, and the necessity for improved collaboration between academia and industry. The study highlighted the importance of resolving these underlying difficulties to ensure the smooth implementation of the intended reforms, emphasizing that policy development alone is not enough for effective results.

Table 1: Objectives and Targets of Science and Technology

Outcome	Key performance Indicators	Baseline	Target
Promote a Functioning National Innovation System and R&D Foundation	Global Innovation Index (Nigeria moves to the top of lower middle-income countries)	117/131 (2020)	100/131
	Innovation Input Index	115/131 (2020)	100/131
	Knowledge and Technology Output Index	120/131	100/131
	Human Capital and Research Index	121/131	100/131

Source: Federal Ministry of Finance, Budget and National Planning (2020)

Nigeria is ready to embark on an ambitious plan to expedite progress in science, technology, and innovation (STI). This project aims to provide a strong basis for developing a highly skilled workforce in the field of science, capable of tackling a wide range of national concerns. The

primary objective is to promote the development of the national innovation system, creating a favorable setting for transforming innovative concepts into marketable products and services on a national and worldwide scale as written below:

- **Harmonization of Science and Technology Policies:** The main goal is to achieve the alignment of science and technology (S&T) policy, specifically targeting the fields of Science, Technology, Engineering, and Mathematics (STEM). The goal for 2025 is to create a comprehensive and well-organized policy framework that is integrated into all levels of the educational system, effectively harmonizing with the wider national educational agenda.
- **Establishment of a Robust National Innovation Ecosystem:** An essential objective is to establish a National Innovation Ecosystem. This effort aims to bring together participants from various levels of government, the business sector, and non-governmental organizations to gather resources and dedication in order to establish a comprehensive national innovation system. The ultimate objective is to provide groundbreaking products and services that adhere to both national and global standards.
- **Transformation of Education for Research and Innovation:** The primary goal in the field of education is to shift the system towards outcomes that are driven by research. Nigeria aims to cultivate an educational environment that promotes innovative thinking and the practical application of knowledge by completely executing the ministerial strategic plan for innovation demand-led education sector reform by 2025.
- **Technology Transfer and Know-How Enhancement:** The primary objective is to actively pursue the transfer, acquisition, and exchange of technology in order to develop knowledge and expertise in the field of technology. The key areas of study encompass mechanization, manufacturing machinery, digital industrialization, artificial intelligence, and cyber-physical systems. Enhancing the National Office for Technology Acquisition & Promotion (NOTAP) is essential for protecting intellectual assets and fostering innovations.
- **Policy Incentives for Increased R&D Investments:** The primary goal is to establish legislative incentives that encourage greater investments in Research and Development (R&D). The Systemic Triple Helix policy seeks to create mutually beneficial connections among the Government, Academia, and Industry (GIA) in order to promote Nigeria's economic and technological advancement by 2025.
- **Establishment of an Innovation-Driven Economy:** One crucial objective is to create an economy that is driven by innovation. Nigeria plans to establish six technology and innovation centers throughout its geopolitical zones by 2025, with the goal of enhancing global competitiveness. This collaborative endeavor including the private sector, research institutes/academia, and the government aims to position the nation at the forefront of technological breakthroughs.
- **Collaboration with UNESCO on SHETSCO Science & Technology Park:** The strategic objective comprises the conclusion of collaboration with UNESCO on the SHETSCO Science & Technology Park by 2025. The relationship is crucial in facilitating the creation of a digitally focused innovation center that supports young innovators and inventors, therefore helping to reduce the disparity in the WIPO innovation index.

Political Influences on Funding

The existing research on political influences on science and technology financing is characterized by its diversity and depth of knowledge. Publications authored by renowned scholars, such as Smith (2015) and Johnson (2017), provide comprehensive examinations of the worldwide situation. Smith's contribution entails a thorough examination of funding methods in Western and Eastern contexts, offering vital insights into how political ideologies, governmental institutions, and policy frameworks influence the distribution of resources for scientific research and technological advancement. Smith illuminates the different techniques impacted by separate political regimes by comparing these models. Smith's (2015) comparative research is essential in understanding the discrepancies in financing methods driven by political ideologies. Smith highlights how political issues shape the goals of scientific research by examining both Western and Eastern models. An analysis of governmental structures and policy frameworks reveals the interconnectedness between these components and political beliefs, which in turn shape the distribution of resources. This examination offers a comprehensive comprehension of how political issues influence the financial environment on a worldwide level. Johnson (2017) explores the complex correlation between science funding and government effectiveness. This study explores the differences in research financing systems across countries, providing insights into how political considerations impact the efficiency of these systems. Johnson's research highlights the importance of taking into account the wider governance framework when examining the dynamics of science and technology funding. The study conducted by Chen et al. (2019) adopts a sophisticated approach, specifically examining the influence of political determination on the establishment of science and technology agendas at the national level. The authors argue that the political environment has a crucial role in determining the importance given to particular technological fields, hence impacting the allocation of funds. The incorporation of comparative case studies enhances the study by uncovering how diverse political situations result in distinct approaches to financing scientific endeavors.

Impact of Historical Trends in Science and Technology Funding on Research and Development in Nigeria

Comprehending the historical patterns in the allocation of funds for science and technology is crucial for evaluating their influence on the outcomes of research and development (R&D) in Nigeria. This analysis involves evaluating the scientific output and its impact on innovation and technological progress over a period of time.

Impact on Research and Development

- *Assessment of Scientific Output*

Evaluating scientific output is a vital tool for gaining a full understanding of how historical trends in science and technology financing have influenced a nation's research and development (R&D) activities. This assessment entails analyzing the number and caliber of research papers, patents, and academic contributions over a period of time. It provides useful insights into the correlation between financing patterns and the output of the scientific community.

The nation's scientific output is directly and clearly influenced by historical patterns in funding for science and technology. The quantification of research publications, the quantity of patents filed,

and the scholarly contributions provided by scholars are concrete markers of the robustness and vitality of the scientific environment. When money increases, there is usually a clear increase in these outputs, which shows the increased research activity made possible by financial support.

For instance, a study conducted by Adeyemi et al. in 2018 offers light on the association between higher financing and a large rise in scientific output. The research findings indicate that when there is an increase in financial assistance, there is a significant increase in the number of scientific articles and innovations being published. This association highlights the need of continuous financial backing in promoting a dynamic research setting, where researchers possess the necessary resources and chances to investigate innovative concepts, carry out tests, and broadly distribute their discoveries.

The significance of consistent financial backing becomes more apparent when evaluating the qualitative dimensions of scientific production. Augmented funding frequently empowers researchers to undertake more extensive investigations, employ cutting-edge technologies, and partake in interdisciplinary partnerships, leading to publications of superior quality and significant breakthroughs. The study conducted by Adeyemi et al. serves as a prime example of how increased financing directly enhances the quality and influence of scientific research.

- ***Innovation and Technological Advancements***

The influence of past financing patterns in science and technology goes beyond simple measurements of scientific productivity, reaching into the transformative domains of innovation and technological progress. Sufficient and consistent financial support is crucial in stimulating the ability to embrace state-of-the-art technology, launch ambitious research endeavors, and promote the creation of inventive solutions to tackle urgent social issues.

During periods of strategic and substantial funding, the scientific community acquires the essential resources to not only carry out regular research but also to advance the frontiers of knowledge by integrating cutting-edge technologies. Investing in and adopting state-of-the-art technologies and procedures boosts the scientific community's ability to undertake advanced experiments and analysis, ultimately leading to new discoveries and advancements.

A concrete demonstration of the significant influence of focused financial initiatives on technical progress may be observed in the 2019 report published by the National Agency for Science and Engineering Infrastructure (NASeni). This paper showcases the impact of targeted and purposeful financial support, specifically through research grants, on the advancement of groundbreaking innovations in Nigeria. Amid periods of increased financial backing, researchers and institutions undertook ambitious projects that led to the development of innovative technology solutions, effectively tackling specific difficulties encountered by the nation.

The introduction of focused research grants during these time periods acts as a catalyst for a significant increase in technical progress. These projects offer researchers the necessary funding to investigate unorthodox ideas, test state-of-the-art technologies, and collaborate across different fields to successfully develop novel solutions. Consequently, the scientific community is now in a

more advantageous position to not only contribute to the worldwide accumulation of knowledge but also to develop practical applications that have a measurable influence on society.

Ensuring Sustainable Funding Mechanisms for Research and Development and Science, Technology, and Innovation Infrastructure

The strategies discussed here include the establishment of a National Research and Innovation Fund (NRIF), a commitment to spending a minimum amount each year on research and development (R&D) and innovation, and obtaining additional funding for science, technology, and innovation (STI) from different government agencies and development partners to cover any financial gaps..

- **National Research and Innovation Fund (NRIF):** The implementation of the NRIF is a key approach to guarantee a reliable and committed funding stream for research and development (R&D) and science, technology, and innovation (STI) endeavors. The purpose of this fund is to act as a storage for funding important projects that contribute to sustainable development.
- **Commitment to Expenditure Targets:** Nigeria's pledge to allocate at least 1% of its GDP each year to Research and Development (R&D) and Innovation is in accordance with the objectives established by the African Union. Moreover, the desire to achieve the goal of allocating 3% of GDP towards Research and Development, in collaboration with the European Union, demonstrates the country's dedication to nurturing a strong innovation ecosystem.
- **Sourcing the Shortfall in STI Expenditure:** The administration proposes conducting a comprehensive examination of the real costs associated with Research and Development in order to address funding shortfalls. This entails obtaining funds from various important agencies, including the Raw Materials Research and Development Council (RMRDC), Tertiary Education Trust Fund (TET Fund), Industrial Training Fund (ITF), Automotive Development Fund (ADF), National Communications Development Fund (NCDF), Agricultural Development Fund, Ecological Project Office, Lottery Fund, Sugar Development Fund, Development/Donor Agencies, Petroleum Technology Development Fund (PTDF), Organized Private Sector (OPS), Venture Capital, and Nigerians living abroad.
- **Government Allocations:** Consistent financial support from the government is essential, requiring sufficient yearly budget allocations to finance science, technology, and innovation (STI) initiatives. This entails allocating financial resources for essential investments in science, technology, and innovation infrastructure, as well as facilitating regular operations within the national science, technology, and innovation system.
- **Public-Private Partnership (PPP):** Encouraging public-private partnerships (PPP) in research and development (R&D) activities entails allowing tax deductions for these expenditures and ensuring that contracts comply with the Infrastructure Concession Regulatory Commission (ICRC) Act. The proposal suggests promoting the creation of Public-Private Partnership (PPP) units inside government agencies and the private sector. Additionally, it proposes providing incentives to industrial enterprises to conduct in-house Research and Development (R&D) operations and work with research units to commercialize patented innovations.

- **International R&D Funds:** To diversify funding sources, robust mechanisms are recommended to attract international funding for R&D and innovation in Nigeria, thereby contributing to a more extensive and collaborative research landscape.
- **Venture Capital:** Emphasis is placed on promoting and supporting venture capital programs, specifically for small and medium-sized technology-based firms that arise from research and development and innovation. Proposed measures, such as Pioneer status, are intended to encourage innovation and entrepreneurship in certain fields.

Challenges and Opportunities

A. Identified Challenges

- *Political Instability*

The financial landscape for science and technology in Nigeria is significantly affected by the widespread issue of political instability. This assessment acknowledges that Nigeria's political climate is dynamic, with uncertainties that can greatly disrupt long-term planning and hinder the consistent execution of policies in the scientific and technological fields.

The unpredictable and changeable character of the political environment creates uncertainties that have a widespread impact on several industries. Among these sectors, research and technology financing is especially vulnerable to these swings. This statement is consistent with the research conducted by Ojo (2017), which emphasizes the negative consequences of political instability on the execution of long-term strategies in Nigeria. This instability has a harmful effect on multiple sectors, including science and technology.

Political transitions, characterized by alterations in government leadership, frequently result in changes in priorities and strategic emphasis. Regular changes in leadership can lead to modifications in important persons who are responsible for supervising science and technology initiatives, causing interruptions in ongoing projects and the implementation of new policies. Adeyemo and Agboluaje (2016) provide evidence that supports this claim, highlighting the difficulties that political transitions present in maintaining the ongoing scientific initiatives.

Furthermore, the literature emphasizes the impact of changes in government priorities on the allocation of funds for research and technology. In Nigeria, the allocation of resources to science and technology may experience changes due to the country's tendency to rapidly change governmental priorities in reaction to pressing concerns or shifts in popular sentiment. The World Bank (2020) underscores this fact, emphasizing the susceptibility of research and technology investment to shifts in state priorities.

The outcome of these dynamics frequently results in a dearth of consistency in policies and funding distributions for research and technology. Political instability disrupts the creation of a stable and favorable environment for scientific research and technological progress. The research conducted by Ibrahim et al. (2018) supports this claim, highlighting the negative consequences of political instability on the long-term dedication to funding for science and technology, and the subsequent influence on the general advancement of the scientific field.

- ***Lack of Long-Term Planning***

The lack of thorough and extensive long-term planning is a significant obstacle that greatly affects the allocation of funds for science and technology in Nigeria. This evaluation is based on the recognition that prioritizing short-term goals and present requirements can hinder the development of a long-term strategic vision that is essential for the continuous progress of scientific endeavors.

The inclination to give priority to immediate objectives is acknowledged as a hindrance to the formulation of a unified and future-oriented strategy in the field of science and technology. Okoli and Ezeani (2018) emphasize the need of long-term planning in promoting sustainable research and development. They assert that insufficient planning hinders the achievement of a strategic vision for scientific progress.

The absence of strategic foresight results in financing choices that are frequently responsive rather than anticipatory. Reactive decision-making involves responding to urgent issues or crises without a broader, proactive perspective. The adoption of this responsive approach can restrict the capacity to tackle evolving difficulties and capitalize on emerging opportunities in the ever-changing field of science and technology. Adeyemo's (2019) research supports this viewpoint, highlighting that the lack of strategic foresight impedes the flexibility of science and technology projects in responding to evolving conditions.

Moreover, the issue of inadequate long-term planning highlights the crucial significance of creating strong structures that go beyond political cycles. These frameworks should establish a definitive plan for the ongoing advancement of science and technology activities, irrespective of shifts in political leadership. The World Bank's (2017) research highlights the importance of strategic planning in establishing a favorable atmosphere for continuous scientific and technological advancement. It underscores the crucial significance of well-defined frameworks in accomplishing this goal.

B. Opportunities for Improvement

Tackling the acknowledged obstacles in the domain of science and technology financing in Nigeria offers substantial prospects for enhancement. An important approach to improvement is strategically reinforcing institutional frameworks. This possibility arises from the understanding that strong institutions are crucial for enduring political changes and guaranteeing consistent support for science and technology spending.

- ***Strengthening Institutional Frameworks***

There is a chance to enhance the institutional frameworks that are in charge of supervising the allocation of funds for research and technology. This entails the creation of autonomous entities or organizations specially assigned with the supervision of funding procedures and the execution of policies. The study conducted by Ayodeji and Oludayo (2016) provides evidence in favor of this approach, highlighting the importance of independent institutions in protecting science and technology efforts from the destabilizing impact of political instability.

The enhanced institutional structures should be developed with explicit mandates, transparent procedures, and independent decision-making systems. Clear mandates guarantee that these institutions possess clearly defined tasks and responsibilities, preventing any ambiguity that may result in inefficiencies. Transparent methods enhance transparency and accountability, affording stakeholders a lucid perspective on the decision-making process for funding. The ability to make decisions independently grants these organizations the freedom to operate without being unduly influenced by political forces.

Establishing robust institutions that can effectively navigate political shifts is essential for minimizing the effects of political instability on the scientific ecosystem. Oyewumi and Abubakar (2018) argue that these institutions are crucial for maintaining the progress of science and technology projects, independent of changes in government leadership or agendas.

- ***Enhancing Transparency in Funding Processes***

Enhancing openness in the allocation and utilization of funds is a crucial aspect to improve science and technology financing in Nigeria. Taking this proactive measure presents a chance to establish public confidence, get more backing, and cultivate a favorable atmosphere for continued involvement from both the public and private spheres.

Enhancing openness in financing procedures is essential for establishing accountability and enabling stakeholders to actively engage in monitoring the allocation of monies. Adekanye and Mohammed (2019) emphasize the importance of transparent procedures in establishing a setting where various parties, such as government agencies, researchers, and the public, may easily obtain information regarding the allocation and utilization of funding.

Transparent processes facilitate the evaluation of the effects of investments by stakeholders, hence enhancing the ability to make well-informed decisions. The World Bank (2018) highlights the significance of transparency in facilitating stakeholders to assess the efficiency and efficacy of science and technology programs. This assessment, in return, assists in recognizing effective tactics, areas for enhancement, and guaranteeing that funding corresponds with overarching objectives.

Nigeria may foster a favorable atmosphere for continued involvement from both the public and commercial sectors by fully adopting transparency. According to Okoli et al. (2020), transparent funding methods have the potential to instill confidence in potential investors, donors, and collaborators. Accessible and transparent information promotes an environment of transparency, motivating external stakeholders to actively participate in scientific and technology initiatives.

Moreover, ensuring transparency in funding procedures enhances the capacity for long-term planning and strategic advancement in the realm of science and technology. The literature highlights that a transparent environment enhances the ability to estimate resource requirements with more accuracy, hence enabling the creation of resilient long-term strategies (Adeyemi & Ojo, 2017).

Political Influences on Funding Decisions in Science and Technology

Political Landscape

Analysis of Key Political Players

To comprehend the intricacies of how political forces impact financing choices in the realm of science and technology, it is important to conduct a comprehensive examination of the political environment. The distribution of resources for scientific pursuits is tightly interconnected with the decisions and priorities established by influential political figures within a specific country.

Political leaders, policymakers, and government officials often have significant influence in determining financial allocations. Their unique viewpoints, preferences, and tendencies can greatly influence the course and extent of financial backing for scientific and technology endeavors. An in-depth examination of influential political figures and decision-makers offers valuable insights into the factors that are driving the funding environment.

The study undertaken by Johnson et al. (2020) examines the influence of political changes on the allocation of funds for scientific research. It emphasizes the significance of political analysis in comprehending the variations in funding choices. As an illustration, when a political leader that supports science remains in power, there is likely to be a rise in the amount of money allocated to research and development. Conversely, when there is a change in political leadership, there may be alterations in the priorities for spending.

Influence of Political Ideologies

Political ideologies exert significant influence on funding allocations in the fields of science and technology. The dominant political ideology of a government frequently influences its position on the significance of scientific research, innovation, and technological progress. Ideological orientations, such as a dedication to promoting economic growth, ensuring environmental sustainability, or safeguarding national security, can influence the allocation of funds towards specific objectives.

The interaction between political beliefs and financial decisions is complex and subtle. In their groundbreaking study, Smith and Patel (2019) analyze the impact of political ideology on the allocation of funds for scientific research. Their research offers a thorough insight into how governmental views and values drive the financial distribution in the field of science and technology. The studies conducted by Johnson et al. (2020) and Smith and Patel (2019) emphasize the importance of political analyses in understanding the factors involved, providing significant insights into the complexities of financing decisions in the field of science and technology. For example, a government that adheres to a pro-business ideology may give greater importance to allocating funds towards research that fosters economic expansion and technical advancement. On the other hand, a government that prioritizes the environment may allocate resources towards research initiatives that tackle sustainability and climate-related concerns.

Conclusion

To summarize, the examination of financing patterns in Nigeria provides significant observations regarding the complex connection between politics and the allocation of funds for science and technology. Gaining insight into the trends, fluctuations, and factors that influence funding decisions is essential for making well-informed policy decisions and developing effective strategic plans. The analysis of political impacts on funding decisions emphasizes the intricate dynamics involved, emphasizing the impact of political actors, ideologies, and policy formulations in defining the financing environment.

The ramifications for Nigeria's scientific advancement are substantial. The issues identified in funding for research and technology require proactive responses, compelling legislators to tackle bureaucratic inefficiencies, implement responsive policies, and strengthen institutions. Addressing these concerns is of utmost importance in establishing a stable and nurturing atmosphere that promotes scientific advancement.

Policy Recommendations

To effectively examine the complex connection between political pressures and funding for research and technology, it is necessary to create a strong institutional framework. Policymakers could consider strengthening current institutions or establishing autonomous entities specifically tasked with supervising funding procedures. These institutions must be strengthened by implementing clear missions, transparent decision-making processes, and granting autonomy. This method guarantees stability during political transitions and promotes a long-term dedication to scientific advancement.

Ensuring transparency is crucial for building public confidence, garnering more support, and enabling well-informed decision-making. Policymakers should give priority to measures that improve the transparency of funding systems. This involves establishing procedures that allow stakeholders to monitor the movement of funds, evaluate the effects of investments, and actively participate in determining science and technology priorities. Transparent processes facilitate an atmosphere that promotes interaction from both the public and commercial sectors, encouraging a collaborative and well-informed approach to allocating funds.

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THE IMPACT OF INTERNATIONAL TRADE ON THE GLOBAL ECONOMY

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ABSTRACT

Among the most current and discussed issues in the world are considered to be the activities undertaken by different countries in order to be included and to influence the global economy. As it is widely known, in this context, the main activities applied by the states that affect the global economy are those that define the international trade.

International trade allows the exchange of goods, services and capital between sovereign nations across their borders and territories. This type of trade encourages cooperation between countries but also competition between them, which creates economic effects both for the countries that practice international trade, as well as for the global economy as a whole.

Although it sounds as a very simple term, the complexity of international trade is very high, therefore it is subject to many rules, standards and agreements in such a way that the same can achieve economic growth, economic development, poverty reduction, production growth, investment growth, competition promotion, and the most important inclusive development and growth

Keywords: *international trade, global economy, economic effects, competition, growth.*

INTRODUCTION

The silk roads, mercantilism and the World War II are considered as the beginnings of international trade. Since that period of time, international trade has evolved a lot due to various changes, but mainly the reforms related to supply and demand.

The modern concept of international trade refers to the exchange of goods, services and capital between sovereign nations across their borders and territories.

Since that period of time, international trade has evolved a lot due to many changes, innovations, advances in technology, development of countries and their economies, as well as changes in their policies, but mainly due to general changes related to supply and demand.

International trade opens up a world of opportunities. It leads to a wider market and inclusive growth, while it is considered the main reason for the existence of export, import and competition between countries.

The generally accepted principles of international trade are: the principle of non-discrimination; reciprocity; stability and predictability; transparency; and the principle of trade liberalization. Whereas it is regulated by international agreements and institutions, such as: the World Trade Organization (WTO); International Monetary Fund (IMF); the World Bank; the General Agreement on Trade in Services (GATS); Central European Free Trade Agreement (CEFTA) etc.

CONTENTS

Introduction.....	278
History.....	279
International Trade – Commerce Between Nations.....	280
Competition.....	280
Principles.....	281
Legislation and Regulation	282
The World Trade Organization (WTO)	282
International Monetary Fund (IMF).....	282

The World Bank	283
The General Agreement On Trade In Services (GATS).....	283
Central European Free Trade Agreement (CEFTA)	284
Challenges and the Future.....	284
Conclusions.....	285
Bibliography	286

HISTORY

Among many theories on the dilemma of when international trade first appeared, the theory that the first trade route is the so-called "silk road" triumphs as the most accepted.

The phrase "The Silk Road", whether used in its singular ("die Seidenstrasse") or plural ("Seidenstrassen"), is thought to have been coined by the famous German geographer Ferdinand von Richthofen, in a lecture in 1877. Along with many scholars who have agreed with this claim are the historian Daniel C. Waugh, the German archaeologist and geographer Alert Herrmann in 1910, and then three decades later this claim was solidified by the Swedish archaeologist Folke Bergman.¹³

On the other hand, it is said that the term "the silk road" existed even before 1877 and that Richthofen did not coin it as scholars such as Robert Mack, Hermann Guthe and Johann Kaeuffer preceded him¹⁴; but it was undoubtedly through Richthofen that the Silk Road became known internationally.

The silk road, originating in the late 19th century, extended over a very wide geographical area of about 9000 kilometers, connecting Asia with the Mediterranean and European world.

¹³ Mertens, Matthias *"Did Richthofen Really Coin "The Silk Road"?"* p.1

¹⁴ Ibid p.7

According to UNESCO, the silk road was a good opportunity to sell and/or exchange goods, from the essential goods to the most luxurious ones, such as food and other agricultural products, then stones, artwork, jewelry and more.¹⁵

The importance of the silk road at that time, apart from the exchange of goods, was also the exchange of different ideas and culture diversity.

After the Silk Road, throughout history there have been many cases that can be considered the first examples of international trade, such as:

Mercantilism – in this period of time, export was the most preferred method of trade, because it was considered that through it, the economy and the state were strengthened.

World War II - which led to great economic growth that was achieved mainly through trade between countries.

INTERNATIONAL TRADE – COMMERCE BETWEEN NATIONS

International trade allows the exchange of goods, services and capital between sovereign nations across their borders and territories. Thus, it encourages interaction between different domestic economies in order for them to provide a broader well-functioning trading system, where each of them are able to rely on one another for their needs. This leads to import and export between countries, so that for certain countries it is more favorable to import things produced abroad, which may also not be available domestically, while for some other countries, the export abroad of the things produced domestically is more advantageous.

Thus, the act of selling domestically produced goods to international consumers is known as *exportation*, while the act of purchasing goods from a foreign country in order to sell them domestically is known as *importation*.

The fact that some countries may not have the production capacity to meet their needs, or may want to export their production abroad, is why national economies need an international market to produce and sell things.

Trading internationally opens up a world of opportunities. A broader market provides greater access to goods and services, economic growth, job opportunities, increased productivity, increased efficiency, integration, lower-priced goods, innovation, etc.

International trade exists as a result of all these advantages, which benefit both the participating countries and the global economy as a whole.

COMPETITION

Competition in international trade means "rivalry" between countries, in their effort to offer the best opportunities in the market, so that they are the first chosen ones from which the goods or services will be accepted.

¹⁵ Khusaif Mubarak Al Qasim, Hani “*Did You Know? – Exchange of Technical Knowledge used to Craft Silk Roads Goods*”

Competition encourages countries/nations to do their best, and in this context, the global economy also benefits. This leads to additional market opportunities and economic linkages, where many participants compete for the same space.

Competitiveness creates the circumstances for better opportunities, higher quality, lower prices, more productivity, innovation, unique products or services, inimitable products, competitive strategies etc.

The level of competitive intensity is determined by various factors, such as: product features, the development scale of competitive countries, the quality they offer, demand and supply, and not only.

The impact of all this creates a win-win situation for competing countries in international trade and the world economy.

PRINCIPLES

International trade is based on mainly these generally accepted principles:

The principle of non-discrimination - which includes these two sub-principles: the most favoured nation treatment and national treatment.

- The most-favoured-nation treatment (MFN) principle means that a host country treats investors from one foreign country no less favourably than investors from any other foreign country and it somehow gives investors a guarantee against certain forms of discrimination by host countries, and it paves the ways for equality of competitive opportunities between investors from different foreign countries.¹⁶
- The national treatment requires that once imported, foreign products are given at least as favorable a treatment as “like” domestic products.¹⁷

The principle of reciprocity - is a "right to equality" between states, whereby states treat each other equally in terms of rights, benefits or obligations. These elements, to be reciprocal to the states, must be the same or equal.¹⁸

The principle of stability and predictability - firstly requires a stable market, so it gives the states a sense of security to take actions, and then a predictable market, in which the expected results of those actions are clearly visible.

The principle of transparency - implies subjection to these regimes:

- To make information on the relevant laws, regulations, and other policies publicly available;
- To notify interested parties of the relevant laws and regulations and of any changes to them; and
- To ensure that the laws and regulations are administered in a uniform, impartial, and reasonable manner.

¹⁶ UNCTAD “*Most-Favoured-Nation Treatment*” p.7

¹⁷ Horn, Henrik “*National Treatment in the GATT*” p.2

¹⁸ Yanai, Akiko “*Reciprocity in Trade Liberalization*” p.1

The principle of trade liberalization - it is one of the main principles, especially in the framework of globalization, which requires the reduction or removal of restrictions and/or barriers, mainly in the international aspect.

LEGISLATION AND REGULATION

International trade is regulated by international agreements and institutions. The latter are an integral part of international law, and some of them are:

- The World Trade Organization (WTO);
- International Monetary Fund (IMF);
- The World Bank;
- The General Agreement on Trade in Services (GATS);
- Central European Free Trade Agreement (CEFTA) etc.

THE WORLD TRADE ORGANIZATION (WTO)

The World Trade Organization (WTO) deals with the rules of trade between nations¹⁹ at a global or near-global level.

It administers the trade rules and agreements negotiated by its members in order to eliminate trade barriers and create transparent and nondiscriminatory rules to govern trade, likewise serves as an important forum for resolving trade disputes.²⁰

The WTO was created in 1994, when GATT member countries signed a new trade pact to replace the GATT with the WTO. Since the WTO is the successor of the GATT, its trading system dates back to the time of the GATT, in 1948.

Currently, the WTO extends all over the globe and has 164 member states, while Kosovo has not yet joined it.

The main goals for which the WTO was created and continues to operate are the achievement of economic development for both national economies and the world economy, then also for economic stability, welfare and a sound common economic policy between member states.

In case of international economic disputes, the WTO has primacy to treat them through the Dispute Settlement Body, which has authority to establish dispute settlement panels, refer matters to arbitration, adopt panel, Appellate Body and arbitration reports, maintain surveillance over the implementation of recommendations and rulings contained in such reports, and authorize suspension of concessions in the event of non-compliance with those recommendations and rulings.²¹

INTERNATIONAL MONETARY FUND (IMF)

An important organization for international trade is the International Monetary Fund, a specialized body of the WTO, founded in 1944 at the Bretton Woods Conference in the USA.

¹⁹ World Trade Organization “*What is the WTO?*”

²⁰ Cimino-Isaacs, Cathleen D.; Fefer, Rachel F. “*World Trade Organization: Overview and Future Direction*” p.2

²¹ World Trade Organization “*Dispute Settlement*”

The IMF so far has 190 member states and is responsible for facilitating the expansion and balanced growth of international trade, promoting exchange stability, and providing the opportunity for the orderly correction of countries' balance-of-payment problems.²²

The IMF fosters international financial stability by offering:

- Policy advice;
- Financial assistance; and
- Capacity development.²³

THE WORLD BANK

At the Breton Woods conference, in addition to the IMF, the International Bank for Reconstruction and Development IBRD was also created, which at that time aimed to finance the reconstruction of countries destroyed by the World War II.

In the years 1958 - 1988, within the framework of IBRD, 4 other institutions were established, mentioned below:

- International Finance Corporation (IFC)
- International Development Association (IDA)
- Multilateral Investment Guarantee Agency (MIGA)
- International Centre for Settlement of Investment Disputes (ICSID).

Nowadays, IBRD and IDA, with a joint designation, are called the World Bank, while the World Bank Group is the designation for all 5 institutions: IBRD, IDA, IFC, MIGA, ICSID.

The World Bank's objective today is to end extreme poverty and increase prosperity while financing economic development, especially for the world's least developed countries.

THE GENERAL AGREEMENT ON TRADE IN SERVICES (GATS)

The general agreement on trade in services (GATS), entered into force in 1995, is the first trade agreement to cover trade in services.²⁴

The GATS operates within the framework of the WTO and all members of the latter are parties to the GATS.

GATs main pillars are:

- Ensuring increased transparency and predictability of relevant rules and regulations,
- Providing a common framework of disciplines governing international transactions, and
- Promoting progressive liberalization through successive rounds of negotiations.²⁵

²² De Micco, Pasquale *"The International Monetary Fund, the World Trade Organization and International Trade"* p.1

²³ International Monetary Fund *"What is the IMF?"*

²⁴ WTO, Trade in Services Division *"The General Agreement on Trade in Services"* p.1-2

²⁵ Ibid p.3

CENTRAL EUROPEAN FREE TRADE AGREEMENT (CEFTA)

The original CEFTA agreement dates back to 1992, although the new multilateral agreement was signed in Bucharest in 2006, with the aim of facilitating trade and investment, while also helping the European integration process for its signatories.

The signatory countries of CEFTA belong to the Western Balkans region. The scope of CEFTA is closely related to the efforts of these signatory countries as well as the goal of the European Union to create a market that encourages economic development, increased security and political stability.

Kosovo joined CEFTA in 2007, but because at that time it had not yet been officially declared a state, UNMIK had signed on its behalf. Although Kosovo declared independence in 2008, UNMIK continues to unfairly represent Kosovo in CEFTA.

CHALLENGES AND THE FUTURE

The reason of international trade are the benefits it generates, such as: economic growth, economic development, poverty reduction, production growth, investment growth, competition promotion, and the most important inclusive development and growth. To achieve these goals, the countries participating in international trade are subject to various challenges, while their future is expected to experience numerous reforms.

Challenges:

Although the impact of international trade on the world economy is high, it faces various challenges. Thus, the main challenges are considered to be the tendency for free trade as well as differences between countries, such as:

- Level of development;
- Different economies;
- Domestic government rules
- Different purposes, but the same trading space, etc.

The future:

In order to impact positively on the world economy, in its near future, international trade is expected to develop and undergo major transformations by adapting fairer and more sustainable practices, encouraging rule-based systems, encouraging higher production and greater investments, producing greater profits etc.

The main focus for improvements in the future of international trade are these areas:

- Reform options;
- Free trade agreements;
- Technological progress;
- Inclusive participation; and
- Risk diversification.

CONCLUSIONS

Over the years, it has been shown that the specialty of international trade lies in its feature – win-win situation, which brings benefits both to the countries included in it, but also to the world economy itself. This is the reason why a bright future is expected for international trade, which is expected to develop and undergo major transformations, by adapting fairer and more sustainable practices, encouraging rule-based systems, encouraging higher production and greater investments, producing greater profits etc.

However, achieving all these benefits is not so easy, since the process of integrating national economies into international trade comes with various challenges, mainly referring to the differences between nations.

By engaging in international trade, countries agree that by expanding their market, they become part of a competition with other countries, as well as subject to the principles, regulations and standards of the international level.

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The socio-political status of languages in the Republic of North Macedonia

Abstract

The term language planning refers to measures taken by official agencies to influence the use of one or more languages in a particular speaking community.

American linguist Joshua Fishman has defined language planning as "the authoritative allocation of resources to the attainment of language status and corpus goals, whether in connection with new functions that are aspired to or in connection with old functions that need to be discharged more adequately" (1987).

The four major types of language planning are status planning (on the social attitude of a language), corpus planning (the structure of a language), language planning in education (learning), and prestige planning (image).

Language planning can take place at the macro (state) or micro (community) level.

Key words: Language planning, sociopolitical issues, minorities, use of languages

I. INTRODUCTION

Let us imagine for a moment that we are aware of what a linguistic “problem” is; the question that raises now is whether we should first wait to let the problem erupt and then undertake some kind of “linguistic planning”. This seems to be the case of Canada, Belgium and former Yugoslavia – countries where linguistic problems weren’t dealt with carefully. The word is about the French language in Canada, Flemish in Belgium and Albanian in former Yugoslavia before they turned into a very serious political problem. “Linguistic planning” in these regions existed because linguistic issues became political ones. Should then linguistic planning be limited only to the prevention of linguistic problems, or would it be better to foresee the latent linguistic problems and then make some attempts to include the preventive linguistic planning? In my opinion, this is one of the most important issues where linguistic planning can occur. How can then linguistic problems be predicted? Are there any cases today when a language represents a political problem, when a “linguistic volcano” is just about to happen? Is it possible in such cases to perform a timely legal and political planning of the status of languages in multi-lingual countries? What are the factors that worsen linguistic problems? Even though there are not many resources on these issues, some resolutions have been offered by Inglehart and Woodward (1973), by Deutch (1969) and Kelman (1971).

One thing is for sure – for politicians and bureaucrats from democratic systems, the preventive linguistic planning would be more than welcome.

Since both conferences held in the USA about the issue in question (whose results have been published in Fishman’s *et al* (1968) and Rubin and Jernudd’s (1971) books focused on “new and developing” countries, it results in the impression that the linguistic planning is applicable only in

underdeveloped or in developing countries; though it is not that clear what a “new” and what a “developing” country is. Does it only have to do with the issue of political transition or with the social, economic and linguistic transition as well?

Even if this notion is defined only within the framework of the political transition and is applied only in the newly established states, there is no doubt that linguistic planning is possible and necessary since most of these countries are experiencing their political “transition”; in general, they are in a state of flux – they are experiencing their transition period in the economic, social, cultural and linguistic aspect as well. In such cases, it is clear that linguistic planning is quite useful and necessary if the aim is to have real development of these countries.

The issue is whether these problems occur only in developing countries. Are the well-established states free of linguistic problems? The issue then rises as to what the problems with Catalanian and Basque in Spain are. Canada and Belgium are also developed countries, and they still do have linguistic problems. From what said above, we can clearly see that linguistic planning should deal with linguistic problems both in developing and developed countries.

1.1. Is there a need for linguistic planning only in multilingual countries?

There is no doubt that linguistic policy is particularly acute in bilingual and multilingual countries, as is the case with India, Sri Lanka, Spain, Belgium, Macedonia, Canada, etc. Since all countries in question are multilingual, the question is if there are such problems in monolingual countries on the other hand.

Macnamara witnesses that in Great Britain, which in 1893 was almost monolingual, the linguistic problem appeared at the moment of emergence of the movement for the revival of Irish, which was closely connected to the separatist Irish movement that culminated in 1921 when Ireland became an independent country. And, having in mind that Great Britain today is an almost monolingual but multiethnic country, then would it be natural for monolingual but ethnically heterogeneous countries to have either ethnic or linguistic problems? The evidence that we possess suggest that conflicts can also emerge in nations that are ethno-linguistically homogenous. The rivalry between two similar dialects in Norway such as *Ninorsk* and *Bokmal* (Haugen, 1959), or between those Albania and other Albanian inhabited areas in former Yugoslavia is such an example. Emphasized bi-dialectism can be problematic in ethnically homogenous countries. In other words, this proves that linguistic planning and linguistic conflicts are possible not only in multilingual countries and monolingual multiethnic countries, but also in monolingual countries with emphasized bi-dialectism or multi-dialectism.

1.2. The decision-making nature in linguistic planning

1.2.1. Can linguistic problems be removed by removing the linguistic diversity?

The thought exists that multilingualism is an evil embedded in the mentality of western civilization. The roots of this mentality according to Haugen (1973) can be found in the Christian and Hebrew mythology, namely in the Babylon’s “curse”. The extensiveness of this idea is also proved by Kloss (1967), who claims that European linguistic policies have showed tendencies

towards linguistic uniformism. The thought that linguistic diversity is an obstacle to political unification is spread among all intellectuals. In other words, the conviction that multilingualism is an overspread evil comes from the major creators of the thesis according to which there is causal dependency between the linguistic diversity and linguistic and political problems and issues. Hertzler (1967) thinks that “Babylon’s curse” is still causing confusion, division, social and political disorder, and conflicts among people and that it is not that clear if there is causal relationship between linguistic diversity and linguistic and political problems.

The relatively peaceful coexistence of four languages in Switzerland would make the etiology of linguistic problems based on linguistic diversity unsustainable. Perhaps, even more important is the issue of whether the linguistic uniformity ensures “political harmony/understanding” and consequently, creates societies without political and linguistic problems. Pei (1968) and Knowlson (1975) have also proved that the majority of prevailing schemes of linguistic policies have been based exactly on this wrong thesis. There is no doubt that linguistic uniformity can resolve some problems in linguistic communication, but the question is if it would also guarantee political unity which is preferred by the supporters of this idea. Examined cases prove the opposite. Farb offers many examples of bloody wars among people that speak the same language. Apart from the national revival movements of the Irish and Albanians, the case of Serbo-Croatian proves this very clearly. Regardless of the fact that four slavophone nations in former Yugoslavia, Croats, Serbs, Muslim Bosnians and Montenegrins speak the same language – Serbo-Croatian, they have executed one of the most monstrous acts against each other in the post-World War 2 Europe. The case of Serbo-Croatian proves that languages that once were united can be fragmented and divided, and this explains that a linguistic unity cannot guarantee the political unity. Moreover, as Kelman notes, the attempts to eliminate linguistic diversity in an artificial way can create anti-effects – faction, antagonisms, ethno-linguistic and political frictions, etc.

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1.3. Concentration and definitions in linguistic planning

1.3.1. Can a language be planned?

This is also the title of the book edited by Rubin and Jernudd (1971). This question may seem excessive and superficial for those who are aware that the language might have been influenced or planned for ages. The question is worth analyzing because there are still linguists who, based on the comparative-historic linguistics of the 19th century, believe in the organismic evolution of the language. These experts defend with stubbornness the idea that language is developed in an organismic way and that it evolves “naturally” without the necessity of external impacts. Robert Hall (1950), one of the supporters of this idea is not in favor of this extreme viewpoint, even though the title of his book “Do not touch the language” leaves this impression.

Does a language really evolve in a “natural” way? Can the development of a language be influenced? Is the insertion of French words in English, after the Norman invasion, part of the “natural” evolution of the English language? We can see from above that there is no doubt at all about the possibility to influence a language in its developmental path.

The issue is not whether it is possible or not, but to what extent can the language and the linguistic attitude of speakers be manipulated and influenced. On the other hand, the question is how sustainable is Tauli’s thesis (Tauli, 1968), that “languages can be assessed, changed, regulated, improved, or even created according to someone’s wishes and imaginations?”

Another important theoretical issue is the moral aspect – are there any moral and ethical definitions in terms of linguistic planning? Many scientists consider that the aspect of morality in linguistic planning should not be taken into account, and this complies with Skinner’s idea that “either people control the others, or they are controlled by the others (Hymes, 1973).”

Another important issue is the question of what the linguistic planning definitions are and whether linguistic problems can be resolved without consensus of political control/supervision.

1.4. Does the socio-political advancement of a language cause division in multilingual countries?

We could see above that attempts for linguistic uniformism could lead to division instead of unification. The causes of the disintegration of the Habsburg Empire, according to Inglehart and Woodward support this approach.

According to the authors in question, the Hungarian chieftains and noblemen of other ethno-linguistic minorities interrupted the assimilation of their ethno-linguistic communities into the German culture willfully at the moment when the emperor Josef II attempted to impose German as the only official language of the Empire. This raises the question whether all attempts for the advancement of a language over the others is doomed to fail? There is no doubt that a linguistic policy whose aim is to impose the language of the majority population over the minority ones, will be rejected and hated and if enough political mobilization, it will also be opposed. In order to implement successfully a linguistic policy there should be an agreement by all parties involved. In cases when the majority does not take into consideration the minority viewpoints, cases such that of the Sinhalese who wanted to impose their language to Tamils or the imposition of Macedonian on the Albanian population in Macedonia should be expected.

Having in mind these circumstances, how can a language gain a prevailing or more advanced status in multilingual countries? Swahili in Tanzania, Bahasa in Indonesia and Tagalog in the Philippines represent positive examples of the advancement of the status of a language over the others. So, what are the factors that made these cases successful? Are they only isolated cases or are the same principles and methods applicable in other countries of the world as well?

There is evidence for the existence of other cases as well some time ago. Brosnahan (1963) mentions three successful cases of an early language imposition – with the Latin, Greek and Arabic. Later cases include the expansion of English in Great Britain and French in France. The fact that there are only a few cases of a successful imposition of a language raises many questions:

- Under what kind of circumstances can there be a successful language imposition?
- Is the advancement of a language desirable?
- Is language imposition possible in modern times?
- Is the consensual language planning possible?
- Is violence the only means to achieve political and linguistic integration?

If the above-mentioned facts speak clearly that linguistic planning is not only a language imposition over another language, then how would a real language planning occur? One thing is for sure – linguistic planning experts have come to the conclusion that during the process of linguistic planning, it is mandatory to take into consideration a lot of factors.

2. MATERIALS AND METHODS

Several resources, as indicated, have been used in this paper, by utilizing the methods of content analysis and comparison. It has been dealt with from a purely theoretical approach, therefore no concrete empirical data have been provided as such.

3. CONCLUSIONS

Even though the case with separatist Irish movement in Great Britain proves the opposite, there have been many moments in history when decisions and actions have been based on the idea that a linguistic problem can be resolved by eliminating the ethnic and linguistic diversity.

The roots of the idea that multilingualism is an evil embedded in the mentality of western civilization, according to Haugen (1973) can be found in the Christian and Hebrew mythology, namely in the Babylon's "curse". The extensiveness of this idea is also proved by Kloss (1967), who claims that European linguistic policies have showed tendencies towards linguistic uniformism. The thought that linguistic diversity is an obstacle to political unification is spread among all intellectuals. In other words, the conviction that multilingualism is an overspread evil comes from the major creators of the thesis according to which there is causal dependency between the linguistic diversity and linguistic and political problems and issues. Hertzler (1967) thinks that "Babylon's curse" is still causing confusion, division, social and political disorder, and conflicts among people and that it is not that clear if there is causal relationship between linguistic diversity

and linguistic and political problems. The relatively peaceful coexistence of four languages in Switzerland would make the etiology of linguistic problems based on linguistic diversity unsustainable. Perhaps, even more important is the issue of whether the linguistic uniformity ensures “political harmony/understanding” and consequently, creates societies without political and linguistic problems. Pei (1967) and Knowlson (1975) have also proved that the majority of prevailing schemes of linguistic policies have been based exactly on this wrong thesis. There is no doubt that linguistic uniformity can resolve some problems in linguistic communication, but the question is if it would also guarantee political unity which is preferred by the supporters of this idea.

The question that raises now is what is the most suitable problem for resolving linguistic problems? If multilingualism is not misfortune, is it then “wealth”? This opinion probably prevails in the majority contributors to Fishman’s (Fishman et al, 1966) ^{book. Jernudd and} Das Gupta (Das Gupta, 1971) refer to language as “wealth”, but not within the European context of “national treasure”, as Skadegard (1969) claims when he says that “the existence of linguistic minorities is Europe’s treasure”. This makes us think whether we should praise or scold multilingualism. If the above-mentioned facts speak clearly that linguistic planning is not only a language imposition over another language, then how would a real language planning occur? One thing is for sure – linguistic planning experts have come to the conclusion that during the process of linguistic planning, it is mandatory to take into consideration a lot of factors.

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BIOGRAPHY

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Kujtim Ramadani has been working at the Southeast European University for 20 years now. He is a lecturer of English at the Language Center. He holds a BA in English Language and Literature and an MA in Comparative Public Administration. He has participated in numerous conferences, seminars, workshops and Erasmus + training weeks. He is also a renowned translator and interpreter from English into Albanian and Macedonian and vice-versa.

The media and the democratization of society between the ideologization of values and critical public opinion

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Abstract.

Communication is the skill of seduction - said Cicero, and the medium is a message and the world is a global village - are the famous sayings of the media theorist Marshall Mack Luan. I chose these two visionary and still unsurpassed messages to make a symbiosis of the effects of mass communication, the transformation of social changes and the creation of public opinion through the globalized media reality. The analyzes start from the causal setting of the multi-significance of the functions of the media, the construction of media messages or Agenda Setting, the pluralism of the interests of the contemporary audience brought about by the return media influence of the democratization of society and the change of existing values through a critical institutionalized public. These variables, of course, have a generalized simplified thesis that the media influence the democratization of society or the media are a reflection of the democratization of the institutions of the system. This setting of the premise of communication as a two-sided social process, tries to reflect the dynamics of media effects expressed especially through the informative and analytical function, to indicate the danger of the dominance of the ideological components of media messages and the frequency of the spiral of silence in relation to the critical public.

Keywords: media, democratization, public, opinion, society.

1. Introduction

In the globalized media reality, especially with the theoretical reorganization of the space and time of media messages, in academic circles the question of redefining the media influence is becoming more and more relevant, primarily conditioned by the informative and analytical

function of the media, which creates a new construction of the formation of public opinion. The pluralism of the interests of the modern audience is expressed through the cause-effect connection of the media, the democratization of society and the change of existing values. In general, the prevailing thesis is that the media is a reflection of the democratization of institutions as an arrangement of a social system constructed with the forms of ideology and specific policies for the application of social values. The theoretical and analytical approach of this research tries to explain the dynamics of the effects of the media, especially expressed through the informative and analytical function, starting from the premise that communication is a two-sided social process. The analyses of the contemporary communication reality elaborated in the paper indicate the danger of the dominance of ideological components of media messages and the frequency of a spiral of silence in relation to the critical public opinion.

It is known that one of the basic functions of the media is informative, whose main purpose is to inform the recipients with a message of public interest for which social awareness and a certain attitude towards the new, the unknown, the current and above all the true and objective is expected. In modern societies, the informative function of the media and information are used to form, develop and change the contents of a certain worldview, by having the power to destroy a certain worldview in a relatively short time.

2.Theoretical debates on the controversy of media standards and criteria

The awareness of changes and new values depends on the application of professional standards and criteria in the formation of public opinion expressed through the way the media message is constructed. These are objectivity, impartiality, truthfulness, comprehensibility, timeliness, accuracy

2.1. Complementarity of professional criteria

Media practice shows that even honest intentions for writing a media message do not always satisfy the criterion of objectivity. The controversy of the concept of objectivity is also reflected in the issue of balanced facts, which is a working principle of the BBC. However, the balance of the facts does not necessarily mean objectivity, because there is no accuracy in the facts.

When it comes to the truth of an event as a professional media criterion, it is understood that it is an indisputable fact for its publication, that means something happened, but how it happened is a question that arises due to insufficient facts, i.e. incomplete sources of information. The absence of information leads to incomplete or wrong information, where the opinion and reactions of the public are channelled, reduced and create a distorted image of the current issue that is problematized by the media, i.e. it is presented as current, significant and solutions are offered for its solution.

Complexity as a professional criterion of the media presupposes a comprehensive analysis of situations, events and problems, as well as an indication of the complexity and contradictions of the social processes about which it is informed. Given that the socio-political, economic and cultural influence, despite social conditioning, the media will only be able to achieve through a new quality of information, comprehensibility as a media standard requires that events and problems be creatively and expertly constructed into an understandable message accessible to all citizens. Regardless of their educational level, occupation or professional qualification, economic or political status, Only then, according to Kunchik and Zipfel (1998), “The communication action

achieves its constant goal - understanding the event as well as communication interaction - active involvement in the social dialogue, the process of public opinion, agreement and cooperation” (p.115).

Communication experts warn of some distortions when it comes to accuracy as a media standard. These are the subjective selection of information, the one-sided summarization of discussions and speeches, the way of paraphrasing, the arbitrary translation into a less professional language, the extraction of words and quotes from the context, the distortion of the speaker's basic message. All these imperatives of the mass media form or deform the image of a democratic society. According to the concept of Bentele (2008), objective media messages are characterized by accuracy, completeness, verifiability, factuality and neutrality. According to Schneider (1992), objective information represents “ demarcation of opinion from information, relying on facts that do not change, that are not kept silent or presented for the sake of doing a favor, while every information should contain a minimum balance” (p.159).

2.2. Selection of facts and values in media content

The practice of media communication shows that there are unwritten rules for a correct, objective description of reality. This means that all public facts should be correct. Uncertainties should remain recognizable as such. Credibility implies completeness and balance. The author should not express his opinion, avoid phrases, and not use unfounded tendencies, i.e., facts, for decoration or addition.

If we start from the saying of Schneider (1992) that “journalists are competent for everything; they are educated for very little of it, and they are empowered with almost nothing” (p. 162), it is obvious that the media reality ideologies values creates a distorted image of the democratization of society, dulls critical public opinion, and creates a one-dimensional man, precisely through the escapist use of the media and its narcotizing dysfunction. Through the selection of facts, that is, events according to their actuality, placing the facts side by side without comment or deeper analysis, with the deprivation of the media, an anomic society is created where the media create agenda setting. The selection of topics and values in media content, which is a control instance known in gatekeeper research, is a process of information reduction. It implies that one topic is suppressed at the expense of one or more other topics, and with the processing of the news, they are also modified ideologically. In that case, the evaluation of the news is not in the selection process but in the attitude towards the audience and the time factor.

3. Analysis of the communication premise - media functions and democratization of society

“The Eastern European media’s most significant contribution to the initial phases of democratization in 1989–2000 has thus been to serve as examples of and conduits for the newly available political, economic, and cultural options, on the one hand, and as facilitators of political, market, and cultural competition, on the other” (Gross, 2002, p. 167).

Joseph Clapper's book (1960), *Effects of Mass Communication*, discusses the difficulty and time of relevant literature on the social and psychological impact of mass media (Baran, 2002), which demonstrated the interdisciplinary character of the science of mass communication within the multiple meanings of mass media functions.

3.1. The polyvalence of media functions and a focused public

In addition to informational, entertainment-recreational, and educational value, the literature emphasizes the function of creating public control over politics, education, and political socialization, as well as the function of managing the economy through advertising.

Establishing a focused public is very important in developed countries. In other words, this is communication between groups that take an active part in political processes, such as non-governmental organizations, based on the common interests of citizens, parties, etc. A small number of authors connect the dominant media functions with the political system. The entertainment function is usually dominant in the private media, and contrary to this, the democratic, semi-state-organized media have the function of sharing information. It is known that mass advertising is the primary task of the media in totalitarian systems; that is, control over the contents of communications is always complemented by entertainment, which acts as an obstacle to solving real needs.

3.2. Participatory and representative forms of media democratization

The complementary analysis in terms of the theoretical approach to media functions is to show a newly redefined media role, especially in developed liberal societies. According to the democratic-participatory theory, in a politicized, fragmented, and diverse society, the needs, interests, and goals of the recipients are central to the media content. In doing so, the variety of communication messages, their local character, and the change in the functions of the communicator and the recipient should be highlighted. In such a horizontal connection of communication, feedback and public reaction to media content are of particular importance. In a participatory democracy, media communication ensures the protection of citizens throughout the entire social period through the self-actualization of their political, social, and economic rights. This is of particular importance for the role of the media in "Europeanization" and the establishment of new values. However, countries in transition face a representative form of democratization of the media, which was explained by Bloomer and Katz (1974). According to them, the media are in a close relationship with the citizens and their interests, so what is most needed in the area of information sharing is the existence of "well-informed agents who will be able to act effectively in the analysis served by the information media and who will find reasonable solutions to the problems of today's society" (Kunchik, M., Zipfel, 1998, p. 101).

The analysis of the national media in the Western Balkans shows the media as a creator of the socio-political, economic, and cultural life in the country and as an attempt to incorporate this approach into the lives of the entire audience. In that way, they are presented to the public that does not actively participate; that is, the media creates the participation of citizens in public life without the active involvement of citizens.

3.3. The informative function and open questions about media pluralism

The controversies of media pluralism in news programs are imposed as open questions from the analysis of central news programs. This discourse implies facilitating the maximum flow of different opposing opinions related to the relevant aspects of a social topic, and this informative quality is an element of analytical genres.

The focus on the analysis of daily news programs on television and radio is justified for several reasons. First, because they represent a specific form of realization of the informational function

of the media that affects the enrichment of the cognitive dimensions of the media contents and affects the formation of an active, opinionated public. They have a high rating compared to other programs and are broadcast during peak hours, the period when the TV stations have the highest number of viewers. Overall, the analysis shows that the audience is offered a high level of informational pluralism about topics that cover everyday life and about the representation of government institutions and political parties. However, it can be said that the media understands pluralism more as the transmission of a quantity of information than as the quality of information processing. This can be seen through the dominance of the level of information (presentation) about the analytical level (creation) in the news, that is, greater coverage of informative rather than analytical genres. Some television stations have an expressive political flavor in the general and individual announcements in the shows by using attributes, emotional phrases, and commenting on the informational element of the news instead of neutering it to get positive or negative media context. Analytical creation in the news is often reduced to presenting the editorial position that reflects the media's editorial policy without presenting the opposing opinions and additional facts and information about the events that would objectively support the comment. When reporting on social and political events in the media in the Republic of North Macedonia, the unsigned and illustrative materials are often without a clear origin, the articles are conflicting where only one of the parties is consulted, and the texts are not signed. Analyses show that the media use unnamed or generally defined sources to spread unconfirmed information from the domestic scene or when reporting on events happening outside the country.

The cause-and-effect relationship between democracy and the social arrangement of relations in a state means that the more developed the democratic capacity of the institutions of the system, the greater the freedom of speech and expression of thought, the creative and analytical function of the media, and their participatory role as an expression of pluralism among citizens. From there, freedom of the media implies freedom of expression, freedom of speech, and free transmission and dissemination of information in society without restriction. At the same time, this opens up contemporary debates around issues of media reality, the shaping of media culture, and the formation of public opinion. Furthermore, Dan Nimmo (1978) warns of the increasing occurrence of "factoids," which are processed and packaged information that presents itself as accurate, true, and original and that replaces facts. They are sublimated statements of fact that are generally treated as true, even though there is no evidence to support them. The end effect is "virtual politics" created by a media-created reality that is manipulated by politicians. (Swanson & Mancini, 1996) Regarding the arbitrariness of the issue of media freedom, where the terms democratic and independent media are related, the theory shows that debates about the control of the media occur through the influence of powerful individuals as well as business and the political elite.

3.4. The cognitive dissonance between opinion and behaviour

Walter Lippmann, the intellectual father of agenda-setting theory, whose book, *Public Opinion* (1922), began with a chapter titled 'The World Outside and the Pictures in Our Heads.' The central thesis of public opinion is that the news media are the primary bridge between the vast array of events in the external world and the truncated views of these events in our minds. As Lippmann noted, our opinions and behavior are a response to these pictures in our heads, not the larger outside world.

3.4.1. Media vs. factual reality

According to Schulz (2014), the reality presented by the media does not match the true reality, that is, what happened. He talks about the construction of reality through the media, where news value

is the criterion on which that construction takes place. This constructed world for the recipients, who do not have direct access to more than the reported events, becomes a factual reality, i.e., "second-hand reality." This is not to say that media reality equals reality and that reality can therefore be ignored. But it is also true that, to a large extent, citizens' perceptions of reality are precisely formed through the selective criteria of the professional group of journalists.

The informative function of the media opens many debates in academic and media circles related to the meaning of the information organized in the news and its influence on social reality, that is, the effects on the audience. It is especially important to emphasize the social and human aspects of new information, its influence on the formation of public opinion, and the intensity of increasing the cognitive dimension among certain interest groups. Bal's finding (1997) is in that direction: "The information that reaches the audience is carefully arranged, half-chewed, and half-digested, depending on the specific requirements of the media and their political patrons" (p. 52).

3.4.2. Consistency theory and social influence

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4. Ideologization of values and critical public opinion

According to Giddens (2002), "Ideology and power relations influence message encoding and ideas or beliefs which serve to justify the interests of dominant groups" (p. 583).

The choice of topics values and issues surrounding facts determine the dimensions of media influence, and the construction of media reality in everyday events contributes to the homogenization of media content. At the same time, the media influences the determination and structure of topics. The importance of the media is significantly greater when attitudes are created about unknown topics, especially if information is repeated about hitherto unknown issues of social reality, while the pluralism of information sources is reduced or there is an objective impossibility to follow the contents in other media. Ideologically coloured news directly affects the creation of attitudes that mean approaching or moving away from a political option, as well as politicizing decisions, phenomena and processes, especially among neutral recipients or less educated audiences. The instrumentalization of information leads to the manipulation of public opinion. This implies that media contents are often selected according to the possibility of their use (instrumental value) in group life. The syndrome of identification and projection with negative news related to the existence, life, personal safety and security of the audience increases the prerequisites for their reproduction in reality and contributes to antisocial phenomena and changes in social psychology and the realization of certain social roles. In addition to this, objective

standards in the creation of media information can also lead to an increase in real awareness and knowledge without a change in attitude and behaviour.

Analyses of the values of Macedonian society recognize a pseudo-modern Republic of North Macedonia. Namely, while it oscillates between modern and postmodern orientations at the institutional and technological levels (we are talking about economic and political institutions), traditionalism remains in the sphere of social and cultural values. The non-acceptance of risk as a principle of action within the economy, the insufficient participation of citizens in the spheres of decision-making and the return to religion, are signs of this traditionalism. Faced with this reality, the Macedonian society, just like the other countries of the former communist bloc, should strive through reforms in the economic, political-legal and cultural spheres, to constitute a social environment in which the pluralism of interests will be fully implemented. citizens through developed democratic forms and the rule of law.

4.1. Contemporary paradigms of values: fragmentation versus social integration

Modern pro-Western oriented societies do not function based on social integration but mostly based on fragmentation and adaptation to micro-social units as small parallel worlds. Some of them are rich, powerful and with an emphasized sense of social security, while others are socially rejected, deprived of the well-being of developed civilizational models, and thrown into a state of anomie. It happens in the societies in which the quasi-egalitarian dogma that has its roots in the French Revolution and its three revolutionary maxims - freedom, equality and fraternity - reigns. Equality here plays the role of a social norm through which social control is achieved and enables the ideal of the "democratic man". Democracy as a value in itself does not mean the distinction between people but emphasizes the equality of the conditions for existence, thus it fails and does not want to abolish inequality. Creating a whole structure of ideas, values and feelings that shape social life in its specificities and diversities, democracy faces the challenge of justifying social inequality through the non-hierarchical ideal of equality. Such a classic concept of democracy, which is embodied in a different way in both capitalism and socialism, is experiencing its renaissance, but also the new mark of the changing times. Many authors, however, emphasize the contradiction of those changes. Postmodern theories show that fragmentation, the collapse of old institutions, the freedom of individuals, and the atomization of society are just some of the possibilities.

“Daniel Bell (1976) locates the three agents of social development in economy, politics and culture as segments of efficiency, equality and self-realization. But Bell also gives exceptional importance to culture, emphasizing its explicit imagination, creativity and play of symbols. This view is significant from the point of view of postmodern society, which he sees as a construction caused, above all, by the influence of technological processes and changes” (Bell, 1976, 1973, quoted according to Petkovska, 2004, p.225).

On the other hand, there are those understandings according to which postmodern culture is used as a paradigm for contemporary culture. This, in turn, imposes the dilemma - are we living the end, the maturity or the negation of modern society?

“One of the main determinants of postmodern society is the controversial thesis about the end of history, the end of great ideologies, which find their origin in the inherent imperfection of liberal politics and liberal economics. These are euphemisms that denote the contemporary civic

conception of political democracy, the free market, and civic culture” (Francis Fukujama, 1994, cited in Petkovska,2006, p.143).

The fact is that the traditional framework of socialization and regulation that guaranteed the social cohesion and reproduction of the industrial society has not completely disappeared. The Republic of North Macedonia, like most countries of the Western Balkans, is on the path of leaving the past, and still far from the future, whatever it may be. We are in a postmodern society, which implies a fragmented society without a social dimension, composed of individuals facing the forces of the wild market with the help of free reason. If we were in a situation where society did not exist, then the use of concepts such as integration, inclusion, exclusion, and marginalization, would be meaningless and inappropriate.

According to Petkovska (2004), in the field of inequality, there are still more or less marginalized groups, and among them are the young, that is, their culture and value system. Especially in modern society, they are expected to be a fluid and flexible force that should build the values of the future of every society.

4.2. Deviation of critical public opinion

Means of mass communication in modern social changes, especially in the era of globalization which is supported by technical-technological expansion and mass culture, increasingly occupy a central place in the formation of public opinion on several significant issues of social-political, economic, and cultural life. The polyvalent function of the media on the one hand and the pluralism of the choice of media topics on the other, create a media reality that has the democratization of the public. But precisely the thesis of a well-informed citizen in conditions of mass communication content due to dysfunctionality, mostly of the informative and analytical function of the media, has a retrograde effect on critical public opinion. Deviations in that regard are channeling of public opinion, manipulation, and propaganda. The reduction of social consciousness at the same time takes place on two levels, segregation, and unification, and the syndrome of identification and projection through media content enables the creation of a focused public. The reduction of cognitive dissonance, which as a phenomenon is also characteristic in the pluralistic communication reality, is expressed by the role of the mass media in harmonizing the attitudes and practical actions of the person, that is, the recipients. This means that if media messages are a function of faster social progress, they are accepted with faster intensity, with greater diffusion to the majority of the audience, and the difference between the audience's opinion about the occurrence, processes, and actions that are treated by the media and their behavior in the media is reduced. the appropriate practices. The focus of the theoretical approach to the media and public opinion in the democratized, pluralistic communication reality is the escapist use of the means of mass communication.

The theoretical conceptualization of the thesis for a well-informed citizen, in practice mostly due to the massification of communication content and dysfunctionality of the media, has a retrograde effect on critical public opinion. The reduced information contents and the tendentious approach in the analysis of current phenomena and processes, instead of forming public opinion, channel it in the direction of the media focus. Manipulation and propaganda are the most common effects, which as a collective public opinion expresses only the prevailing consciousness created through segregation and unification of opinions, attitudes, and views. Uniform, instead of critical public opinion on separate communication realities also enables the reduction of cognitive dissonance,

which implies that if media messages are a function of faster social progress, they are accepted with faster intensity, with greater diffusion to the majority of the audience, and the difference between opinion is reduced to the audience about the occurrence, processes, and actions that are treated by the media and their behaviour in the respective practices.

4.3 Instrumentalization of public opinion

“Media of communication ... are vast social metaphors that not only transmit information but determine what is knowledge; that not only orient us to the world but tell us what kind of world exists” (Carey, 1972, p 285).

The mutual influence of politics and the media in the political reality of a society is largely conditioned by the media's construction of the contents of the current political developments.

4.3.1. The media and the politicization of public opinion

The media not only transmit messages and information from political actors but also analyze, select, comment, give their opinions, and present views on them. They also invite and convey the opinions and views of other competent persons and groups (experts, former public officials, and functions, etc.) Regarding the analytical function, the media put the events and decisions from the political sphere under constant analytical scrutiny, which is usually realized as critical and thus contributes to continuous confrontation with political factors. From this, it can be concluded that the political actors and the media are in a constant struggle for supremacy in the process of shaping public opinion. This media reality can result in a situation where the media will yield to the pressures of political actors who can impose themselves on the media and limit or completely suppress the freedom of the media.

4.3.2. Agenda Setting in function of forming public topics of the media

Agenda setting, that is, the media frame as a product of media reality can be defined as the " media process of creating public awareness about the most outstanding and important public affairs" (Kuntzich & Zipfel, 1998 p.128). From the large number of events and topics that are registered during a day by the media, the editor selects only some of them that he considers more important or more interesting than others. This means that the media plays a key role in shaping public topics, thus forming public opinion. Public opinion, which as a discourse is defined as attitudes, viewpoints, and beliefs about certain wine practices and traditions, the media not only transmits messages and information from political actors but also analyzes, selects, comments, gives their own opinions, and presents views on them. They also invite and convey opinions and views of other competent persons and groups (experts, former public officials and functions, etc.)

“In modern societies, the availability of information is critical for the quality of decision-making by citizens and legislators” (Bellon & Minho, 2004). It implies that in democratic-developed societies, the effects of public opinion reflect negatively on the government if it tries to escape from its responsibility or transparency, abusing the media. Public opinion has the power to force a response, accountability, and openness from the government that implies guaranteeing democratic values and the rule of law. At the same time, the biggest advantage of the public opinion formed through the media is that it should not demand responsibility for the (non-working of the government and political entities only from elections, but should present it here as an everyday topic. That is why public opinion is a strong democratic corrective that protects and promotes the foundations of good governance. From the large number of events and topics that are registered during a day by the media, the editor selects only some of them that he considers more important

or more interesting than others. This means that the media plays a key role in shaping public topics, thus forming public opinion. The agenda-setting affects which issues should be informed, debated, and thought about. In this context, political scientist Bernard Cohen(1963) says: - The press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about” (Valenzuela & Maxwell, 2019, p.105)

5. Media manipulation and propaganda

Public opinion is necessary for politics because it is the only way through which politicians can gain support, votes, and sympathy, but on the other hand, it can also be their biggest opponent. Public opinion is managed and controlled precisely by politicians. They tend to create the kind of perception among the audience that suits them, would benefit them for certain goals, and would help them achieve certain plans. The perception that they will create among the audience is precisely public opinion. Propaganda and various types of manipulation, as well as other tactics, politicize public opinion through the use of various data or information to seduce the public, i.e. directing attention to the message or meaning that the author, regardless of the validity of the data, wants to convey challenged him to exercise control over the recipients of information. According to Street (2003), the term propaganda denotes an activity whose purpose is to influence broad social strata by spreading ideas.

5.1. Selection of themes and values

The manipulation of the media in the pluralistic communication reality is carried out by the selection of topics, events, and language through which the messages of a certain medium are organized and transmitted in a certain term, during which various attempts are made to meaningfully create public opinion. The goal is to numb the public, create a reduced public, and instead of developing a critical public opinion that will represent a democratic form of media participation of the audience, a media projection of a certain opinion is created that tends to impose itself as a representative of the civil public.

The process of shaping the media's political-informational content creates a media reality that differs from the real reality. The continuous presence of a certain topic and its media treatment through various forms of media expression grows into media advocacy (Media Advocacy). In media terminology, it is defined as "... the strategic use of the media for the promotion of a particular public initiative or position" (Lorimer, 1998, p. 37). When the media commits to a certain problem and presents it to the public, then the particular problem that is being treated transforms it into a public issue. It is particularly important to emphasize the issue of the social and humane aspect of the media message, that is, of the new information, its influence in the formation of public opinion, and the intensity of increasing the cognitive dimension among certain interest groups. The selection of topics values and issues surrounding facts determine the dimensions of media influence, and the construction of media reality in daily events contributes to the homogenization of media content. At the same time, the media influences the determination and structure of the topics. The importance of the media is especially great when creating attitudes about unknown topics, especially if the information is repeated about previously unknown issues of social reality while reducing the pluralism of sources of information or there is an objective impossibility to follow the contents in other media.

5.2 Syndrome of identification and projection with negative news

Ideologically coloured news directly affects the creation of attitudes that mean approaching or moving away from a political option, as well as the politicization of decisions, phenomena, and processes, especially among neutral recipients or less educated audiences. The instrumentalization of information leads to the manipulation of public opinion. This implies that media contents are often chosen according to the possibility of their use (instrumental value) in group life. The syndrome of identification and projection with negative news related to the existence, life, personal safety, and security of the audience increases the prerequisites for their multiplication in reality and contributes to antisocial phenomena and changes in social psychology and the realization of certain social roles. In addition to this, objective standards in the creation of media information can also lead to an increase in actual awareness and knowledge without a change in attitude and behaviour.

6. Conflict of socio-economic and cultural values

The socio-cultural environment of the Republic of North Macedonia, like other countries in the region, in the period of transition inevitably affects the change of value systems on the one hand, and on the other hand, the existing models of values established in the national and cultural identity of the state, show a tendency of resistance towards the changes.

The social context of the formation of new values along the path of the European integration processes on the economic level faces a dysfunctional market economy and slow, in most cases, non-transparent privatization. The unreformed economic capacities in the material-technical sense and human resources are accompanied by bureaucratized administrative procedures that were characteristic of the socialist management system, as well as by a high level of bribery, corruption, and economic crime. The low level of the gross social product is a consequence of the low level of direct foreign investments and the inefficient management of domestic production facilities, which are accompanied by non-standardization of the quality, assortment, and placement of Macedonian products according to the rules and standards of the international market. All of this contributes to unemployment, poverty, large class differences, reduced social mobility, etc.

“The democratization of the political system with the introduction of multi-partyism and pluralism of interests, the functioning of parliamentary democracy and the formation and operation of several political organizations, civil associations, as well as the introduction of rules for the functioning of a legal state, represent new values in the transition period of the political environment of the Republic of North Macedonia” (Siljanovska, 2007).

They are based on the universal principles of democratic rights and freedoms, the right to free expression of citizens, democratic forms of political decision-making, and the rule of law of the institutions of the system. These phenomena are more ideologized in practice than they are essentially implemented. As a consequence, the Republic of North Macedonia is faced with insufficiently implemented forms, means, and modalities of practicing the proclaimed European values in the development of the political system of decision-making and management of institutions in the exercise of legislative, judicial, and executive power. The conflict of value systems (non-complementarity between new democratic-liberal and traditional-centralized values) in the development of social-political relations in the Republic of North Macedonia, as well as in most countries of the Western Balkans, is expressed through: the emergence of non-democratic forms of direct governance; the partisanization of all areas of social life; bribery and corruption; the protection of personal and party interests instead of the interests of citizens; distrust towards

the institutions of the system; emergence of conflict situations; violence and insecurity of citizens, etc.

The economic, political, and cultural doubts in the social processes and changes of the Republic of North Macedonia in the formation of post-communist values in the transition period are also reflected in the social sphere, which is expressed by the absence of a concrete strategy for the functioning of social policy and the absence of mechanisms for social care and protection of citizens. The inefficiency of the administration, partisanship, and the absence of criteria of values, the conflict of interests as a characteristic of the entire social system, position the state on the low rung in the development of social relations. The processes that take place without applications that will build it as a welfare state result in increased social insecurity and citizen dissatisfaction, especially among the elderly and the young population.

In the field of culture, the positive and negative trends in the Republic of S. Macedonia are shaped by several processes and phenomena such as the decline of moral values; impermissible rate of politicization of cultural activities; ideologization; rise of ethnocentrism in culture; negative influence of religious tensions as well as lack of essential criteria in the (non) acceptance of some global civilizational values. (Petkovska. 2006). The recent years have seen the introduction and development of modern trends in education and science but with the absence of clear criteria for the possibility and justification of their application. High achievements in the field of artistic creation are insufficiently stimulated and inadequately presented to both the domestic and foreign public, and the development processes in the protection and presentation of cultural heritage are burdened with financial, organizational, and ideological problems.

In the formation of the new value systems in the Republic of North Macedonia, the development of the media systems was of great influence. There is inconsistency, contradiction, and ambiguity in the implementation of the informative, educational, and entertainment-recreational functions of the media. On the one hand, there is a developed network of media, and on the other hand, most of the media have a problematic quality of the presented program contents, there is a lack of developed production, sensationalism is nurtured, and uncritical exposure of popular culture and civic values.

Modification of the system of socio-cultural values is not always done linearly. These transformations are often accompanied by conflicts created by the coexistence between the two value systems. These conflicts of values can create tensions in the individual which are translated as deviations of the general system of values or in divergent evolutions. One such phenomenon can be extreme nationalism, xenophobia, and the increase in crime.

Until 30 years ago, two ideologies dominated the peoples of Europe. One, which developed in Western Europe, puts the individual and his interests at the centre, and the other, which developed in communist Europe, tended towards the uniformity of individuals in the name of an overriding collective interest where there is no place for individualism. In the name of modernization, of the development of individuals, both ideologies cultivated values and behaviours determined to ensure their success. Their basic elements were many times opposite and inconsistent with the basic intention. These two ideologies and their systems, be they political, economic, and cultural, left a mark on all domains in society, in the sense that they postulated systems of values and norms that are different and incompatible because they were based on different premises and followed opposite concepts. The failure of the communist ideology and the decision to enter the European

Union is the result of the need in the communist East to transplant political and economic Western institutions in place of the old economic and political structures, as a precondition for membership. This implies an adaptation of norms, and changing social values that do not coincide with the existing organization of life.

7. Conclusion

As a historically determined, dynamic, and deeply integrated category in the structure of a society, social consciousness is the most general framework from which the behaviour of individuals emerges. It implies that the behaviour of the individual is never a behaviour by itself, but always has some source in a certain system of values that are operationalized through the norms whose final result is a certain social consciousness.

In modern societies, the means of mass communication are used to form, develop, and change the content of a certain worldview. The forms of creating public opinion about current phenomena and processes contribute to changes in the level of requirements, that is, the criteria of the recipients, which can create a situation of feeling deprived of something, that is, create a state of relative deprivation. At the same time, it should be known that this term indicates the assessment of one's social position according to relative criteria, that is when comparing income, privileges, well-being, etc. with groups or individuals with whom the person orients himself. Since absolute deprivation denotes a feeling of deprivation according to objective criteria of opinion, the difference between these two angles is significant in the formation of public opinion, especially in the era of cultural globalization, where absolute is transformed into relative deprivation. Or rather, the global media are less and less directed towards the creation of productive-oriented values such as savings, investments, positive valuation of entrepreneurship, and consumer orientations are spreading more and more.

In certain circumstances, especially when there is a dysfunctionality between the informative, educational, and entertainment-recreational function of the media at the expense of the increased space of entertaining media content, there is a possibility that the means of mass communication enable an escape from the truth and at the same time do not lead to an increase in the level to the demands of the audience which is called escapist media use. With such compensatory use of the media, as a result of personal deprivation or deprivation conditioned by the socio-cultural environment, they contribute to the removal of temporary depressions but do not enable solving the problems. Failure to create a critical public, on the one hand, loses the self-initiative and creativity of the audience in creating ways and means to solve certain communication realities, and on the other hand, the suppression of real problem situations can lead to the activation of a closed circle that would have the function of more exacerbates the problems.

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How Can Blockchain Technology Contribute To Risk Management In International Trade?

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Abstract.

The fact that the parties are beyond borders in international trade, they do not know each other well enough, the different political and economic conditions and systems of countries, long distances, varied commercial traditions, conjunctural factors make international trade more risky than domestic trade. Legal legislation in terms of the rights and obligations of the parties, foreign exchange transactions due to the use of foreign currency, transportation and insurance in terms of transportation activities, accounting and financial transactions in terms of determining the effects

on businesses and the country's economy, the policies followed, the content of the contracts drawn up and the procedures diversify the risks. These risks are manifested as obstacles that hinder the functioning and development of commercial activities and thus reduce their efficiency. In this context, reducing or eliminating obstacles such as bureaucracy, complexity, non-transparent processes and country policies will facilitate access to new markets and strengthen the supply chain.

Today, the fact that blockchain technology contributes to operations by revolutionizing business processes in various industries shows that it also has the potential to alleviate the problems associated with cross-border trade. With the integration and development of blockchain applications in many areas of use in international trade, it is possible to overcome many obstacles that arise within the framework of the risks in this area.

This study was written to investigate in which areas blockchain technology can be used in international trade and to what extent it can provide solutions against classified risks for these areas. In the study, a multifaceted examination is made to develop the foreseen and planned strategic elements regarding risk management in international trade by using blockchain technology.

Keywords: Blockchain, International Trade, Risk Management

RISK MANAGEMENT

The concept of risk, which means the possibility of any threat to cause loss or harm in an asset, has different meanings for various fields.

The risk, in the insurance field, is the existence of the danger of loss, the probability of loss, the uncertainty, the probability that the actual result is different from the expected result, and the likelihood of any situation other than the expected situation. risk in banking; failure to collect or fulfill a loan or commitment and in banking is a failure to collect or fulfill a loan or commitment. Indecision theory, risk refers to situations in which the decision-maker cannot determine the consequences of any event. In the field of finance, risk; the probability of deviation in the occurrence of any planned or anticipated situation with respect to the financial aspect of the entity (Emhan, 2009: 210). Synonymy with danger, the concept of risk used for events that are expected to emerge in the future, but whose uncertainty is unlikely to occur, is precisely related to the future and expresses uncertainty in the future.

Risk management is primarily the management of anticipated fact expectations. Today, risk management is a proactive process for preventing risks that occur in a multivariate and complex

economic environment before they occur, reducing costs by effectively managing them, increasing competitiveness and benefiting from the risks undertaken (Yarız, 2012: 20). Risk management is the coordinated activities carried out to guide and control an organization in relation to risks (TS ISO GUIDE 73: 2012). The main objectives of risk management can be expressed as follows (Polat, 2007: 32);

- To ensure the protection of the company's basic assets,
- To maintain the integration of the production processes of the services and products produced by the company,
- Ensuring that employees are sensitive to risks and prevent these risks before they increase their costs,
- Communicating information and data about the possible risks to the company executives in a timely manner, enabling them to make easier decisions about the risks faced by the company,
- To ensure that managers see all the effects of possible risks in decision-making processes,
- Continuously monitoring and reviewing the identified risks of the company.

Corporate risk management is a comprehensive and systematic approach developed for all organizations of various sizes and adopting different missions to identify, measure, prioritize and take steps to influence the strategic objectives, related projects and daily operations (PwC, 2007: 5). Corporate risk management is the process of identifying, measuring, managing and explaining all important risks to increase the value of business shareholders (Segal, 2011: 24).

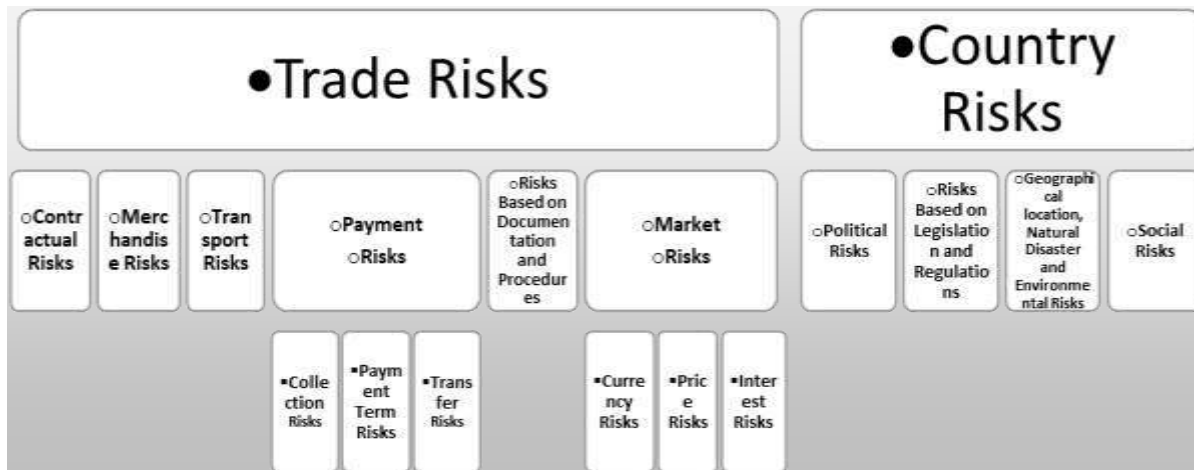
In the risk management process, determining the sources of risk and determining the types of risk is a priority. It is necessary to classify systematic and non-systematic risks and decide what resources are and how much these risks can be managed and whether they are to be assumed. Analysis methods are qualitative, semi-qualitative, quantitative or mixed analysis. Control activities of the results of the analysis related to risk management should be carried out. The types of controls carried out to achieve the objectives in risk management can be specified as preventive controls, corrective controls, directive control, and supervisory control.

RISKS IN INTERNATIONAL TRADE

Since international trade is a trading activity that takes place between exporting and importing countries with long distances between them, which are bound by different languages, cultures, legal systems and regulations outside the borders of the country, these differences and distances may lead to greater risk diversity in international trade than in domestic trade. In the process of selling goods from one country to another, many institutions involved in the interaction of money, goods, and documents, and every element that plays an active role in this process until the end of the trade, constitute a risk area containing various threats.

Risks in international trade are classified and diversified from various perspectives. In general, these risks can be grouped under two main headings as trade risks in terms of trade-based elements and country risks in terms of originating from the country or countries of trade. Accordingly, risks can be classified as figure 1. Some of these risks are seen as risk factors for exporters and others for importers, while others are a general risk classification for both parties.

Figure 1: Risks in International Trade



Source: Created by the author.

Trade Risks:

Risks based on the trade between the exporter and the importer and directly affecting this trade can be defined as trade risks. These risks can be diversified as follows.

Contractual risks; refer to the legal risks arising from the contrary behavior of the parties, despite the elements specified in the contracts that frame trade and contain criminal sanctions relating to the parties' responsibilities and possible disputes. Contract risks are seen as a risk factor on both the exporter and importer side.

Merchandise risks; are the risk that the production and quality standards and technical specifications of the exporters do not meet the expectations of the importer and are the risk situations that arise in terms of the exporter upon rejection or disapproval of the goods by the importer. This risk is also a kind of risk that may arise in terms of the standardization and inspection legislation of the importing and exporting countries.

Transport risks; are the risk of damage, loss, and deterioration during transport. On the other hand, the excessive increase in transportation costs according to market conditions, equipment and infrastructure deficiencies, prolongation of transit times, delays in delivery, and additional costs that may occur during transportation also constitute risks for both exporters and importers.

Payment risks; are collection-based risks such as the fact that the exporter cannot receive the cost of the goods from the importer or collect it with deduction or these are procedural risks that may arise for the exporter or importer due to the nature of the developed payment systems and risks related to fund transfer and exchange restrictions.

The collection risks are defined as the importer's avoidance of paying the cost of goods, in other words, these are also referred to as trade risks.

Payment term risks are those that arise as a result of behaviors that are contrary to the specified payment system framework. The delay or complete elimination of the payment of goods due to the failure of the exporter to prepare the shipment documents correctly, completely and on time is also referred to as the documentation risk in this risk group. In the context of the payment system

of the importer, the undertaking of various charges and commissions incurred in the bank is also a risk factor that must be assessed.

Transfer risk is a type of risk that occurs when the importer wishes to make payments, although various limitations in the importer's country's foreign exchange, banking, and fund transfer systems do not prevent transfers, or by imposing certain funds or taxes on payments, also referred to as financial risk.

Risks based on documentation and procedures; refer to the risks that may arise from the mistakes that the personnel involved in trade transactions may make on the documents to be carried during their duties and as a result of which may cause financial losses between the parties and the possible risks caused by the procedures. Risks such as failure to benefit from tax exemptions, confrontation with various customs penalties, confiscation of goods, loss of time or consequently increase in costs may occur due to documentation-related reasons and non-compliance with procedures or being affected by possible changes.

Market risks; are the risk that the financial structure of export or import companies may face due to fluctuations in market prices or price movements in the opposite direction. The main market risks are exchange rate risk, price risk, and interest rate risk.

The currency risk is a risk factor for both the exporter and the importer, increases create a risk to the importer and decrease create a risk to the exporter.

Price risk is the profit rates change the probability of the exporter or importer if a commodity is purchased by the exporter at a fixed price and sold in the world markets with a variable index, or the exact opposite possibility.

Interest risk is the risk arising from the changes in interest rates, it affects the expected return on any investment positively or negatively or affects the borrowings of the companies. The interest rate has a direct impact on the cash flows to be obtained or exported at maturity.

Country Risks:

These risks are arising from many factors affecting international trade, trade from policies, economic conditions or legal regulations to natural occurrences to the countries and negatively affect the exporters or importers. These risks are listed as follows.

Politic risks; states the general country risks restrictions placed on incoming or outgoing foreign exchange transfers, changes in laws, trade sanctions and embargoes and similar interventions caused by war, internal turmoil, terrorism, economic crisis, deterioration of international relations and similar reasons outside the control of exporters or importers. For these reasons, the importer may cancel the order, not receive the goods from customs or pay.

Risks based on legislation and regulations; are the scope of risks expressing that the exporters or importers are unprepared for the legislation and regulations in the country concerned and that they suffer material and moral damages due to these regulations. These risks represent many negative possibilities, from overpayment of taxes to the cancellation of import permits, from the use of trademarks to the restriction of distribution channels.

Geographical location, natural disaster, and environmental risks; explains the geographical location of the country of export or import and all the risks caused by natural and environmental disasters that may occur directly and indirectly in trade.

Social risks; demographic changes in the country of trade, cultural differences and studies, conjunctural, economic and political developments, social reactions and similar developments as a result of various international relations are among the risks affecting the development of international trade.

In the literature, various groupings are made regarding the definition of risks encountered in international trade. In addition, research is being conducted into the sources of risks. In a study conducted in the Maldives in 2020 under the leadership of the Asian Development Bank, a matrix was created regarding the main problems encountered in international trade and their sources. The focus group consists of government and private organizations from Maldives, which are directly involved in the cross-border trade process.

Figure 2: Key Pain Points in International Trade

No.	Pain Points	Importer	Exporter	Customs	Customs Broker	Ports	Airports	Shipping Agent	Freight Forwarders	Banks	Insurance	Regulators
1	Risk of trade document fraud	•		•								•
2	Multiple accounts lock-in	•	•		•			•				
3	Process duplication	•	•	•	•	•	•	•	•			•
4	Compliance enforcement			•								•
5	Cross-border collaboration			•		•	•			•	•	
6	Trust and reliability	•	•	•	•	•	•	•	•	•	•	•
7	Standardization	•	•	•	•	•	•	•	•	•	•	•
8	Security and privacy			•		•				•	•	•
9	Process transparency	•	•	•	•	•	•	•	•	•	•	•
10	Manual payments	•	•		•	•	•	•		•		•

BLOCKCHAIN

Blockchain is a concept that takes its name from its working logic and refers to a technological infrastructure developed with data blocks cryptographically chained to each other in the form of rings (Nakamoto, 2008, 2). Blockchain is a decentralized, peer-to-peer, transparent, immutable, and append-only data storage. It keeps a permanent record of writes called transactions. Multiple transactions are grouped in blocks. Each block in a blockchain contains its hash computed using a well-known hashing or proof-of-work algorithm (e.g., SHA256, ethash, and equihash) and the hash of the previous block called parent block (Bosu, et al, 2019: 2638).

A data block is a type of database that contains raw, unprocessed information. “Cryptographically chaining” in blockchain is a concept for data security and refers to the encryption of data so that only authorized parties can access it. Thus, data security and confidentiality are ensured.

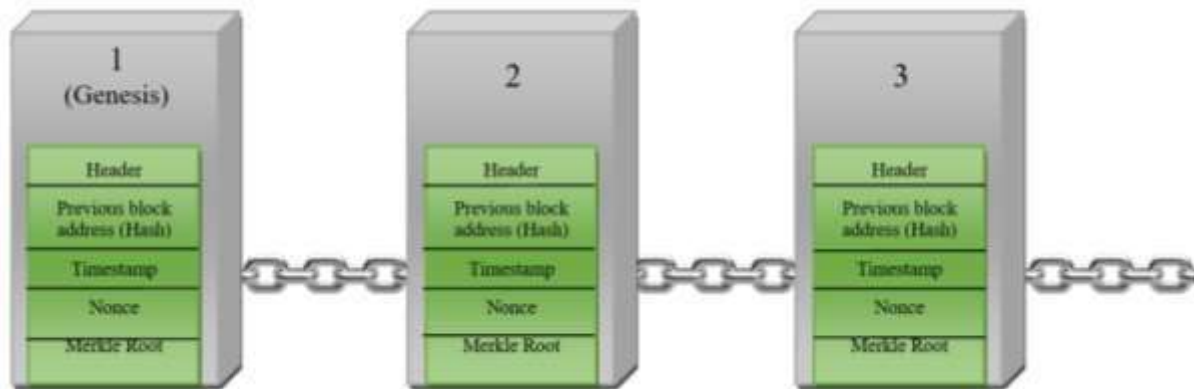
Blockchain refers to a structure that differs from a standard database with a central management or network where data is stored and managed. Since there is no such network in which data is stored in the blockchain, there is no central database or control center (Bambara & Allen, 2018: 6).

Structure of Blockchain:

Blockchain system is a structure consisting of blocks where data is stored. The blocks in question are arranged by adding them to each other linearly in a chain over the time they are created. The first starting block created in terms of time in the chain link is called "genesis" (Usta and Dođantekin, 2017: 118-119). Each block following the Genesis block contains a summary of the previous block. In the blockchain system, in order to change a piece of data, it is necessary to change all the blocks before it.

Blocks consist of block title and data (Bambara & Allen, 2018: 17-18).

- Header
- Previous block address (Hash value)
- Time information when the block was created (Timestamp)
- Nonce data required for proof of work,
- Merkle root



Header: A block header is used to identify a particular block on an entire blockchain and is hashed repeatedly to create proof of work for mining rewards. A blockchain consists of a series of various blocks that are used to store information related to transactions that occur on a blockchain network. Each of the blocks contains a unique header, and each such block is identified by its block header hash individually.

Hash Value: The root of the word “chain” in the definition of blockchain is based on the use of the Hash value of the previous block in connecting blocks together. According to Beck (2018), the Hash value is also like a fingerprint that guarantees that the data in the block is unique. Therefore, in case of any change or destruction in the original data, the Hash value of the modified data will be incompatible with the original fingerprint. Therefore, in order to change any data, the Hash password of all blocks in the blockchain must be cracked, not just the block containing that transaction. Although this scenario is theoretically possible, it is impossible in practice as new blocks are constantly added to the chain. For this reason, The Economist (2015) called blockchain technology the “Trust Machine” (Aktaş, 2018: 23-24).

Timestamp: The timestamp proves that the data must have existed at the time, obviously, in order to get into the hash. Each timestamp includes the previous timestamp in its hash, forming a chain, with each additional timestamp reinforcing the ones before it (Nakamoto, 2008, 2)

Proof of Work: It is a method used to prove that a computer works for a job. Nonce, which is used as a one-time key in computer science and is located in the block header, represents the data required for proof of work. In other words, it is the changeable number value used to produce the desired block summarization value. If a suitable block summary value is not formed, an attempt is made to create the appropriate summary value by increasing the nonce value (Drescher, 2017: 89-90).

Merkle Root: Considering that there are numerous data blocks in the blockchain system, the summary information of a certain number of data blocks is combined and collected under a single package, and then the data in these combined packages is collected under a single package at the last stage. Therefore, a single summary value is created for the data blocks in the group in question, and this summary value is called the Merkle root (Drescher, 2017: 88).

Network Designs for Data Security in Blockchain:

Blockchain technology can be designed in different network types by evaluating data privacy and security according to the structures and requirements of stakeholder institutions in supply chain management. These are open, consortium and private blockchain networks.

In the 'Open Blockchain' system, it is a network where all participants in the network have the right to access all information and every transaction made within the scope of the network is seen by all participants. "Bitcoin" and "Ethereum" are examples of this network.

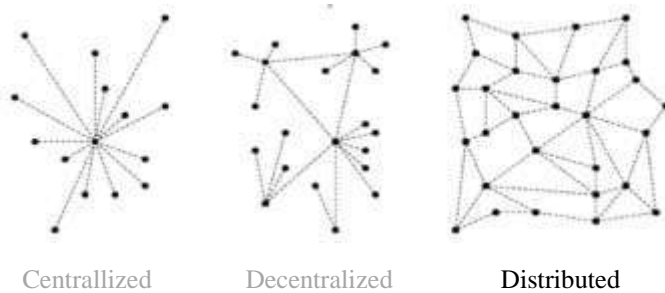
The "Consortium Blockchain" system is a type of network where although participation in the network is free, participants are subject to permission to access data and participate in the consensus process. Private Blockchain system is the Blockchain network where the authorities are most limited in terms of participation in the network and access to data.

In the "Open Blockchain" network, it is possible to ensure data security through encryption. However, the possibility of deciphering passwords has necessitated the production of new network structures. In this context, in the private Blockchain network, participation in the network, access to data and participation in the consensus process depend on permission. It is especially preferred by public institutions where confidentiality must be kept at a high level, military and police organizations responsible for ensuring security, international financial and regulatory institutions (Özyüksel Ekinçi, 2020: 86-87)

Key Elements of Blockchain:

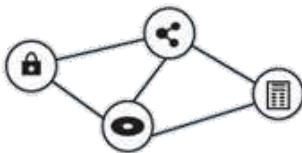
Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset could be either a physical entity or a digital record of value. Blockchain improves network efficiency by reducing duplication of work, automating network rules, and validating smart contracts. Once added to the blockchain network, data cannot be altered. This makes any blockchain solution highly trustworthy and removes friction among network members (Asian Development Bank 2020: 13).

Distributed Ledger Technology: All network participants have access to the distributed ledger and its immutable record of transactions.



With this shared ledger, transactions are recorded only once, eliminating the duplication of effort that is typical of traditional business networks.

Records Are Immutable: No participant can change or tamper with a transaction after it has been recorded to the shared ledger.



If a transaction record includes an error, a new transaction must be added to reverse the error, and both transactions are then visible.

Smart Contract: To speed transactions, a set of rules -called a smart contract- is stored on the blockchain and executed automatically.



A smart contract can define conditions for corporate bond transfers, include terms for travel insurance to be paid, and much more.

BLOCKCHAIN APPLICATIONS AGAINST INTERNATIONAL TRADE RISKS

Many applications developed with blockchain technology generally focus on goals such as simplifying transactions, increasing speed and flexibility, and reducing operational errors and costs. Programs carried out in line with these goals are very important for risk management. In the context of international trade, a blockchain network can be used to exchange data and documents as digital assets or can also be used to exchange values such as duty payments, fees, and expenses. Blockchain applications are expected to make significant contributions, especially since risks are multidimensional and need to be managed due to the nature of international trade. In this regard, platforms developed for different purposes and fields have begun to be used in international trade activities. Some applications developed accordingly are listed below.

Using Blockchain in Letter of Credit:

As it is known, Letter of Credit (L/C) is the safest form of payment used in cross-border trade and its use is quite common around the world. However, the burden of L/C transactions is also high. High and variable operational costs, reserves, time losses and similar burdens due to inconsistencies make L/C transactions risky. It is thought that today's blockchain technology will be used to reduce this burden.

Using federated blockchain, an L/C can be modeled as a smart contract between the importer and exporter to guarantee payment to the latter, if the trade merchandise is delivered to the importer in accordance with all specified conditions.

L/C is issued on Distributed ledger technology network consisting of the exporter, importer, issuing bank, advising bank and may be even the transporter.

The L/C terms and conditions can be drawn by the importer and stored immutably on the blockchain network as a draft. The draft is presented to issuing bank which after review will approve it. The draft can also be reviewed by the exporter and approved by his advising bank. The Network consensus ensures that there exist only one copy of L/C and all parties can work on it depending on their access rights. Once reviewed and approved by all parties, Issuing bank finalizes the L/C and issues it to the exporter. Any changes/amendment can be implemented using multi-signatory mechanism by granting appropriate permissions to participants. The blockchain smart contract contains terms and condition of trade (EPRS, 20200: 30)

Possible participants;

- cross-border trading parties (exporters/importers/traders)
- banks and credit institutions
- shipping agents and freight forwarder
- customs brokers
- related customs departments
- insurance agencies

Advantages;

1. LC requirement are documented in a smart contract which exactness and precision on the contractual conditions like time and place of delivery, mode of delivery and quality of the product.
2. It allows for more transparency around transactions and operations, including everything from tracking invoices to digitizing documents.
3. The issuing bank can verify condition on the basis of documented submitted by exporter/advising bank effectively removing ambiguity.
4. All stakeholders have visibility of the latest state and any discrepancies can be resolved faster.
5. Any change/amendment can be processed faster and in cost-effective way through a multi-signatory mechanism.

Using Blockchain in Open Account and Financing:

Blockchain solution for cross-border payment has the potential to solve inefficiencies and provide a fast, cheap and secure alternative to traditional banking methods. Blockchain solves these challenges by streamlining the process and simultaneously storing each transaction on a secure distributed ledger. The implementation of blockchain technology in trade finance is expected to facilitate the existing traditional methods that are associated with high costs and paper heavy processes.

The primary aim of blockchain solutions for open accounts is to provide fast and transparent transactions while avoiding non-payment risks in the process of supply chain financing. In this context, blockchain-based platforms facilitate all stages of trade finance, ranging from order creation to payment execution. In particular, the use of a smart contract in a permissioned blockchain, provides guarantees of payment and automatic settlement when conditions determined by the parties are met.

However, the potential lack of legal recognition of a digital system, and the need to settle for a common technical infrastructure are the main limits to this use case development.

On the other hand, transactions on the blockchain can be made protected and less costly, without the need for approval processes, through payments made through digital currencies. He predicts that in the future, the use of technology and cryptocurrencies will have a major impact on the financial inclusion of developing countries and will be highly adopted in the international remittance market. However, it is also possible that the use of blockchain for cross-border payments may increase risks of instability, given the volatile state of digital currencies used as a medium of exchange on the blockchain.

Possible participants;

- cross-border trading parties (exporters/importers/traders)
- banks and credit institutions
- shipping agents and freight forwarder
- customs brokers
- related customs departments
- insurance agencies

Advantages;

1. The digitalisation of open account financing can be expected to accelerate the trade transaction process while enhancing transparency and security.
2. The creation of a smart contract, can make trade finance transactions considerably faster (by removing long period of time in which actors wait for the other to receive and validate paperwork) and more transparent for both trading partners (by providing a shared, common and secure infrastructure in which transactions are stored and visible).
3. The automated transaction of smart contracts can avoid non-payment risk for the exporters as the transaction is concluded simultaneously and validated by all the actors involved.

4. Blockchain solution is beneficial to banks, as it avoids the challenge of coordinating multiple players involved in the transaction, fraudulent risks, costly procedures and paper heavy documentation.
5. Cross-border payments powered by blockchain can provide significant benefits to businesses and consumers by reducing transaction fees for international payments.
6. The use of blockchain can also allow for reducing delays in reconciling payment information. Companies and individuals will benefit significantly from blockchain technology as the current banking system uses a complex and inefficient infrastructure for cross-border payments that may involve large numbers of counterparties.

Blockchain in Document Usage and Documentation Transactions:

Risks related to documentation and procedures in international trade generally cause negative consequences such as disruption of labor law between the exporter and importer as a result of troubles and delays that may be experienced due to missing or incorrect documents. However, differences in the legislation and procedures of the relevant countries and sectoral practices may cause delays, restrictions or even obstacles in customs procedures, disruptions in transportation, and problems related to payment and delivery in commercial processes.

All the participants of the blockchain trade network are able to digitally share data and documents. These data are immutably stored on the blockchain ledger and documents are cryptographically indexed in the ledger. To enable faster read or write capabilities, documents are stored on an off-chain database component and cryptographically linked to the ledger.

On the other hand, blockchain platforms will accelerate the digitalization of international trade and benefit from the advantage of paperless trade. As it is known, there are big differences between business processes carried out with paper documents and business processes carried out with paperless documents. However, international standards for paperless trade have not been fully established. Although it is necessary to use a single and common system among institutions to ensure harmonization between countries, it is difficult to ensure international coordination between institutions so that a project to be invested can establish a common system (Civelek ve Özalp, 2018: 3).

Possible participants;

- customs brokers
- cross-border trading parties (exporters/importers/traders)
- shipping agents
- freight forwarder
- port, airport, station, logistic village operators.
- related customs departments
- one cross-border customs agency to handle the customs application for exchange of documents
- banks, and insurance agencies

Advantages;

1. Necessary documents can be stored securely in electronic environment and viewed simultaneously by stakeholders.
2. Costs arising from writing and transportation costs of printed documents can be eliminated,
3. The need to constantly check the information and documents obtained for the purpose of determining the reliability of organizations that are parties to international trade can be eliminated,
4. Document fraud can be prevented with single-stage or spot control,
5. Since it will contribute to identity recognition and prioritization practices, reliability and acceleration in customs, insurance and banking transactions can be ensured (Özyüksel Ekinci, 2020: 91-92).

Blockchain in Supply Chain:

Logistic processes such as customs, storage, transportation and certification involve many risks. These risks lead to problems such as high costs, time losses, reliability problems, and regulatory obstacles.

Blockchain technology's ability to perform transactions without intermediaries or to minimize intermediaries and to enable reliable and transparent recording of documents in the digital environment can provide solutions to the problems of supply chain management. It is expected that applications developed using blockchain will increase the speed in supply chain processes, establish transparent and reliable processes, and increase efficiency by reducing costs.

Potential customs-focused blockchain use cases largely relate to increasing transparency through information exchange, as well as streamlining and reducing the cost and time of customs operations by replacing paper-intensive tasks with relevant blockchain applications.

In particular, customs can improve the process of obtaining information from primary sources for declaration purposes through a permissioned blockchain.

Blockchain-based platforms are also being developed to optimize the pre-arrival process of customs goods and their rapid release by sharing relevant information in real-time. Another possible use case for distributed ledgers in customs is automatic analysis and selection of customs documents based on some predetermined criteria found in smart contracts. Such platforms require the involvement of multiple governments so that participants can maximize the benefits of commercial information exchange. However, the implementation of a blockchain-based solution for sharing confidential and sensitive data between governments has been extremely slow due to the complexity of intergovernmental document exchange processes and the lack of standardization and trust in the security of decentralized technologies. Therefore, it may be difficult to ensure the establishment of a global-scale platform for data exchange, as a sufficient number of stakeholders will be needed to take part in such a project.

Anti-counterfeiting blockchain solutions will be developed to help manufacturers protect product value, which is strongly associated with its unique identity. Blockchain technology will help prevent counterfeiting (providing a unique identifier stored in a secure database) and track product transfer throughout the supply chain. Given that goods on the blockchain are tracked throughout the supply chain and transactions stored, retailers can verify whether the products received are

genuine. Moreover, the verified history of each product will help consumers identify the authenticity of the products.

Using blockchain for traceability of goods should help increase market transparency and have a positive impact on product brands. The use of blockchain will provide a reliable database where all stakeholders throughout the supply chain can register for real-time information about a particular good (transit location, time and conditions). This will increase the traceability of goods, for example by helping to track any breaches of the cold chain (important for food safety and medicine safety).

On the other hand, digitalization of supply chain exchanges can make international trade exchanges faster and more transparent with the help of blockchain (EPRS, 2020b: 30-38).

Possible participants;

- customs brokers
- cross-border trading parties (exporters/importers/traders)
- shipping agents
- freight forwarder
- port, airport, station, logistic village operators.
- related customs departments
- one cross-border customs agency to handle the customs application for exchange of documents
- banks, credit institutions
- insurance agencies
- national and international authorities

Advantages;

1. Blockchain applications can simplify and speed up customs clearance procedures by reducing the time required for customs clearance processes, including data verification.
2. As technology becomes widespread, customs administrations can reduce administrative workload and optimize their purchasing capacity.
3. The stored distributed ledger and tamper-resistant data guarantee the authenticity of the information and can make its transmission reliable to the authorities of the importing country.
4. Through the use of smart contracts, it can help importers pay customs duties easily. Thus, control over tax payments may be easier for customs authorities.
5. Blockchain-based government-to-government platforms can optimize traditional paper-intensive administrative processes.
6. It can help detect and prevent fraud and other malicious activities internationally by bringing greater transparency to intergovernmental trade relations.

7. Real-time access to all relevant information by all participants in international trade processes can reduce administrative costs.
8. Provides greater transparency in asset tracking and can help avoid shipping delays.
9. Shipping companies can minimize shipping costs by optimizing load capacity.
10. The entire logistics process can be accelerated by using smart contracts based on the completion of shipping steps.
11. Importers, exporters and shipping companies can reduce their own risks so that all potential losses can be covered in a timely manner.
12. Insurance companies can quickly manage risks for faster payment of all premiums and claims compared to traditional paper procedures.
13. Brokers can reduce their administrative fees and focus more on client relationships.
14. By tracking and monitoring the identity of the products in the supply chain, fraud can be prevented and original products can be verified, and product transfer of value can be carried out in a healthy way.
15. Traceability of goods can ensure supply chain reliability, information access, market transparency and prevention of potential risks.

CONCLUSION

The basic advantages of security, speed and low cost that Blockchain technology is likely to provide due to its nature can create an innovative and advanced solution to eliminate the risk elements of international trade. Program infrastructures designed on target platforms such as payment, finance, transportation, customs procedures, permit processes of public & private institutions in international trade can be used to eliminate existing risks with these features.

However, while blockchain-based solutions can in theory deliver huge savings to importers, exporters, shipping companies and other stakeholders, real-life implementation impacts may be less significant due to some challenges. The first is associated with the current poor adoption of such digital solutions even by commercial operators. Despite the growing interest in technology, companies still prioritize more traditional procedures on international exchanges. A blockchain-based platform must have a sufficient number of participants (critical mass) to unlock the maximum advantages of blockchain in terms of fast and reliable information sharing.

Blockchain solutions are still new and adoption is relatively low, which can make their use inefficient. It is also debatable whether blockchain is really needed for such applications or whether the same result can be achieved with less advanced and more widespread technologies. More importantly, the real added value for the consumer of increased traceability and information about product origin is relatively limited, and therefore the promotion of its implementation can be limited only to certain products and consumer populations.

It is thought that blockchain applications, which are seen in individual applications today, will be used in many international trade platforms in the future.

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Streaming Stored Video-Case Studies: Netflix, Youtube and Kankan

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This paper deeply explores the dynamics of stored video streaming through in-depth case studies of three popular platforms: Netflix, YouTube and Kankan. In an age where the consumption of digital content has become an integral part of our lives, it is essential to understand the development, strategies and influence of these companies in the streaming industry. The first case study explores Netflix, providing an overview of its history, business model, content strategy and technology infrastructure. By analyzing the challenges Netflix has faced, this study provides valuable insight into the evolution of the streaming industry.

The second case study focuses on YouTube, admiring its incredible growth, monetization strategies, user-generated content, and social impact. It also explores YouTube's impact on traditional media and the lessons that can be learned from its success, emphasizing its role as a cultural and economic phenomenon. The third case study introduces Kankan, a Chinese video streaming platform, providing an overview of its unique features, market position and global ambitions.

By understanding Kankan's path, this study highlights the diversity of the global streaming market. The paper also investigates key topics such as technology and infrastructure, content licensing and copyright issues, user experience and personalization, business models, and future trends and challenges facing the streaming industry. This research provides a comprehensive analysis of video streaming, providing valuable insight for academics, industry professionals, content creators and digital media enthusiasts.

Key words: transmission, storage, platforms

Entry

Streaming stored video is a technological process used to display video of recorded or stored on a server, continuously and in real time through computer network, without downloading the full video before viewing.

To illustrate this concept let's take an example, let's assume we have a movie stored in a server or on a storage device. Streaming this movie would allow us to watch the movie in real time without having to download the full movie. Users can start viewing the movie immediately, and the system will broadcast video with small parts of it, providing a satisfactory user experience.

Case studies are a very important tool for researchers, students, and professionals in many popular fields. Case studies are in-depth descriptions and details of a particular event, occasion, organization, group, or situation.

Case studies in the field of video streaming for platforms such as Netflix, YouTube and Kankan have great importance to understand the challenges, developments, and successes that these platforms have come across the online video market. Some of the important elements of the cases studies for these platforms are:

1. **Development and Growth:** Case studies can examine the development history of each platform, including their founding, launch strategies, and growth in the video streaming market. These cases may include the start-up period and the challenges that platforms have encountered on their way to success.
2. **Content strategies:** Case studies can analyze how these platforms have selected, produced, and presented their content. For example, how Netflix has invested in original content, how YouTube promotes independent creators, and how Kankan offers licensed or original content.
3. **Business Model:** Case studies can examine the business model of each platform. For example, how these platforms are monetized through advertising, subscriptions, or content purchases and how this business model has changed over the years last.
4. **Technology and Infrastructure:** Case studies may include analysis of technology and infrastructure used for video streaming. For example, how these platforms have developed their own servers, networks, and software to ensure quality high video streaming.
5. **User Experience:** Case studies can explore user experience in each platform, including their preferences, personalization impacts, and challenges that users may encounter.
6. **Competition and Market Strategies:** Case study analysis can examine the competition between these platforms and how they have developed their strategies market to gain audience and remain competitive

Technological Innovation: Netflix has invested massively in streaming technology, ensuring high quality of video transmission and compatibility for devices various, including smartphones, tablets, and smart TVs, computers desktop, laptop also on consoles such as: PlayStation, Xbox.

International Market: International expansion is an important element in Netflix's business model. The platform has launched its service in many countries in around the world, allowing it to grow its customer base and win in global markets.

This business model has helped Netflix become a market leader in video streaming and have a substantial impact on how audiences consume digital content. The platform has become one of the most successful streaming platforms, supporting a wide range of content and constantly innovating to meet the preferences of its users.



Figure 1: The Netflix Business Model

Introduction to YouTube

YouTube is a popular video sharing platform that allows users to upload, watch and share videos. It is one of the largest and most popular platforms on the Internet, and has profoundly influenced the way digital content is consumed and created.

1. Growth of Mobile Apps: YouTube mobile apps and ease of use smartphones for watching video made the platform used by an audience even wider.
2. Influence on Popular Culture: YouTube content and the popular personalities that are created on the platform have become part of popular culture. Content and memes that are created on YouTube have exploded onto the internet and become globally popular.
3. International Growth: YouTube has made a big effort to expand in markets international, translating content and presenting local content to audiences different.

These combined factors have helped grow and popularize YouTube and have it one of the most successful video sharing platforms in the world. The platform continues to evolve and profoundly influence the way content is consumed and created digital.

Kankan

A Chinese video streaming platform

Kankan is a Chinese video streaming platform that has played an important role in digital media market in China. This platform is known for offering a wide range of video content, including movies, TV series, music videos, and much more.

Impact on the Chinese Media Industry: Kankan has deeply influenced the industry digital media in China. This platform has helped to increase competition and innovation, causing other platforms

to offer higher quality content and advanced. Due to the large Chinese market and the development of the Internet, China is one of the countries where video sharing platforms have had rapid growth and great impact.

Kankan is an important example of a successful video streaming platform in the Chinese market and shows how these platforms have changed the way users consume multimedia content and how new opportunities are created for producers and the artists.

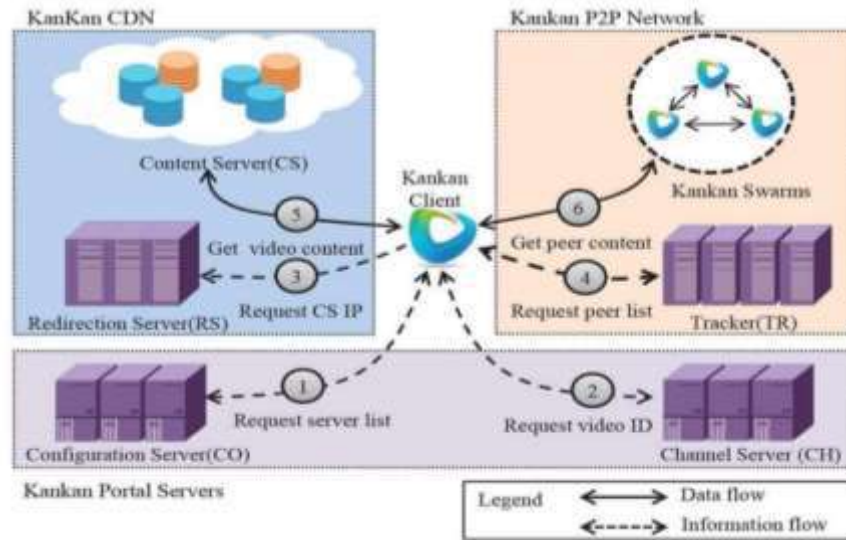


Figure 2: Hybrid Model and Kankan Streaming Architecture

Streaming Technologies and Protocols

When it comes to online video streaming protocols, the terms RTMP are mentioned, HLS, MPEG-DASH and Web RTC and we refer to the transport layer of packets from point A to B. Because different protocols play a big role in terms of transmissions videos in real time we cannot say that one is more important than the other since they together they create a quality that a user expects when watching a video online. Streaming technologies and protocols are considered primary to the operation of video streaming platforms such as Netflix, YouTube, and Kankan. These technologies and protocols ensure the transmission of multimedia content from the source to the device users in real time.

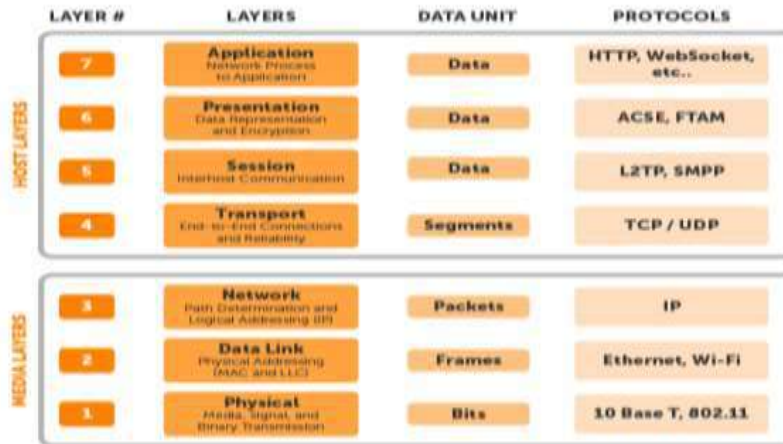


Figure 3: Protocol Layer

Here are some features of CDNs for YouTube:

1. **Improved Loading Speed:** YouTube has distributed its CDN servers in many geographical locations of the world. This makes it possible for videos to load and display faster for users, as the content is placed nearby their audience.
2. **Reducing Load on Main Servers:** By using CDN, YouTube reduces load on their main servers. Copies of videos and other data are to store on the CDN servers, reducing the traffic going to the original servers YouTube. This is important to ensure that the platform remains stable as well in busy periods.
3. **Security and Stability:** CDN ensures that YouTube content is more secure and stable. Users have a better experience of watching uninterrupted video, as the videos are enjoyed by the CDN servers.
4. **Maintenance and Monitoring:** Using CDNs allows YouTube to track and monitor network performance and identify problems faster. This can improve the quality and consistency of their service.

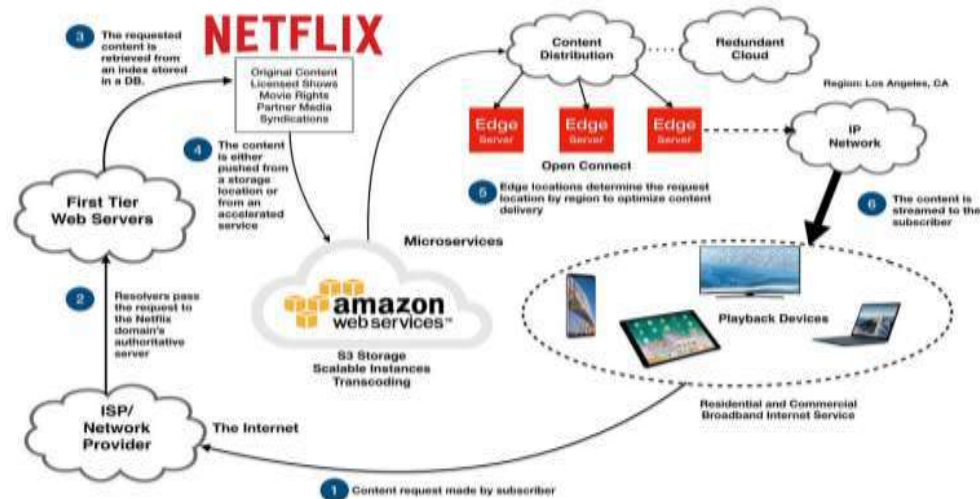


Figure 4: Behind the scenes at the Netflix show in Los Angeles

Concrete examples of video compression for platforms such as:

1. Netflix: Netflix is known for the high quality of their content. They use video compression through advanced standards such as HEVC (High Efficiency Video Coding) to ensure high video quality at the limits of available bandwidth. This means that users can watch videos high quality, even in connection with lower Internet speed. For example, a movie streamed in 4K (Ultra HD) by Netflix uses HEVC compression to ensure high quality and smaller file sizes.
2. YouTube: YouTube uses video compression to allow users to upload and see their videos. They use different standards like H.264 and VP9 for it compress the uploaded videos. For example, a video uploaded to YouTube can use H.264 compression to reduce file size video and to ensure acceptable quality for users.
3. Kankan: Kankan is a Chinese video streaming platform. They use compression technology to ensure that their videos are suitable for internet connections in China and for their wide audience. Video size and streaming quality are different from Netflix and YouTube due to market characteristics and technological infrastructure in China.

Video streaming platforms like Netflix, YouTube and Kankan are updated to continuous way to adapt new technologies and provide rich experiences users. Here are some of the emerging technologies, such as virtual reality (VR), 5G and augmented reality augmented reality (AR), and how they might impact these platforms:

1. Netflix: VR (Virtual Reality): Netflix is experimenting with VR content for it tailored video viewing experience. This means that users can watch their favorite movies and series in a virtual environment, watching used VR devices. This will give a more immersive feeling of viewing the video.

5G: 5G is a new mobile network technology that will help with charging and high-speed video streaming. This will improve experience of Netflix users, ensuring faster downloads and uninterrupted streaming.

Regulatory and Privacy Matters

Regulatory and privacy issues are central to video streaming platforms such as Netflix, YouTube and Kankan. These platforms are under pressure from regulators and should protect their users' data. Here are some of the regulatory issues privacy they must address:

Regulatory Affairs:

1. Copyright and Licensing: Platforms must ensure that all content that they offer are licensed and in compliance with copyright law. It includes deals with movie studios and content creators.
2. Control of harmful content: Regulators and authorities have principles of certain about censored or harmful content. Platforms must have policies and clear mechanisms to censor and remove such content harmful to users.

3. Protection of children's rights: Platforms are obliged to ensure that Harmful or inappropriate content for children is monitored and restricted in accordance with the law on the protection of children's rights.

Privacy Issues:

1. Collection of User Data: Platforms must ensure that the data users' personal data to be protected and treated with respect. This includes registration information, user preferences and their activities on the platform.
2. Personalized Recommendations: Using artificial intelligence to deliver Personalized recommendations must be made in accordance with privacy policies and should be transparent to users.
3. Increasing Privacy Regulations: Privacy laws are diverse in it all over the world and are constantly changing. Platforms must follow developments of adjustments and be ready to meet their demands.
4. Data Security: Platforms must ensure that user data protect against security risks and threats such as pirate attacks informatics. Regulatory and privacy issues are complex and different in each country. Platforms should have clear policies and procedures to address and follow the best security and privacy standards.

Conclusion

Key lessons from the case studies

Case studies are a valuable way to learn from the experience of platforms streaming video like Netflix, YouTube and Kankan. Some of the key lessons you can highlights from the case studies include:

1. Innovation is key: Successful video streaming platforms are the ones that have be willing to innovate continuously. They have developed technologies and their strategies to adapt to changes in technology and preferences users.
2. Deep understanding of the audience: Critically determines the success of the platforms deep understanding of their audience. They must know preferences, habits, and requirements of their users to provide personalized content.
3. Security and Privacy are important: Protecting user data and the security of platforms are big challenges. Platforms should take care to ensure that data and to address various security threats.
4. Markets vary: Each market has its own characteristics and circumstances. Platforms should adapt to these markets, including regulatory and cultural challenges.

5. Learning from competitors: Case study can bring a good way of it learned from competitors. Platforms can identify successful strategies and those that have not worked to use them to develop their strategies.
6. Repeat use of technology: Platforms must follow developments technology and ensure that their technologies are used efficiently and efficient.
7. Strengthening change and adaptation: Platforms must be open to change and ready to rapidly adapt to this changed streaming environment the video.
8. Building their trust and brand: Trust and brand image are essential to attract and retain an audience. Platforms should work for it build and maintain trust with their users.

Some problems about streaming stored video and their solution

1. Video Buffering

Video buffering means storing data in this case video in memory temporary buffer which means you can access the video whenever you want as long as is stored in the register buffer. Buffer problems are hard to see if any everything works optimally.



Figure 5: Video Buffering problem

2. Internet connection problems

Internet connection problems are situations where it is not possible to establish or a stable and fast connection to the Internet is maintained. These problems can be different and affect users' video streaming experience.

3. Problems with the device

Device problems are situations where devices (such as computers, phones, or televisions) that used to watch streaming videos have massively impacting deficiencies on screen display. These problems can be hardware and software.

4. Problems with the streaming provider

Problems with the streaming provider are situations where the company or platform e streaming (such as Netflix, YouTube, or Kankan) has technical problems affecting the user experience. These problems may include:

- Slow content loading: Problems with servers or network e streaming providers can lead to slow content loading, causing constant buffering for users.
- Service Disruption: Service interruptions or server crashes may cause connection loss and streaming interruptions.
- Lack of desired content: Issues with content licensing may lead to the removal of certain titles or content desired by the provider of streaming.
- Lack of possibility of high quality streaming: Platforms that do not offer options for streaming in high quality, including 4K or Ultra HD, can cause frustration for users.

Solutions to these problems in short points:

- Use Content Delivery Networks (CDN)
- Check the internet with a speed test, is it functional?
- Don't overload any device with too much data
- Use wired internet instead of wireless

Conclusion:

In conclusion, video streaming is an important part of today's media environment and is constantly growing. Video streaming platforms like Netflix, YouTube and Kankan have changed the way multimedia content is distributed and consumed by audiences worldwide. They have provided rich user experiences and innovated in great ways. In this area, a constant problem is market stability and competition in growth. With the entry of new video streaming platforms and strong competition from traditional media markets and other existing platforms should be in focus durability and survivability. This is a complex challenge that requires strategy careful management and continuous innovation.

A potential solution to this problem is the diversification of content delivery. Platforms they need to explore new areas and develop original content that can appeal new audiences. The use of new technologies, such as VR and AR, and the expansion of infrastructure technology to deliver high-quality content can be the tools of success. Also, collaboration with independent content creators and small studios can create opportunities new for expanded content and audience.

In a world changed by technology and user preferences, streaming platforms of video must be prepared to evolve and capture the potential advantages that this changed environment offers.

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Teachers' Knowledge of the Phenomenon of Bullying

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Abstract

The purpose of this study is to determine the level of knowledge and awareness of teachers about the phenomenon of bullying in schools and to develop suggestions for intervention strategies related to bullying. The importance of researching this problem comes from the negative impact it has on all its participants, including students who suffer from bullying, those who commit bullying and the school environment as a whole. School bullying is the most common type of school violence. Bullying is defined as, a child displaying behavior that will harm another child physically, verbally or in a virtual environment (Olweus, 2005). The design of this research is qualitative, which aims to benefit teachers' knowledge about the phenomenon of bullying in schools. To achieve the objectives of the research, a series of interviews with teachers will be conducted. The instrument used for data collection is a questionnaire consisting of 18 open questions, which aims to provide detailed information from teachers. The participants of this research are the teachers of primary and lower secondary education from grades 1-9. While the school in which the research will be conducted is the "Elena Gjika" Primary and Secondary School in the capital of Kosovo, Pristina.

Keywords: Bullying, bullying in schools, teachers' knowledge.

Introduction

Bullying is not only a problem in Kosovo but all over the world. Even though the works and prevention efforts do not stop, the phenomenon of bullying always requires different strategies and solutions, because the cases are different and bullying can happen wherever we are. The importance of researching this problem comes from the negative impact it has on all its participants, including students who suffer from bullying, those who commit bullying and the school environment as a whole. According to various researches, there are many actors that influence the rise of bullying, such as the digital world, the attitudes of parents, the school environment, etc. Among the main reasons I chose this topic, is that the phenomenon of bullying is growing day by day, we can better understand this among the many researches on cyberbullying knowing that technology is developing very quickly and is used a lot by young people. School bullying is the most common type of school violence. Bullying is defined as a child exhibiting behavior that will harm another child physically, verbally, or in a virtual environment (Olweus, 2005). The person who bullies is called the bully, and the person who is bullied is called the victim. This research with the topic "Teachers' knowledge about the phenomenon of bullying" aims to determine how much knowledge teachers have about the phenomenon of bullying and how much they are able to identify and treat such cases in schools. It is very important to develop different strategies and policies for the prevention of bullying because many researches show the negative impact that bullying causes such as it has been reported that victims may experience problems requiring clinical help, feelings of dissatisfaction and insecurity at school, school phobia, depression, anxiety, sleep difficulties and bedwetting at night (Cole et al., 2016; Östberg, Modin, & Låftman, 2018). In addition, it has been observed that children who have been bullied have low self-esteem and somatic symptoms, experience loneliness and isolation (Boulton & Underwood, 1992; Schwartz, 2000; Williams, Chambers, Logan, & Robinson, 1996). Additionally, it has been determined that bullied students experience psychological problems such as suicidality, anxiety, and depression and exhibit behaviors such as truancy, dropout, and poor achievement (Greenbaum, Turner, & Stephens, 1988; Olweus, 1993; Rigby & Slee, 1999). Preventing bullying requires a shared commitment and ongoing cooperation between parents, students and teachers. Their cooperation is essential to achieve a safe and supportive school environment. In addition, schools should have their own strategies for the prevention of bullying and give due importance to this issue.

Review of Literature

Bullying is recognized as a common social problem in schools. This form of behavior among students causes physical, emotional and social damage to the victim. Bullying poses a serious threat not only to the victim, but also to society in general. Therefore, it is important to find and implement effective solutions to this problem.

"Bullying has serious effects on the mental health of targeted children. Studies show that children who are bullied are more likely to experience problems such as anxiety, depression, low self-esteem, frequent school absences, and academic failure. In addition, children have suicidal tendencies and this is one of the most serious consequences of bullying". Although most research has focused on the individual consequences of bullied people, previous research has highlighted

the importance of understanding bullying in the context of schools, because it is where bullying occurs more often Olweus, (2013).

Although bullying is a common problem in the school environment, it is quite difficult to solve, due to the complexity of the issue. To combat this problem, first of all, it is necessary to have detailed information about bullying. In addition, not only students, but also teachers have an important role in the fight against bullying.

Bullying is the practice of repeated and unwanted behavior towards another person or group by a person or a group, derived from a position of power Shaqiri, 2019. This form of behavior causes the victim to suffer physical, psychological, social and academic harm . Although bullying can be seen in all age groups, it is especially common in Limani and Haxhibeqiri school-aged children. The British researcher Smith 2020. On the other hand, emphasizes that bullying is a power relationship and this power is used against the victim (p. 83). Researcher Turk Yurtçu (2021), on the other hand, points out that bullying is not limited to physical attacks.

Many theories have been proposed regarding bullying, such as social learning theory, conflict theory, and the role of environmental factors. Social learning theory argues that individuals shape their behaviors by following the patterns around them Yılmaz & Şahin, (2020). Conflict theory, on the other hand, argues that social inequalities and existing contradictions in society form the basis of bullying behaviors Berisha, (2019).

The issue of bullying, which was of interest to scientists in the 1970s, has become an even more prominent topic after the incident that resulted in the suicide of students who were exposed to peer bullying in Norway in 1982. After this incident, the Norwegian Ministry of Education began studies to investigate peer bullying. Similarly, the Swedish researcher Heinemann conducted studies on peer bullying by observing the behavior of students in Kanadikırık Kindergarten Kılıç, A & Kılıç, 2013. Various studies show that bullying behaviors are common all over the world. For example, a study conducted in Kosovo found that 65% of school students were bullied and 48% were bullies Krasniqi, 2019. Similarly, a study conducted in Turkey showed that 25% of students were exposed to bullying (Yılmaz & Şahin, 2020, p. 8). These findings show that bullying behaviors are a common problem worldwide, and not only in Kosovo. However, bullying behavior may be less common in some countries. For example, studies conducted in Scandinavian countries found that bullying behaviors are less common and effective policies are implemented to prevent bullying Salmivalli et al., (2011).

Many effective policies have been implemented to prevent bullying in the Scandinavian countries. Some examples are:

1. Education programs: Scandinavian countries offer education programs on bullying from an early age. These programs aim to teach students empathy, respect, communication skills, conflict resolution techniques and other social skills.
2. School policies: In Scandinavian countries, schools have strict guidelines for dealing with bullying. Students who do not comply with these principles may receive disciplinary action.
3. Teacher training: Scandinavian countries provide teachers with anti-bullying training. These trainings aim to teach teachers techniques for recognizing the signs of bullying, communicating with students and preventing bullying.

4. Parent education: Scandinavian countries offer training to parents to combat bullying. These trainings aim to provide parents with guidance on recognizing the signs of bullying, how to treat their children and how to protect their children from bullying.

These policies have been effective in reducing bullying behavior in Scandinavian countries. However, the problem of bullying has not completely disappeared and studies are constantly being conducted on this issue.

IN 2020, the teachers who participated in the research, for the prevention of bullying in schools; They suggest that families of students be given family education, cooperation with families, empathy training for students, psycho-social interventions, problem-solving skills, success and training to prevent disciplinary punishment. In addition, they suggest that family counseling is needed with studies that will be suitable models for students.

In the article Yoneyama, S., & Naito, M. 2021, the types of bullying in school are discussed. The authors covered a wide range of types of bullying, including physical, verbal, social and psychological bullying. While physical bullying is based on the aggressor's violent behavior, verbal bullying is when the aggressor uses words to verbally insult or humiliate another person. Social bullying is when a person is isolated or humiliated by others. Psychological bullying is when someone is emotionally abused, humiliated or manipulated. The authors also referred to the effects of these types of bullying. They also looked at different strategies that can be used to prevent and respond to bullying.

Problem Definition

Our research on teachers' knowledge of the phenomenon of bullying is important for the prevention of bullying, the identification and treatment of victims and perpetrators of bullying, as well as for cooperation with parents and other professionals to address this issue in school settings. This makes them better able to identify, intervene and support students who are victims of bullying. Teachers have an important role in preventing bullying by developing educational programs and promoting awareness and positive behaviors. Their knowledge of bullying enables them to identify and deal with victims and perpetrators of bullying effectively. They can also collaborate with parents and other professionals to address cases of bullying and find common solutions.

The purpose of this study is to determine the level of knowledge and awareness of teachers about the phenomenon of bullying in schools and to develop suggestions for intervention strategies related to bullying. For this purpose, we will seek answers to the following questions;

1. Study question: How much knowledge do teachers have about the phenomenon of bullying?

Under the woods are;

- a) How the knowledge and perceptions of male and female teachers differ regarding the phenomenon of bullying in schools?*
- b) What are the differences in knowledge about the phenomenon of bullying among teachers young and old?*
- c) How able are teachers to distinguish bullying from other forms of violence?*

METHODOLOGY

The design of this research is qualitative, which aims to benefit the knowledge of teachers regarding the phenomenon of bullying in schools. In order to achieve the objectives of the research, a series of interviews will be conducted with teachers from the "Elena Gjika" Primary and Secondary School. The interviews will be conducted using a list of semi-structured questions and leaving space for teachers' free responses. After the completion of the interview phase, an analysis process will be carried out to identify the main themes and understand the general perspective of the teachers regarding bullying. The instrument used for data collection is a questionnaire consisting of 18 open questions, which aims to provide detailed information from teachers. The questionnaire is divided into three parts. In the first part, teachers are asked to provide demographic information, such as age, gender, work experience in the field of education, level of education, etc. These questions help classify and analyze data based on teacher characteristics. In the second part of the questionnaire, there are 9 open questions that aim to reveal the knowledge of teachers about the phenomenon of bullying in schools. These questions allow teachers to provide detailed and in-depth answers, sharing their thoughts, experiences and views regarding bullying in the school environment and 3 closed questions. The third part of the questionnaire gives the opportunity for primary and lower secondary teachers to add their opinions. This section is specifically designed to ensure that first through ninth grade teachers have the opportunity to express their specific thoughts and perceptions regarding bullying. We have chosen this data collection methodology to gain the knowledge and opinions of teachers about bullying in schools. The questionnaire used is suitable to provide rich and in-depth information from the teachers' responses. This method allows us to discover different perspectives, personal experiences and knowledge of teachers, contributing to a specific and qualitative research in the field of school bullying. The findings and questions of other researches play an important role in shaping the main focus of this study.

Participants and samples

The participants of this research are the teachers of primary and lower secondary education from grades 1-9. While the school in which the research will be conducted is the "Elena Gjika" Primary and Secondary School in the capital of Kosovo, Pristina. The report that will be taken from the "Elena Gjika" Primary and Secondary School, prepared by the school directorate, will be used to determine the sample. According to this report the total number of teachers of grades 1-9 are 70. My sample frame is non-probability while sampling is convenience sampling, it is important to use non-probability methods in research in science and social studies because they offer a broader and deeper approach to a particular topic. Convenience sampling is suitable to obtain the desired data in an easier way, for this reason we have selected this sampling. In SHFMU "Elena Gjika" there are a total of 70 teachers, of which 30 respondents will be interviewed, 15 teachers will be from grades 1-5. Also, 15 teachers will be selected from grades 6-9. 10 of the teachers are male and 20 of the teachers are female.

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A variety of Biotechnology Applications in the field of Health Medicine

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Abstract.

Biotechnology is an important and wide field that deals with the use of living organisms to develop products beneficial for sustainable development. Biotechnology devices and procedures provide new avenues for researches to develop products and technologies that could help in improving the quality of human life on earth (Yang P., 2021). The aim: This study is to have an overview of major Biotechnology applications in the field of medicine. Material & Methods: Recently literature and scientific researches. This descriptive study highlights a brief review of various applications of medical biotechnology. Results & Conclusions: In the field of medicine, there are a variety of biotechnology applications². Some of them include the following: **Molecular diagnosis, Gene therapy, Recombinant insulin, Pharmacogenomics, Vaccines (Shastry BS. 2006; Yang P., 2021)**. Medical biotechnology is the use of living cells and cell materials to research and produce pharmaceutical and diagnostic products that help treat and prevent human diseases for e.g., autoimmune disease, cancer and infectious diseases as malaria, tuberculosis, AIDS, etc. (Prajapat & Jain 2022).

Keywords: Biotechnology, applications, health medicine

10. Introduction

Karl Ereky (1917), a Hungarian engineer, introduced the term biotechnology. He defined biotechnology as “all lines of work by which are produced, products, from raw materials with the aid of living things” (Gupta et.al., 2017). The term biotechnology is composed of two words biology and technology. In 1982, modern biotechnology was defined by OECD (Organization for Economic Cooperation and Development) as the “*application of scientific and engineering principles to the processing of materials with biological agents use to provide services and goods for the quality of life improvement*” (Prajapat & Jain, 2022). The applications of biotechnology most promising are observed in the medical field. Biotechnology is the application of biological agents (microorganisms, plant and animal cells, and enzymes) to be used in agriculture, animal husbandry, food production, and medicine industries (Mahboudi, et.al; 2012). Biotechnology

products have affected the promotion of health care in significant success achievements (Mahboudi, et.al; 2012).

11. Material & Methods

The Aim: This study highlights a brief review of various applications of medical biotechnology. This is a descriptive study.

Research strategy: Literature Review and Search. Our study was focused on finding reliable articles and literature sources in consistent with the objective of our study. Recently literature and scientific researches.

Inclusion criteria: We searched the PubMed, MeSH, NCBI database for studies limiting the search to articles only in English language. The types of articles included were: clinical studies (Review, Systematic Review), Free full texts, Abstracts, articles of various medical journals (MEDLINE Journal articles).

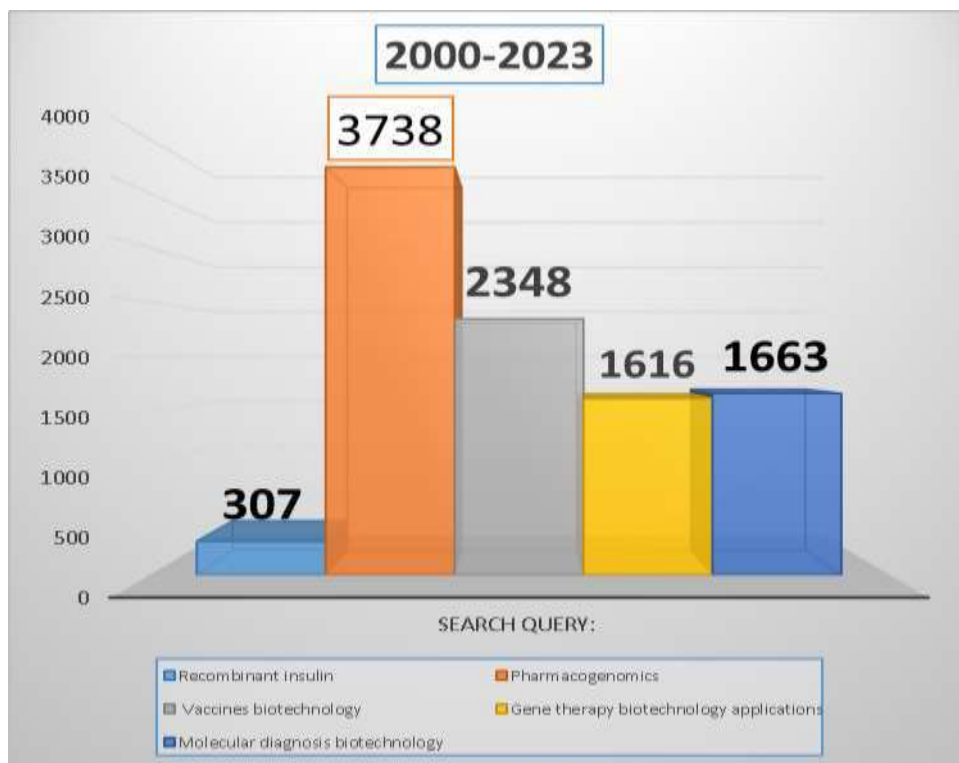
Exclusion criteria: We excluded studies conducted at a time distance of more than 23 years, studies where the text was incomplete and those in languages other than those of the inclusion criteria.

The procedure followed: The search terms were: Biotechnology, applications, health medicine

12. Results and Discussion

There are lot of articles in different sources about biotechnology and its applications in different fields. We focused on those articles which were for applications of biotechnology specially in field of medicine. All the articles were analysed and only those which met the inclusion criteria are taken into consideration for this study.

Figure 1: Number of articles categorised on search queries



As it's obviously presented at the chart above, as result of our searches for the period of 2000-2023, it resulted the highest number of articles for pharmacogenomics, followed by vaccines biotechnology, molecular diagnosis biotechnology, Gene therapy biotechnology applications, and the lowest number of articles for Recombinant insulin.

Table 1: Categorised articles grouped by each year

Search query:	Recombinant insulin	Pharmacogenomics	Vaccines biotechnology	Gene therapy biotechnology applications	Molecular diagnosis biotechnology
2023	10	168	265	133	142
2022	21	305	413	162	223
2021	30	380	508	207	244
2020	7	332	301	143	148
2019	14	265	127	121	79
2018	15	250	108	117	65
2017	17	249	96	104	72
2016	27	244	99	77	73
2015	15	221	80	83	48

2014	20	218	74	69	39
2013	15	153	58	42	38
2012	13	223	34	40	42
2011	14	138	29	40	50
2010	12	140	26	28	34
2009	11	99	34	35	51
2008	18	81	26	37	58
2007	9	61	20	39	44
2006	6	63	7	31	15
2005	5	40	13	32	11
2004	9	33	17	26	180
2003	7	23	4	12	2
2002	6	27	5	14	2
2001	2	18	2	11	1
2000	4	7	2	13	2

At the table above are presented for each year for the period 2000 till 2023, the number of articles resulted from search queries: pharmacogenomics, vaccines biotechnology, molecular diagnosis biotechnology, Gene therapy biotechnology applications, and Recombinant insulin.

The literature review results are presented as follows:

In the field of medicine, there are a variety of biotechnology applications and some of them include the following:

3.1 Molecular Diagnosis

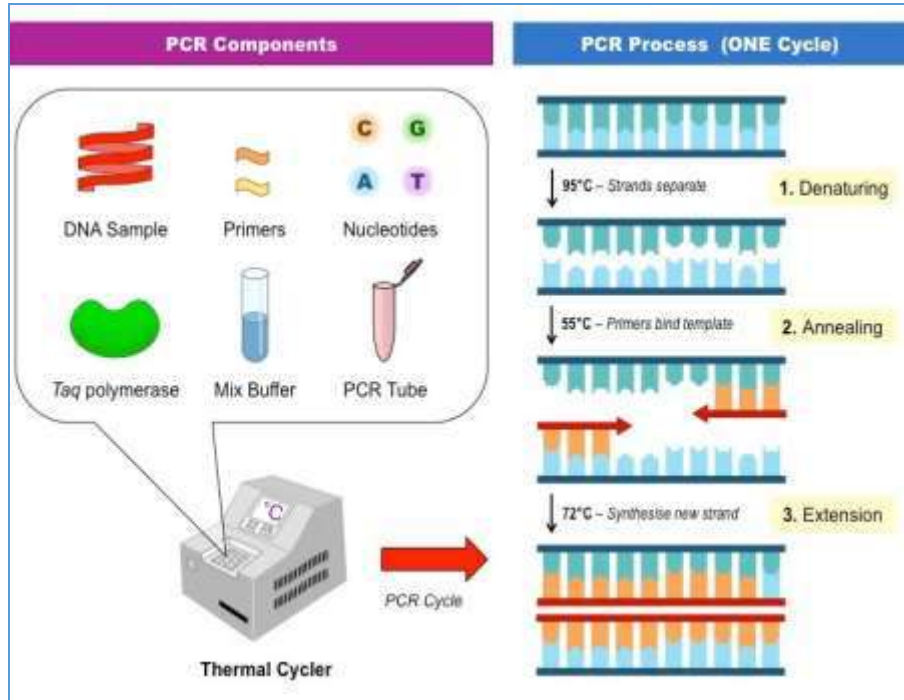
Medical diagnosis is one of the most important applications of biotechnology in the health sector (*Gupta et.al., 2017*). Many times the concentration of pathogen increases by the time the disease is diagnosed. So, early diagnosis and knowledge of pathophysiology are very important for for an effective cure and it can be achieved with the techniques such as: Recombinant DNA Technology, PCR (Polymerase Chain Reaction) and Enzyme-Linked Immunosorbent Assay (ELISA), etc. (*Sagar Aryal, 2022; Siew, et.al., 2021; Suliman Khan, et.al., 2016*).

3.1.1 Polymerase Chain Reaction (PCR)- Principle, Steps, Applications

Polymerase chain reaction (PCR) is widely used in basic science and biomedical research (*Li, A., et.al., 2018*). PCR is a laboratory technique to amplify specific DNA segments for various

laboratory and clinical applications (Demek, T., & Dobnik, D., 2018). Allowing for more than the billion-fold amplification of specific target regions, this reaction has become an important instrument in many applications, including gene cloning, infectious diseases' diagnosis, and prenatal screening for deleterious genetic abnormalities (Sagar Aryal, 2022).

Figure 2: A schematic view of PCR components & process

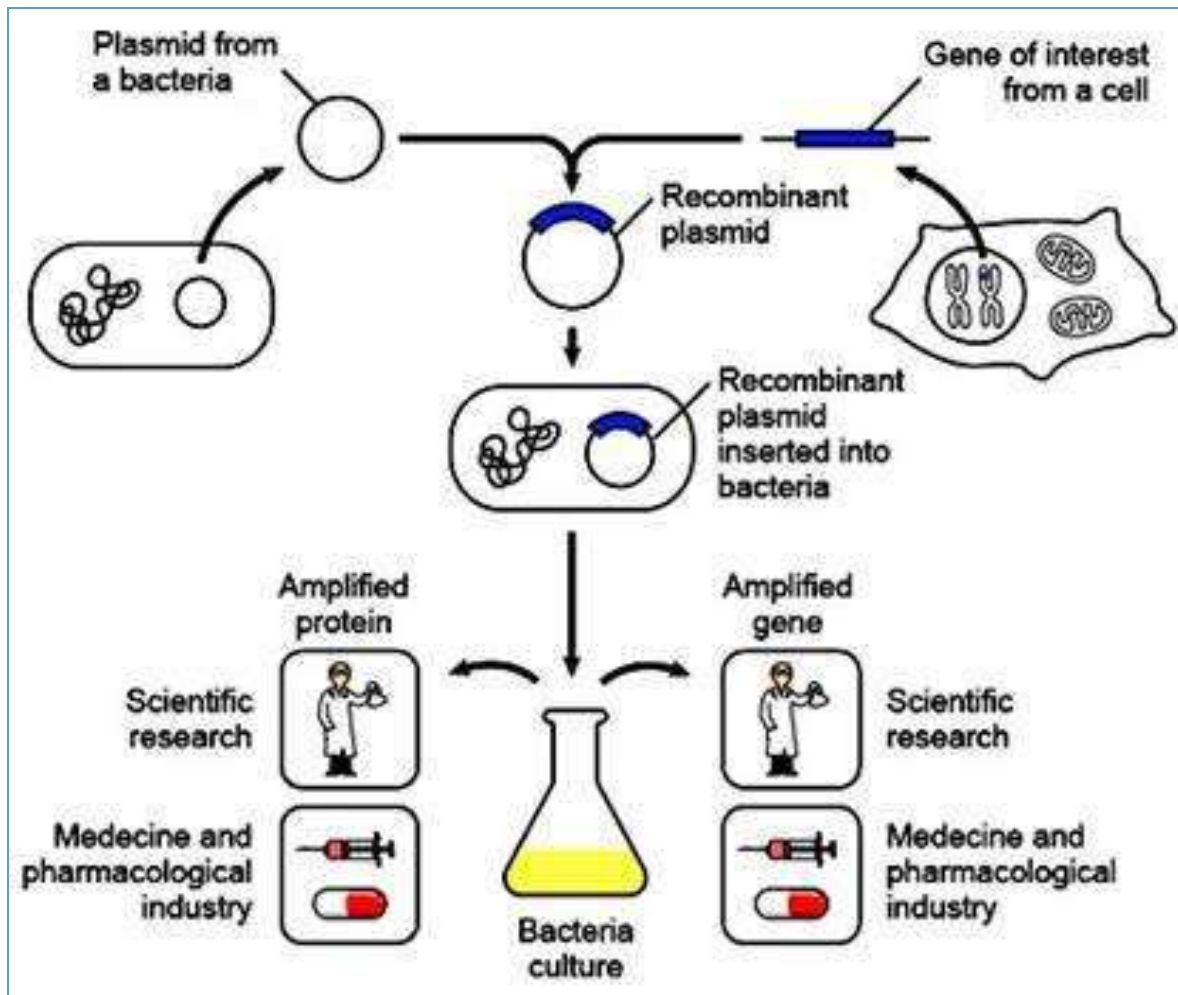


<https://microbenotes.com/polymerase-chain-reaction-pcr-principle-steps-applications/#applications-of-pcr>

3.1.2 Recombinant DNA Technology

Since the year 2019 due to the exposure of COVID-19 pandemic worldwide, biotechnology has had a tremendous scope for the discovery of medicine and vaccine to save human life. The rDNA technology used host organisms to produce therapeutic products for the treatment of human diseases e.g., *E. coli* used for the production of insulin hormone, growth hormones, monoclonal antibody, yeast cells used to produce Hepatitis B vaccine (Yang Peter, 2021; Sagar Aryal, 2022; Siew, et.al. 2021; Suliman Khan, et.al. 2016). The basic steps involved in rDNA technology are illustrated schematically below (Figure 3):

Figure 3. Recombinant DNA Technology Steps and Applications:

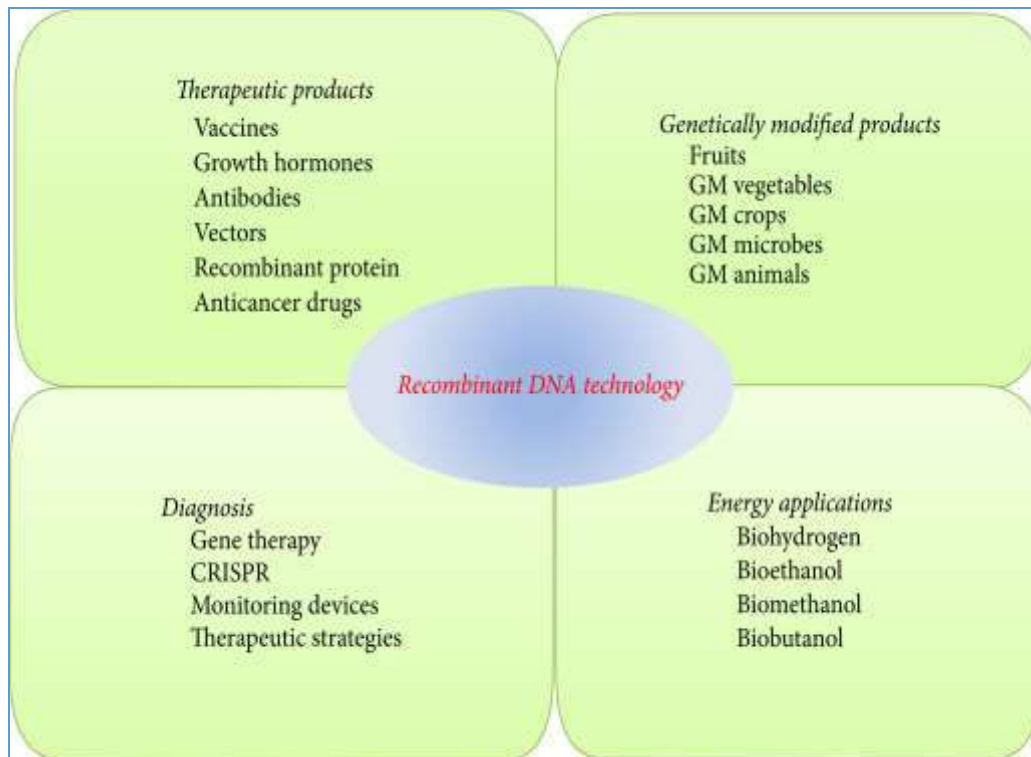


As its' presented at the figure above Recombinant DNA Technology Steps are:

- Treating foreign DNA and plasmid with restriction enzymes and join using ligase.
- Introducing the recombinant plasmid into host bacteria.
- Applications of amplified genes and proteins are explained at the figure above.

Technology of Recombinant DNA has major uses on new enzymes manufacture which are suitable for specified food-processing. RDNA technology has wide spectrum of applications in treating diseases and improving health conditions as production of Antibodies and their derivatives, Investigation of the Drug Metabolism etc (Khan S. et.al 2016). A broad range of applications of recombinant DNA technology has been summarized in Figure 4.

Figure 4: Illustration of various applications of recombinant DNA technology.

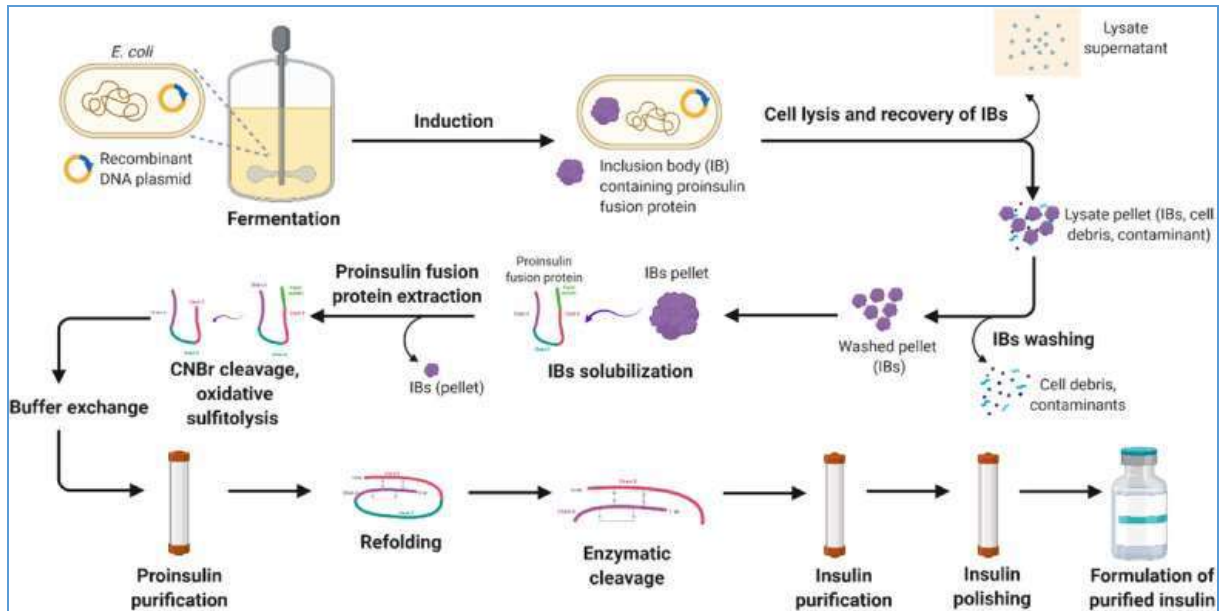


<https://www.hindawi.com/journals/ijg/2016/2405954/fig1/>

3.2 Recombinant Insulin

Diabetic patients require Insulin to remove excess sugar from the blood. Diabetic patients produce by their body have a very low level of insulin or no insulin (Siew, & Zhang, 2021). Therefore, in order to control blood glucose levels, they need external insulin. Later it was discovered that, by the pancreas of the pigs it can be produced the insulin which can be used by humans (Suliman Khan et.al., 2016). But to provide the quantities of insulin required, there were not enough pigs (Mendell, J. R., et.al, 2021). So this led to the cloning of the human insulin gene. Then were introduced in E. coli bacteria the specific gene sequence that codes for human insulin (Yang Peter, 2021., Siew, & Zhang, 2021). The genetic composition of the E. coli cells was altered by the gene sequence, and were produced several E. coli bacteria containing the recombinant human insulin gene within 24 hours. Then from E. coli cells was isolated the recombinant human insulin (Papaioannou, I., et.al., 2023).

Figure 5. The general workflow for the downstream processing of recombinant human insulin and its analogues (created with BioRender.com)

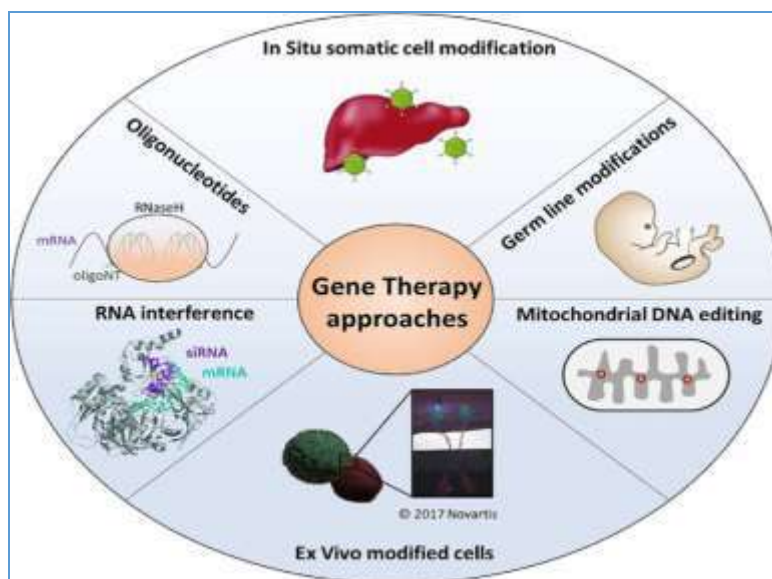


<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8313369/figure/Fig1/>

3.3 Gene Therapy field

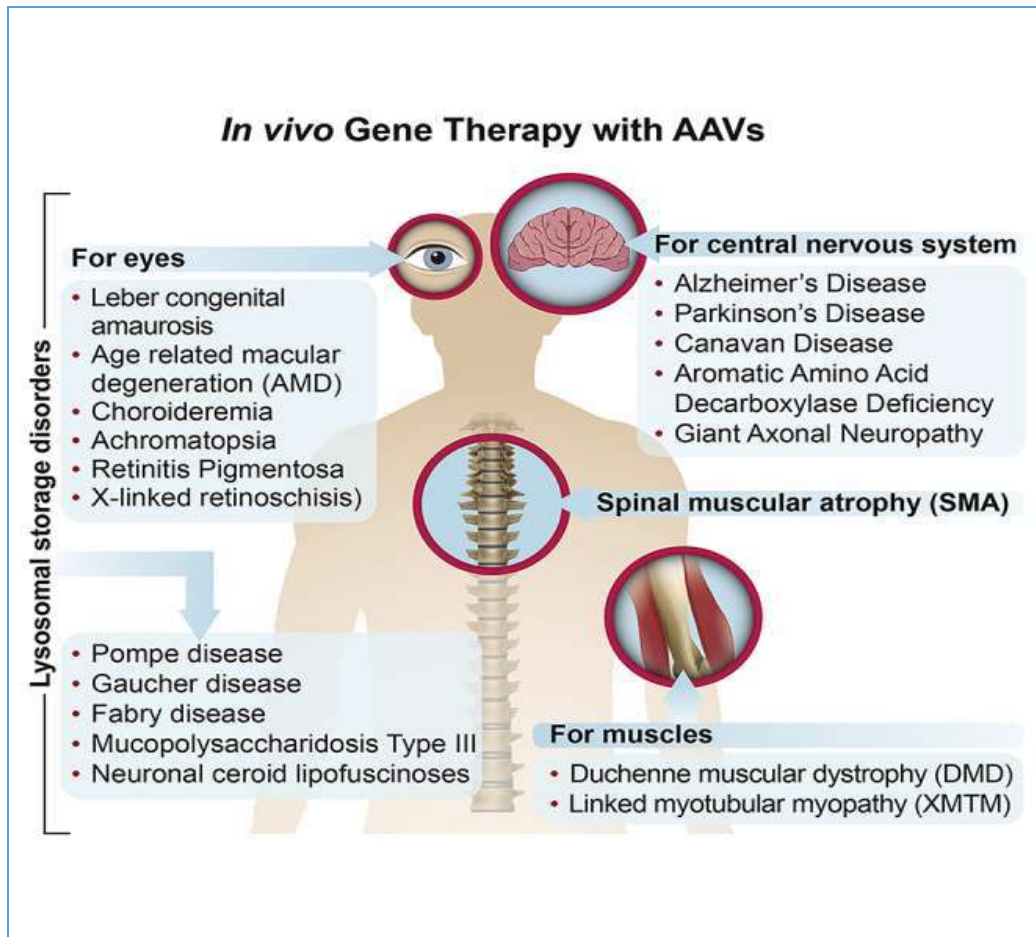
Originally gene therapy was envisioned as the in situ modification of genetic information of cells within tissues (*Jensen & Geoffrey, 2015*), The field has evolved beyond that encompassing more aspects of nucleic acid technology, particularly oligonucleotide technology, which aims to modify gene expression, without necessarily changing the cell's genetic information (*Mendell, J. R., et al., 2021*).

Figure 6: Gene Therapy approaches



The modification of a patient's cells *ex vivo*, outside the body prior to reimplantation has proven to be a successful clinical strategy (Papaioannou, I. *et al.* 2023) Although recent technological advancements have now enabled mitochondrial and germ line or embryonic cell gene therapy, these approaches are not yet being used due to safety and ethical issues (Yang Peter, 2021) .

Figure 7. Current Clinical Applications of In Vivo Gene Therapy with AAVs

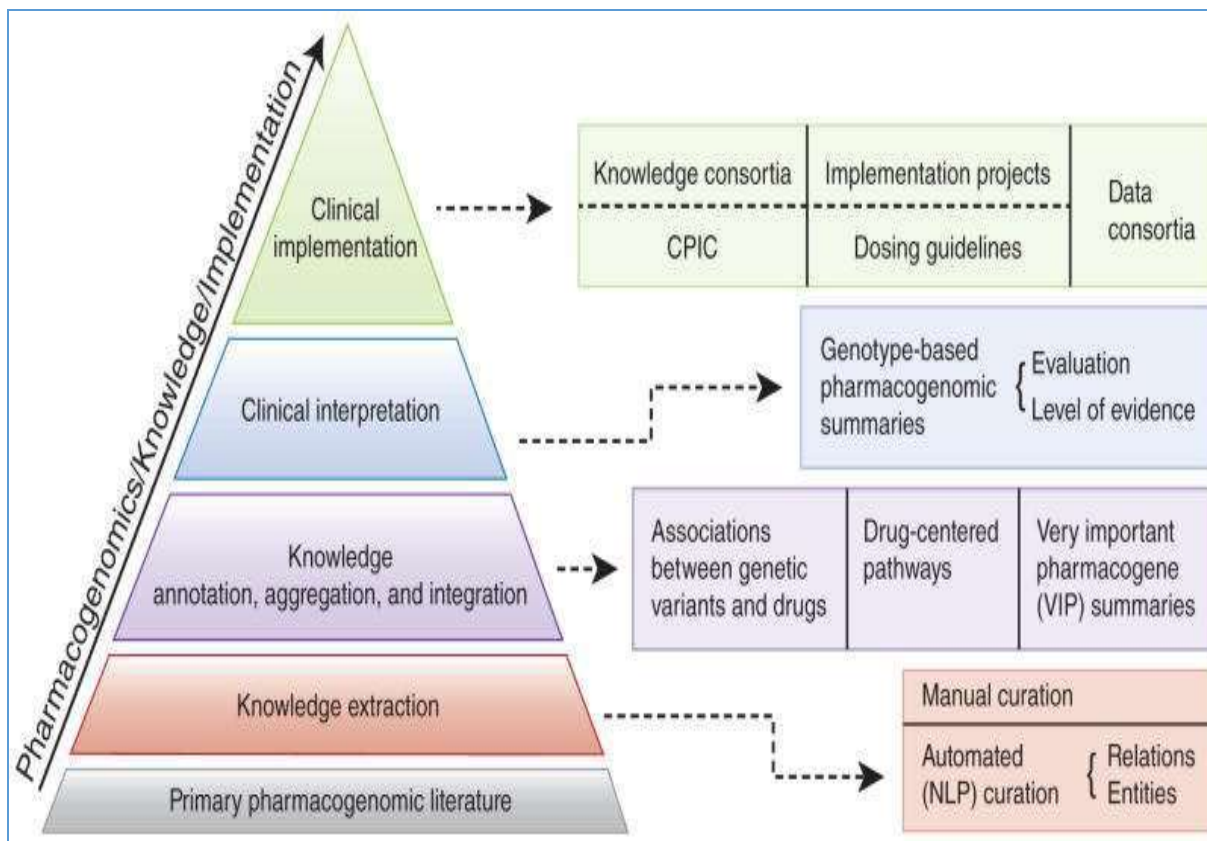


3.5 Pharmacogenomics

Pharmacogenomics has led to the production of drugs that are best suited to an individual's genetic makeup (Rysz, J. *et al.*, 2020). It can be applied in diseases such as cancer, depression, HIV, asthma, etc (Daniell *et al.*, 2009; Cossarizza, 2021). The Pharmacogenomics Knowledgebase (PharmGKB) is a resource that collects, curates, and disseminates information about the impact of human genetic variation on drug responses (Balestrini, & Sisodiya, 2018). It provides clinically relevant information, including dosing guidelines, annotated drug labels, and potentially actionable gene–drug associations and genotype–phenotype relationships (Whirl-Carrillo, M., *et al.* 2012). The PharmGKB is a publicly available Web-based knowledge database whose aim is

to aid researchers in understanding how genetic variation among individuals contributes to differences in reactions to drugs (Whirl-Carrillo, M., et.al 2012). A visual summary of the data available and how these various types of information are integrated within the PharmGKB is provided in the PharmGKB Knowledge Pyramid (see Figure 8) (M. Whirl-Carrillo1, et.al., 2021).

Figure 8. The PharmGKB Knowledge Pyramid.

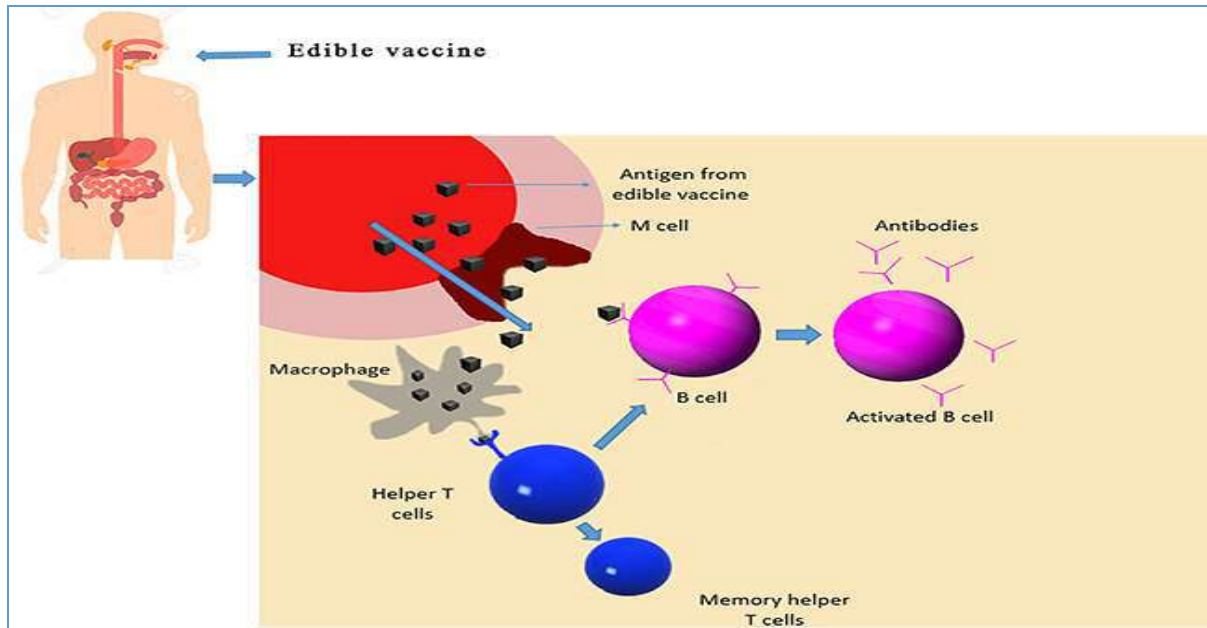


CPIC, Clinical Pharmacogenetics Implementation Consortium; NLP, natural-language processing. From PharmGKB with the permission of PharmGKB and Stanford University. Copyright PharmGKB. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3660037/figure/F1/>

3.6 Edible vaccines

Vaccines are obtained by animals and cell cultures. These vaccines contain inactivated pathogens. To make a plant a good edible vaccine candidate, there are a number of factors as: Must have long shelf life (**Cereals such as rice, maize, and wheat**), **Must grow quickly (such as tobacco and tomato)** and **Easy transformation**. The transgenic plants can produce antigens that can be used as edible vaccines (Ranjha, et.al., 2022). Plants such as tomato, potato, tobacco, rice, and maize are widely used for this purpose (Muynck B De, et.al., 2010), (Daniell H, et.al., 2009). Antigenic proteins from several pathogens can be expressed in plants such as tomato and banana (Ranjha, et.al., 2020). Transgenic sugar beet can treat foot and mouth disease of animals, transgenic banana and tomato can cure diseases such as cholera and hepatitis B (Jensen D., 2015),

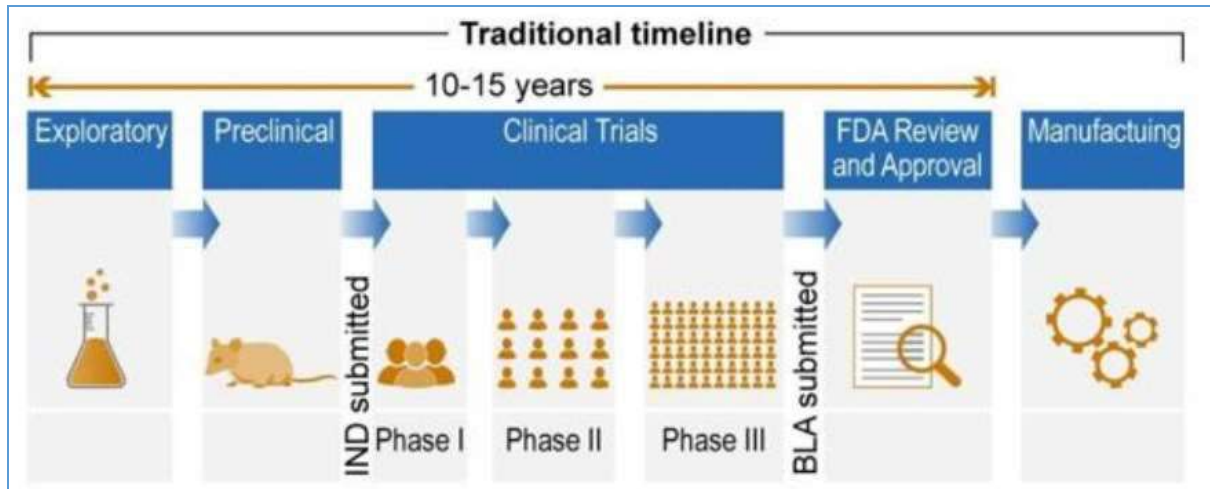
Figure 9: Mechanism of action of edible vaccines.



Edible vaccines are alternatives much safer and cheaper than traditional vaccines. They can make scaling up so much easier, as any edible plant/algae.

The advance of new technologies such as genomics, proteomics, bioinformatics, and recombinant DNA technology are useful for the discovery of new vaccine antigens (*Rinaudo CD, et.al., 2009*). The approaches used for vaccine development are based on an improved understanding of the microbial structure, physiology, epidemiology, virulence, host-pathogen interactions, and the scale of microbial intra- and interspecies diversity (Figure 10) (*Prajapat & Jain 2022*).

Figure 10. Phases of Vaccine Development.



Most current vaccines can target pathogens that have low antigenic variability and for which protection depends on antibody-mediated immunity. This is the case for tetanus, polio, measles, diphtheria, and hepatitis B (Dhouib W, et al.2020).

13. Conclusion

After studying and analysing the recent literature about biotechnology applications, in the field of medicine, we concluded that there are a variety of biotechnology applications².

Some of them include the following:

- Molecular diagnosis,
- Gene therapy,
- Recombinant insulin,
- Pharmacogenomics,
- Vaccines.

Medical biotechnology is the use of living cells and cell materials to research and produce pharmaceutical and diagnostic products that help treat and prevent human diseases (e.g., autoimmune disease, cancer and infectious diseases as malaria, tuberculosis, AIDS, etc.).

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The Impact of Willingness to Migrate on Political Apathy among Kosovo Citizens

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Abstract

The country of Kosovo is currently on the verge of an immigration crisis with the visa requirement expected to end in January 2024. As the title implies, the purpose of this study is to measure the impact of the willingness of Kosovar citizens to leave the country on demonstrated political apathy. More specifically, the study is focused to measure whether those who express

their willingness to immigrate tend to already demonstrate less interest in the political developments of the country. The study employed quantitative research to gather information for the research question. This process was completed throughout a questionnaire which used Likert type questions. The findings from the questionnaire supported the hypothesis that willingness to immigrate will lead to less concern with the country's political developments. The study is relevant as it contributes to the relatively little researched relationship between political apathy and immigration in the context of Kosovo.

Keywords: Kosovo, political apathy, immigration, citizens

14. Introduction

There is a tendency in the past few years among Kosovo citizens to leave the country. This tendency has come as a result of multiple factors that have been rather persistent in this country, but, it must be mentioned, are of a rather uniform nature in most of the countries. Nevertheless, the aim of this paper is to evaluate whether there is a tendency among citizens of Kosovo who have chosen to leave the country to begin showing less attention to the political developments in their country. It could be considered as rather intuitive for the people who express their aim of leaving the country to want to be rather distanced from the political developments in their homeland, but this is not necessarily the case.

As shown by a report from the National Democratic Institute conducted in 2021, there was a record number of voters that came from the diaspora which ultimately were crucial in allowing LVV (Self-Determination) to win the elections by a landslide (National Democratic Institute, 2021). Nevertheless, such behaviour has not been consistent as to come with a conclusion that people who aspire to move abroad express a strong link with the political situation in their homeland.

In line with this argument, the hypothesis for this research is that individuals who express the willingness to leave the country will continue to lose interest in the political situation of their homeland. The article entitled “Drivers of Political Participation: Are Prospective Migrants Different?” is one of the rather few attempts to define the relationship between those who intend to leave the country and their levels of political participation. The study was conducted in the area of six former-communist transition economies which involve North Macedonia, Serbia, Ukraine, Moldova, Kazakhstan and Tajikistan and made use of secondary data (Douarin & Radu, 2021). In this regard, this paper attempts to reproduce a rather similar mission using both primary and secondary data in order to measure the particular political participation tendencies of those citizens that attempt to leave the country. While studies on the consequences related to the immigration tend to focus generally on the economic and cultural effects of this process, there is also a relevant body of research that deals with the intertwining of these two components: politics and immigration. (Alesina & Tabellini, 2021). This paper serves as an addition to this body of research that attempts to relate immigration with politics by attempting to study the particular aspect of prospective migrants and their political participation tendencies with an emphasis in the Republic of Kosovo. While this paper will only represent a small contribution in this topic, it will at least pave a new path for research in this particular area when considering the political context of Kosovo.

15. Methodology

The study was conducted using mixed methods research. More specifically, a questionnaire was used to complete the study. The questionnaire involved 15 Likert type questions which were designed to answer the question. The reason behind the choice was to gather more data in the form of statistics. There was a sample of 64 people that took part in the questionnaire. The individuals selected were selected based on a probability sampling procedure. Furthermore, the study included both men and women and the sample involved people from the entire country of Kosovo who were at least 18 years old at the time of the conducted survey.

The questionnaire was conducted online as it was perceived to be a rather feasible choice for the purpose of increasing the response rate. In addition to the questionnaire, the paper also employed the document review method as it has intensively included a variety of articles and books from reputable sources that dwell on the main aspects of the topic. This process of document review includes relevant secondary sources in the form of statistics which help further defend and refine the argument from a more quantitative standpoint. These data derived from mainly authoritative governmental or relevant non-governmental sources and added greater relevance to the relationship between the relationship of migration and political apathy. The rationale behind the utilisation of the overall mixed methods approach is that the nature of this study is such that it needs both quantitative and qualitative data for the phenomenon to be adequately represented.

16. Literature Review

There is rather enough research when it comes to the political implications of immigration. Furthermore, such research is rather widespread and it covers most relevant parts of the globe. However, as it will be seen further in this literature review and which constitutes a gap within the current body of knowledge is the relationship between the more specific category of prospective migrants and their particular political participation tendencies. This is particularly accurate when it comes to the context of the country of Kosovo.

First, a relevant effect of nationalism has been its impact on the development of nationalist tendencies among the diaspora. The phenomena of long-distance nationalism is one of the diaspora channel's most important political effects. In fact, nationalism is a contemporary phenomenon of imagined communities that frequently develops in the minds of elites from the diaspora. The actions of moving overseas and residing there have an impact on identities, weakening some and enhancing others. Diasporic identities can range from global citizenship to ferocious ethnic nationalism. Diasporas engage in civic nationalism, which can take the form of lobbying their adopted nation's government on foreign policy or sending aid during a natural disaster. However, they also support (to varying degrees) ethnic nationalism, which can have grave negative effects but is also susceptible to being exaggerated (Kapur, 2014). This indicates that political participation has the tendency to take many forms and to also be impacted by a variety of factors.

Other perspectives on the relationship between immigration and political participation view immigrants as being rather hesitant to contribute to their host country while still maintaining hope for the betterment of conditions in their homeland. Therefore, it follows that given their essential exile status, those new EU citizens who arrived after the 1980s would naturally be content to return home if circumstances changed. The likelihood of political participation, as well as other types of interest in the "host"

country, for that matter, may be markedly negatively impacted by even the slightest uncertainty about one's long-term future in the new environment combined with the possibility of positive changes in one's native country (Adamson, 2002). This study serves yet as another proof for the multifaceted character of the process of immigration.

Another study entitled "The Political Impact of Immigration: Evidence from the States" attempts to shed light on yet another element of political participation which is the voting behaviour of citizens. According to the findings of this paper which attempted to see the differences between low-skilled and high-skilled immigrants in regards to their voting behaviour toward the Republican Party in the United States came to the conclusion that socio-economic status is relevant when it comes to the voting and means of political participation in general (Mayda, Peri and Steingress, 2018). Furthermore, Mayda, Peri and Steingress emphasise that in the context of Europe there is a reverse scenario of the previous trend. In Europe low-skilled immigrants do in fact increase the voting share of the right-wing parties. Furthermore, several studies indicate a larger presence of less educated immigrants in Europe which then might serve as an explanation to the theory (2018). Again, it appears that socio-economic differences between individuals tend to have a rather consistent impact on voting behaviour and political participation in general.

The topic of political apathy remains one of those topics within the broader area of political participation that are yet in need for more research. Nevertheless, even when such research does exist, it seems that it yet seems to appear in a limited geographical context. According to Mason, Nelson and Szklarski "political apathy is the lack of psychological involvement in public affairs, emotional detachment from civic obligation, and abstention from political activity" (1991). The article entitled "Apathy and the Birth of Democracy: The Polish Struggle" discussed the impact of political apathy in the context of Poland's power transition in the early 90s and the potential of political apathy to negatively impact the levels of democracy. The authors continue with making a connection between the collective and individual when it comes to political apathy. Mass, communal action reveals political disinterest, but it originates at the degree of each person's psychology. Collectively, sentiments and a lack of expected participation show political apathy. Apathy is demonstrated when individuals stop caring about politics, stop fulfilling their responsibilities to civil society, and only occasionally or never participate in political institutions or groups (Mason, Nelson and Szklarski, 1991).

Political apathy among prospective immigrants remains a distinctively puzzling area of research in the sense that not only is there not enough research on the topic, but that even the existing research remains rather limited in particular contexts. In fact, most of the research has focused on the political participation of the returnees in their country, and more specifically, on the particular forms this participation has focused in order to impact the political processes at home (Douarin & Radu, 2021). In relation to the previous statement for the limited scope of the studies of prospective migrants, even when specific studies exist, they tend to be rather focused. For example, Douarin and Radu provide research on this topic by considering former communist transition economies. In fact, it must be emphasised that one relevant criteria for this study has been the perceived fragile or imperfect democratic system in the countries involved in the study (2021). Such studies tend to be in relation to the objectives of this particular study as the country of Kosovo has been widely perceived as an imperfect case of democracy. Meanwhile, not only do we find similarities between these countries in terms of their rather nascent democracy, but we also acknowledge that the behaviour of prospective migrants remains a gap in the current Kosovar literature of political participation in general and most importantly on the political participation tendencies for individuals that ought to

be considered prospective migrants. In the process of contextualising political participation of diaspora in Kosovo it is important to stop at a rather particularly interesting moment in the recent political history of Kosovo- that of parliamentary elections of Kosovo which were held in 2021. In these elections, LVV won an unprecedented 50.3% of the vote. This led to the election of Albin Kurti as prime-minister and Vjosa Osmani as prime-minister. It must be emphasised that these elections were characterised by a rather high turnout in general and a particularly high level of turnout by the diaspora which ultimately proved a very important factor toward LVV winning the elections.

Furthermore, it is necessary to briefly discuss the topic of political participation in the context of Kosovo. The results of a Study conducted by Iowa State University in Kosovo indicate that political participation in the region can be primarily attributed to two key factors: party membership and social networks. These two variables play a significant role in explaining both conventional and unconventional modes of political participation. Party members tend to exhibit higher rates of participation in activities such as voting and protests when compared to non-party members. Additionally, individuals who engage in political discussions with others are more likely to participate in protests and voting, underscoring the importance of social networks in shaping political involvement (Hasani, 2016). While such research does explain the sources of political participation, it does not really help explain the degree of such participation or maybe the lack of it in specific circumstances.

Furthermore, recent research from BTI on the Republic of Kosovo tends to discuss the growing immigration tendencies in the Republic of Kosovo mainly as a result of unemployment. This phenomenon will get worse in the conditions of prospective visa liberalisation (BTI 2022 Country Report). Such tendencies tend to impact the levels of political participation and thus relate directly to the topic of this paper. In fact, whether this level of participation might result in practical political apathy in such circumstances remains the practical research gap and the focus of this study.

17. Results

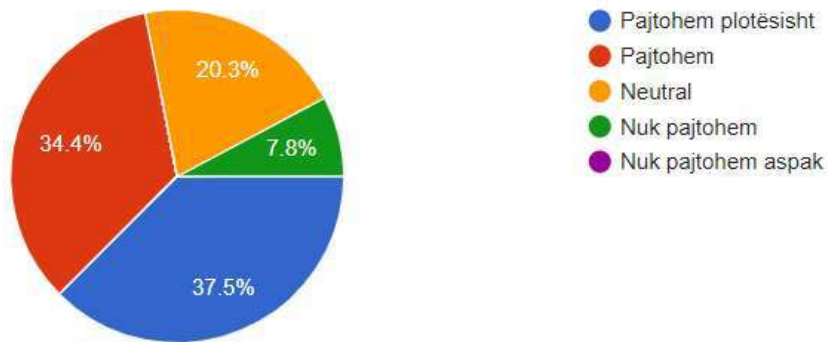
The results of the questionnaire which measured how people perceived the impact of the willingness to leave the country on political apathy produced a variety of results which shed light on a topic which is arguably very novel in the context of the Republic of Kosovo. The findings of the questionnaire will be presented and each question will be elaborated as to further elucidate on the dynamics of political participation and political apathy in the context of Kosovo. This study employed a questionnaire which was built using exclusively Likert-type questions. There were eleven questions on purpose used to measure the core of our research question as to whether willing to leave the country tends to negatively impact the willingness to participate in the political processes. The survey was conducted online. Furthermore, there were 64 people who agreed to be part of the study. Out of 64 participants, there were 41 males and 23 females. These figures are

rather interesting, and, in relation to the commonly held beliefs in the country of Kosovo (and in other societies for that matter), women tend to be less interested when it comes to political issues.

Figure 1: How much do you agree with the idea that the desire to move abroad can make people less interested in the politics of Kosovo?

4. Sa jeni dakord me idenë se dëshira për të lëvizur jashtë vendit mund t'i bëjë njerëzit më pak të interesuar për politikën e Kosovës?

64 responses

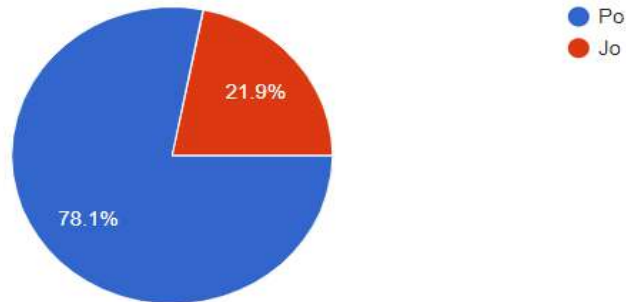


On the question whether the desire to leave the country does make people less interested in the political situation in Kosovo, 70% of the participants answered that they fully agree or fully agree. In fact, 38% of respondents said that they fully agree with this claim. Interestingly, none of the respondents gave an answer on the other extreme- that they do not agree with this claim. This answer tends to indicate an almost consensus agreement over the idea that willingness to leave could make people less interested for the political situation in this country.

Figure 2: Do you think that the desire to move abroad does have an impact on how much people are engage in the political matters of Kosovo?

5. A mendoni se dëshira për të emigruar ka një ndikim të madh në sa janë të përfshirë njerëzit në çështjet politike të Kosovës?

64 responses

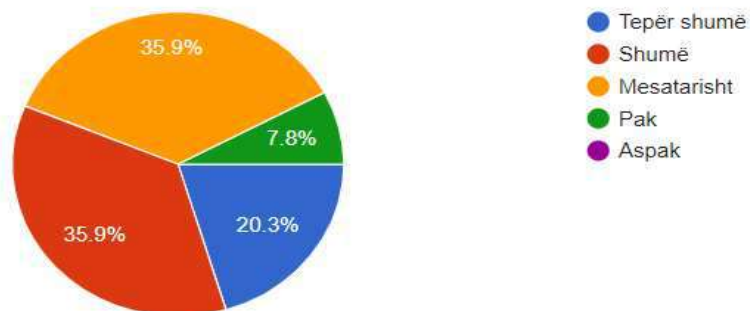


Another interesting question was whether the willingness to leave had a great impact on how much people would be willing to be engaged on political matters. In this case, almost four-fifths of the respondents or 78 percent agreed that this factor would hugely impact the degree of political participation for these people. It must be emphasised that this question tends to provide a strong argument for the main claim of this paper that willingness to leave does contribute to a significant drop of interest for political participation or might lead to apathy.

Figure 3: How likely are people who want to emigrate to be less likely to care about politics in Kosovo?

6. Sa ka gjasë që njerëzit që duan të emigrojnë të kenë më pak mundësi të kujdesen për politikën në Kosovë?

64 responses



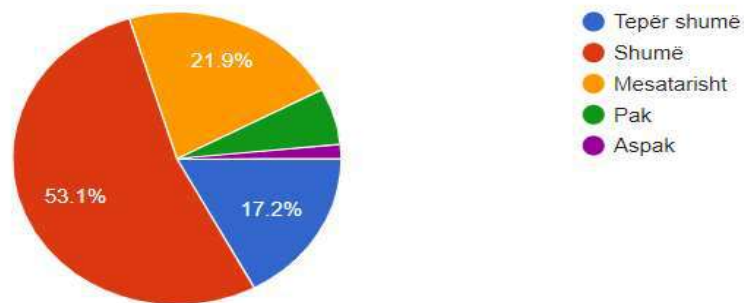
Speaking now not only regarding the willingness to immigrate, but also from the practical implications of the immigration, respondents agree on the assumption that the fact that people leave abroad will in fact imply that they will also not have time to really deal with political matters

of their country. More specifically, 35.9% of the respondents tend to agree that leaving abroad highly affects the chances for political participation in the home country. It must be emphasised that 20.3% of the respondents think that living abroad is expected to have a very high negative impact on the political participation in their homeland. Furthermore, 35.9% think that living abroad has a moderate effect on the chances for political participation in their home country. It could be added that such responses come as no surprise and tend to remain in line on the argument that living abroad negatively impacts participation in the home country.

Figure 4: How much you believe that the desire to move abroad impacts the level of attention that people have for the politics in Kosovo?

7. Sa besoni se dëshira për të lëvizur jashtë vendit ndikon në atë se sa njerëzit i kushtojnë vëmendje politikës në Kosovë?

64 responses

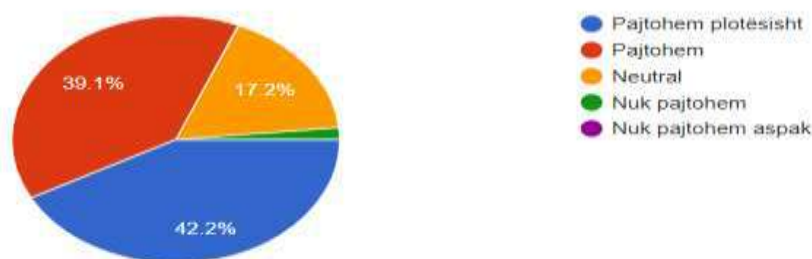


Respondents were also asked on the impact of the willingness to leave the country on the attention that people give to political matters in their home country. In this regard, more than half of the respondents or 53.1% reported that leaving abroad tends to have a high impact on how much attention do people give to the political situation in their own country. It must be mentioned that less than 10% of the respondents reported that the willingness to leave the country will not impact on how much people are interested in the politics of their own country. The answers of the respondents demonstrate that willingness to leave the country does not only impact political participation in a more traditional sense of the word, but it does also impact the levels of interest that people show in their country.

Figure 5: How much do you agree with the idea that people might be uninterested for the Kosovo politics as a result of their willingness to leave for better opportunities?

8. Sa jeni dakord që njerëzit të jenë të painteresuar ndaj politikës së Kosovës është për shkak se duan të largohen për mundësi më të mira?

64 responses

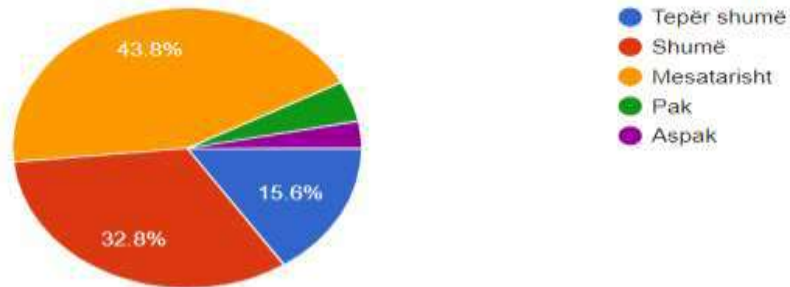


There is also a very high agreement over the idea that people tend to prioritise their economic well-being (hence they choose to immigrate) and based on this it follows that this focus on their own well-being tends to surpass their tendencies to think about political participation. It is rather interesting that none of the respondents disagreed with the statement which might imply that it is this focus on economic well-being for the people that might in fact serve as the primary reason of immigration and that there may not be a voluntary lack of willingness to engage in political participation. Basically, while the paper analyses the relationship between the immigration and political participation, there are variables such as economic well-being which ultimately tend to sway the opinion of the respondents.

Figure 6: How much does the willingness to move abroad impact the possibilities of a person to vote in local or national elections?

9. Sa ndikon dëshira për të emigruar në mundësinë e një personi për të votuar në zgjedhjet lokale apo kombëtare në Kosovë?

64 responses

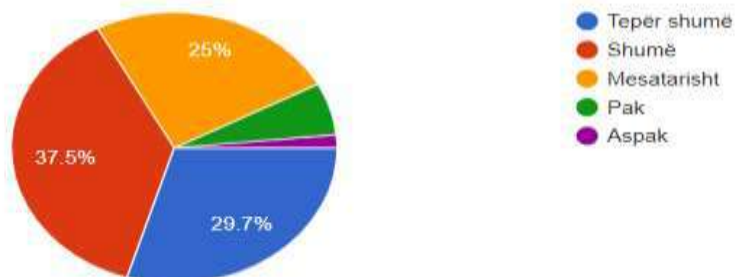


While most of the respondents have agreed over the relationship between the willingness to leave the country and tendencies for less participation, there is a much weaker agreement over the relationship between the tendencies for immigration and willingness to vote. When asked whether the willingness to leave the country impacts the possibilities of the people to vote, the answers from the respondents were rather varied. More specifically, 43.8% of the survey participants declared that the willingness to participate did have an average impact on the possibility to vote. On the other hand, and contrary to this answer, 32.8% of the participants reported that willingness to leave would highly impact voting possibilities in their home country. It must be noted that 15.8% of the respondents declared that the willingness to leave would have a very high impact on voting possibilities of the people in their homeland.

Figure 7: How likely do you think that citizens who want to move abroad are less interested in participating in the activities of their municipality in Kosovo?

10. Sa mendoni se ka gjasa që qytetarët që duan të shpërngulen jashtë vendit të jenë më pak të interesuar për të marrë pjesë në aktivitetet e komunës në Kosovë?

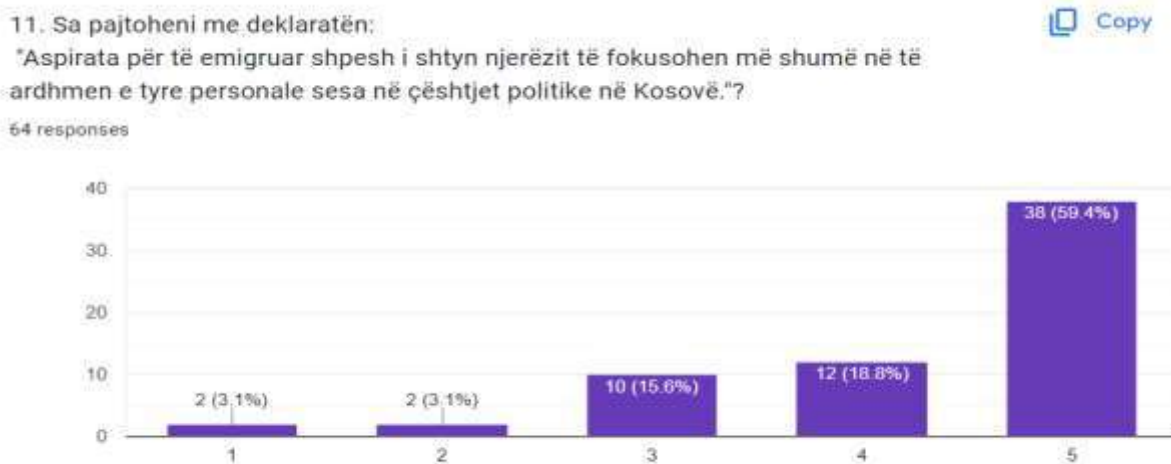
64 responses



The respondents were also asked whether the willingness of the citizens makes citizens less likely to be interested in taking part in various activities organised by the municipalities in their home countries. Out of 64 respondents who agreed to take part in this study, 37.5 responded that there are high chances that willing to leave will make citizens less interested to take part in

different activities organised by their municipality. In addition to this, 29.7% of the respondents reported that there is a very high chance that willing to leave the country will negatively impact the readiness of the people to take part in various activities in their home country. It must be noted that a very small portion of respondents (or around 8%) perceived that willingness to leave the country would not currently impact the readiness of the people to take part in the activities organised by their municipality.

Figure 8: How much do you agree with the following statement: The aspiration to move abroad makes people focus more on their personal future rather on political matters in Kosovo?



The respondents were then asked how they agree with the following declaration: “The aspiration to leave often pushes people to care more regarding their own future compared to the political matters in Kosovo”. They were asked to give five to express maximum agreement with the declaration and one to express the lowest degree of agreement. It must be noted that almost 60% of the respondents gave a five (highest degree of agreement) to the declaration that willing to leave pushes people to care more for their personal matters in comparison to the political matters in their home country. In addition to this, 19% of the respondents gave a four to express their level of agreement with the declaration. It must be noted that only 6% of respondents gave the lowest

level of agreement of declaration which were represented numerically with two and one respectively.

18. Discussion

It is necessary to discuss the implications in relation to the topic of political apathy in general and particularly with the specifics of the findings related to this study. The country of Kosovo is not isolated in terms of concerns regarding its democracy. The problem of public engagement is not something that could be interpreted as a concern only for newly-established democracies. In fact, even most of the established democracies tend to suffer from issues such as low voter turnout, political parties having difficulties in recruiting new members and most importantly lack of interest of people in regards to political matters concerning their community (Zittel & Fuchs, 2007). It must be emphasised that immigration in the context of Kosovo's non-consolidated democracy serves an exacerbating factor which contributes further to the worsening of the process toward the improvement of democratic practices.

It is also important to provide a discussion on the matters regarding some of the particular questions which have been part of this study. For example, both first and second questions tend to immediately create a clear impression that immigration serves as a clear barrier to the political participation process. In fact, it must be emphasised, not only is there an agreement over the negative immigration on political participation, but there is also a general agreement that this process is expected to have a highly negative impact on this regard.

One of the questions of the questionnaire dealt with the impact of willingness to immigration on practical political participation in various activities organised in specific municipalities. The respondents saw a clear relationship between less interest in taking part in such activities and wanting to immigrate. It is interesting to mention that there is no clear agreement over how political apathy should be practically manifested. In fact, the passivity of citizens has been manifested in several forms such as "political abstention, political alienation or political apathy" (Prokop & Hrehorowicz, 2019, p.110). So, it is somewhat unclear whether this expected lack of activity is something separate from the term of political apathy. There is however, a certain degree of confusion between the results of the survey regarding the negative impact of the willingness to immigrate on the voting tendencies of individuals. It must be noted that such results tend to contradict the events of the elections held in 2021 in which diaspora was arguably instrumental on the success of Vetëvendosje or Self-Determination. It must be emphasised that 2021 elections in Kosovo could be considered as a form of exception in regards to a particularly high mobilisation of the diaspora (as mentioned earlier there was a record number of voters) with the ultimate aim of impacting the outcome of the elections.

While the survey respondents have been rather consistent in their opinion that willing to leave the country ought to impact the readiness for political participation in the homeland, it must be added that when people become practically settled in a particular country and thus part of the diaspora, they still tend to have significant ties with their homeland. This is specifically expressed in the form of major remittances that they send to their home country. According to a report commissioned from UNDP entitled "Kosovo Diaspora and its Role amid Multiple Crises" which measured the level of the remittances sent during the post-pandemic era from the Kosovo came with the conclusion that members from the diaspora expect an increase in the level of remittances in the coming years (Germi, 2023). Again, while this cannot be interpreted as political participation, it signifies that although people might

hope to leave their country, they do not necessarily lose the connection with the social and economic reality of their homeland.

It is necessary to also discuss the level of consistency of respondents' answers on the survey. In fact, with few exceptions, the majority of the respondents agree on the negative impact of the willingness to leave the country in the two most relevant dimensions related to this study: the practical perceived impact of the willingness to leave the country in their political participation in the present, but also in their projected impact for the future which means less concern for the political situation in their home country. Based on the questionnaire, it seems that 2021 voting behaviour seems to be the exception and that it is almost very clear that willingness to immigrate is negatively correlated to political participation in the home country.

19. Conclusion

The topic of political participation represents an important part of the general discussion within the discipline of political science. This study was concerned with a more specific topic within the broad area of political participation: that of political apathy in general and particularly in the context of an expected immigration in the verge of the process of visa liberalisation. In this regard, it became necessary to see the link between the immigration and political participation in the context of voting tendencies of the individuals who express a willingness to leave their country.

The literature review in this article tended to demonstrate the participation tendencies of the people who have already immigrated and showed that there is great variation in the levels and forms in which people tend to participate politically in their home country. In this way, people who represent the diaspora of a specific country tend to demonstrate interest in a rather diverse set of ways in the political life of their country. This tends to show that the process of political participation tends to be rather wide-ranging and include a multitude of ways to express interest or even lack of it when it comes to the idea of political participation. The next part included the presentation and analysis of the questionnaire. It must be emphasised that the results of the questionnaire signalled for a clear relation between the willingness to leave the country and the lack of participation in their homeland. In this regard, there was a clear consistent theme among all respondents who associated leaving the country with less participation of all forms. Again, such responses seem to have no contradictory elements and support the negative correlation between the immigration and political participation.

Ultimately, the aim of this paper was to analyse the topic of political participation in the context of the Republic of Kosovo with a focus on the political apathy. More specifically, it analysed the will relationship between the willingness to immigrate and political apathy. In this regard, the conclusions were rather straightforward. Those who express a willingness to leave their home country are not complex in their choices and generally demonstrate such behaviour which is more related to political apathy.

Acknowledgment

This paper is primarily a result of my interest in the area of political participation. Nevertheless, my interest in this area is a result of my studies in political science and, in this regard, I want to thank all my professors and colleagues for stirring and sustaining my interest in this area of knowledge. I am particularly grateful to all my friends and colleagues for always supporting my

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Hologram (Augmented Reality) as a Virtual Teacher

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Abstract.

In the age of information and communication technology, education is undergoing a major transformation. New technologies offer clear opportunities to improve learning and make the student more involved in the educational process. One of the most affected and promising technologies is the use of holograms in combination with augmented reality (AR). Holograms are three-dimensional images that appear in space using illumination and light interference. They provide an immersive and realistic visual experience that is not possible to achieve with ordinary two-dimensional images. The use of hologram technology has extended to various fields, including architecture, medicine, and now education. Therefore, this scientific paper aims to explain the use of hologram technology in the field of education and the ways in which it can serve as an effective tool to provide virtual learning. By integrating augmented reality (AR) with the concept of holograms, an immersive and interactive learning experience is created for students. This paper provides an overview of the basic concepts of hologram technology and its applications in the context of education. Also, the scientific paper describes the importance and future perspectives of the integration of holograms in virtual learning, offering a great potential to improve the quality and efficiency of education. With the continuous advancements in technology, it is expected that

this concept will adapt even better to the needs and possibilities of future education. In conclusion, we can state that the use of holograms in virtual learning advances traditional learning by providing students with a rich and immersive learning experience that this technology has the potential to change the way education is delivered and prepare students for a different worlds and advanced technology.

Keywords: Augmented Reality, Education, Hologram, Student, Virtual Teacher

20. Introduction

In our age marked by rapid technological progress and radical changes in the way we interact with information and each other, education is a field undergoing major transformation. The use of information and communication technologies (ICT), including augmented reality and hologram technologies, has changed the traditional course of teaching and learning. This scientific paper aims to explore and describe this powerful change in the way education is conceptualized and delivered in practice.

1.3 Context of Technological Transformation

In this era, information and communication technologies have entered our daily lives and have affected many areas of people's lives. In the field of education, this influence is even more visible and essential. Schools, universities and other learning institutions have tried to adapt to the speed of technological development, creating an up-to-date and rich learning environment with the latest ICT tools. This transformation is not only an obligation, but also looks at the new possibilities that technology brings to teaching and learning.

1.4 Hologram Technology and Augmented Reality

One aspect of this transformation is the use of hologram technology and augmented reality (AR) in education. Holograms are three-dimensional images that appear in space using illumination and light interference. They provide an immersive and realistic visual experience that is not possible to achieve with ordinary two-dimensional images. The use of holograms and AR technology create a rich and engaging learning experience, making learning more engaging and contextually efficient.

1.5 Purpose of the work

The main aim of this scientific paper is to explore the use of hologram technology in the context of education and to analyze the ways in which it can serve as a virtual teacher. This paper examines the advantages and challenges of using this technology in virtual learning, including applications in various fields of education. It also explores the importance and future prospects of this technology to help shape further thinking and discussions in this important area.

1.6 Definition of key terms

To ensure clarity, it is important to provide definitions of some key terms used in this scientific paper:

Hologram: A three-dimensional image that appears in space using illumination and light interference.

Augmented Reality (AR): Technology that uses information and virtual elements to add an augmented perception of real reality.

Virtual Teacher: A hologram technology application that represents an animated teacher or artificial intelligence avatar in a virtual learning environment.

21. Literature Review

With the use of holograms and AR in education on the rise, it won't be long before students enter the classroom without a physical teacher present. Technology adoption has grown significantly in K-12 classrooms, with augmented reality, virtual reality, and computer vision leading the way. AR holograms can be built upon these technologies to drive enhanced learning outcomes from these EdTech classrooms even further. This will result in providing the best educational tools that will be useful not only for teachers but also for students (Joshi, 2023). The selected instructional design strategy should facilitate effective teaching and learning practices in order to improve outcomes and achieve objectives. Then, well-designed instruction can provide a productive learning environment for AR to enhance academic success. The interactive and engaging nature of the medium provides a strong motivator for learning. Augmented reality can be used for teaching and learning in all fields of study in higher education and the eventual workplace. 3D images can provide important content information to bring to life complex abstract concepts and normally difficult to make sense of with increased learning acquisition (Holland, 2019).

The hologram was discovered in 1947 by accident when the scientist Dennis Gabor was working on his research to develop electron microscopes. After its discovery, it was used in electron microscopes and became known as "electronic holography". Holographic imaging did not advance until the laser was developed in the 1960s. Augmented Reality followed Hologram technology by many years. The reason for this can be attributed to the fact that it is a technology that relied entirely on technology and programming, unlike hologram technology, which was its main basis dependent on equipment, light and physics, and then it evolved and became more dependent on technology (Elmahal, Ahmad, Alomaier, Abdulfatah, & Hussein, 2020).

AR has a moderate effect on learning, in which the clearest benefits relate to learning gains and motivation (Garzón, Pavón, & Baldiris, 2019). The importance of continuing the further development of this technology is emphasized as the potential for learning is high and the use of AR in education is just beginning. For example, a Swedish study about the application of mobile devices and game-based learning using Pokémon Go as a learning tool in elementary school, researchers identified that some of the participating students were looking at their smartphones and the game instead of paying attention to the teacher (Jaldemark, Eriksson, & Mozelius, 2017). Further, an Australian study presents three examples of the use of wearable technology in environmental sciences, cognitive and brain sciences, and teacher training. The authors argue that considering how wearable technologies affect student outcomes and satisfaction is key to instructional design. Furthermore, they emphasize the importance of analyzing student feedback and researching factors that influence students' learning processes (Mårell-Olsson & Bromanb, 2021).

Interactive smart glasses, for example, Microsoft HoloLens 1, allows students to view, transform, move or rotate 3D objects using hand gestures. Mixing reality and virtual 3D objects (eg sometimes described as Mixed Reality) provides an interaction in which students can explore 3D objects from different angles (Trelease & Nieder, 2013), for example, different molecules in stereochemistry.

It is important to remember that robots are created to assist humans, not the other way around. Thus, teaching involves showing love, dedication, and compassion. Currently, robots are not capable of providing these qualities to students. However, in the future, robots equipped with artificial intelligence may be able to support and aid children in their development, much like human teachers (Orhani, 2023).

22. Methodology

This scientific paper uses a methodology based on literature review to investigate the use of hologram technology as a virtual teacher in education. This methodology provides a deep understanding of the previous work of researchers and researchers in this field, and helps to identify trends, challenges and advantages of using this technology in education.

22.1 Identification of literature sources

To build the knowledge base needed for this study, we use a wide range of literature sources. These include scientific articles, books, research reports, and other academic documents that have addressed topics similar to the use of hologram and AR technology in education.

22.2 Literature review process

The literature review process will include the following steps:

Identifying key terms: We identify key terms related to the use of hologram technology in education, including "hologram", "virtual teacher", "augmented reality", and others.

Search and selection of resources: To ensure a complete approach, we use specialized scientific databases and electronic libraries to find and select relevant resources.

Reading and analysis of sources: The sources were read and analyzed to understand the approaches, methodologies and results of previous studies in this field.

Identifying trends: We identify general trends and potential knowledge gaps regarding the use of hologram and AR technology in education.

22.3 Advantages and limitations of the methodology

Using a literature review-based methodology offers major advantages, including access to a broad knowledge base and evaluation of the previous work of other researchers. However, this methodology may have some limitations, such as the lack of new or context-specific data

23. Materials and Methods

23.1 The hologram

Hologram is a technology that creates three-dimensional images of objects or scenes that appear to be present in space. This effect is created using light interference. Unlike the usual two-dimensional images that appear on a flat surface, holograms give a complete and immersive visual experience.

The process of creating a hologram is based on attractive interference conditions. Using a laser light, the image of the object to be displayed is stored on a photographic plate. When laser light hits a particular surface, it reflects and collides in a certain way. This creates a burst of light that forms the three-dimensional image in space.

Holograms have various applications in different areas of life. In the field of education, they can be used to make learning more engaging and help understand complex concepts. For example, in the natural sciences, a hologram of a molecular structure can allow students to see in minute detail and understand the interactions between chemical elements. In architecture and design, holograms can be a powerful tool to present three-dimensional models of projects (Holland, 2019).



Hologram technology brings great advantages in creating immersive and rich visual experiences. Students and professors have the opportunity to explore objects and concepts naturally and improve their understanding. However, the implementation of this technology also has challenges, including the cost of the necessary equipment and the need to train teachers for their efficient use.

23.2 Augmented Reality (AR)

Augmented reality (AR) is an innovative technology that merges the visible world with the digitally created world. The use of AR allows users to see and interact with virtual elements that contain additional information in the context of their real environment. This creates a rich and rewarding experience for the user.

AR is used in many areas of daily life and various industries. In education, this technology has great potential to improve the learning process. Students can benefit from a more immersive and engaging learning experience, allowing them to explore topics and concepts in a different and more engaging way.

AR has numerous applications in the field of education. In the natural sciences, students can see three-dimensional models of cells or small organisms that can be manipulated to better understand their structure. In history and geography, AR can be used to bring historical events to life or display interactive maps with additional information. In languages, the use of AR can help in foreign language learning using simulated situations that involve communication with virtual avatars (Lin & Wu, 2017).



Using AR brings with it many advantages. This includes improving understanding, engaging students more deeply and creating a more engaging and inclusive learning environment. However, the implementation of AR also has challenges, including the costs of the necessary equipment and the need to train teachers to use this technology efficiently.

23.3 The Virtual Teacher with Holograms and Augmented Reality: Help or Obstacle in Education?

In the age of information and communication technology, one of the most intriguing developments is the use of hologram technology and augmented reality (AR) to create rich and engaging virtual learning. The concept of a virtual teacher, presented through hologram and AR, offers a new learning experience, integrating technology and education in a way never seen before. However, this great progress is not without challenges and fundamental questions that arise: How does this technology affect teaching and learning, and can it replace the use of real teachers?

An important aspect of this technology is its ability to create a different visual and auditory experience for students. The virtual teacher, displayed through a hologram, can present learning

materials in a three-dimensional and immersive way. This creates a rich and engaging experience that helps learners understand and build deeper knowledge.



At the same time, this use of technology in learning creates new challenges and questions for educators and students.

- Can it replace a real teacher effectively?
- How can the appropriateness and efficiency of this technology be ensured to meet the diverse needs of students?
- In addition, the cost and infrastructure required to implement this technology can be a barrier for many schools and educational institutions.

Another important issue is the adaptability of this technology to all subjects and levels of education. The clearest applications are seen in the natural sciences and technology, where visualization three-dimensional can help understand complex interactions. However, for other subjects such as literature or history, implementing this technology can be more challenging and does not always provide the benefits of a real teacher.

Hologram technology and augmented reality in education is a big step forward towards more inclusive and rich learning. However, it is important to treat it carefully and critically to ensure that it is meeting the goals of education and improving the quality of teaching. This technology should be an additional tool and a rich resource for learning, not a hindrance or substitute for real teachers.

23.4 Educational applications of hologram technology and augmented reality

Applications of hologram technology and augmented reality (AR) have great potential to change the way students learn and understand school subjects. These technologies provide immersive and engaging learning experiences that can help improve student understanding and memory. Here are some apps and platforms that can be used in education:

Microsoft HoloLens: This is one of the leading hologram technology devices. It offers many opportunities to create different learning applications, including natural sciences, mathematics and architecture (Microsoft, 2023).



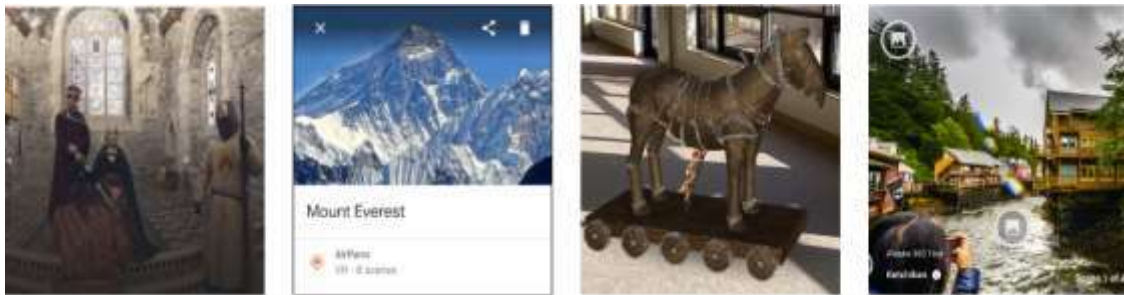
Merge Cube: It is a three-dimensional object that can be used with various augmented reality applications to display objects and information in an integrated way (Merge, 2022).



zSpace: Hologram technology platform that provides an immersive experience using special glasses and gloves (zSpace, 2023).



Google AR Expeditions: Allows teachers to organize various virtual trips through their mobile devices, including trips to history, geography and more (Google, 2023).



DAQRI AR Studio: This is an environment designed to create various AR content for education (Nagah, 2023).



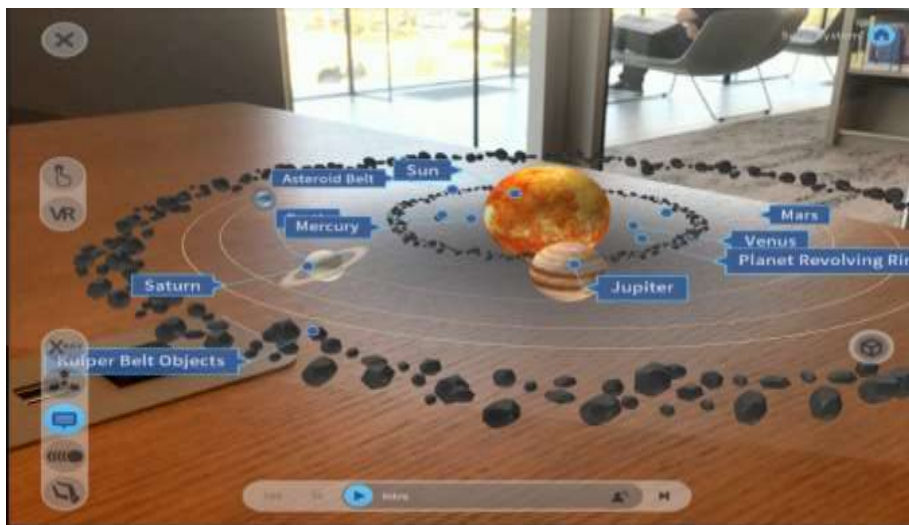
Quiver Education: Allows students to color and explore different objects that appear in a three-dimensional way through the AR application (Quiver, 2022).



Anatomy 4D: This app displays various anatomical scenes in an immersive and detailed way to help students learn about the structures of the human body (Anatomy, 2023).



EON Experience AVR: The platform that offers different experiences of being part of an augmented reality through VR and AR glasses (EON, 2023).



These are just some of the common applications and platforms that use hologram technology and augmented reality in education. Their use can lead to a rich and engaging learning experience for students.

23.5 Challenges and advantages of using holograms and augmented reality in education

Challenges:

Implementation cost: In order to integrate hologram and AR technology into the learning environment, schools and educational institutions need to invest in the necessary equipment and infrastructure. This can be a financial challenge for some institutions.

Need for teacher training and preparation: Teachers need to learn how to use this technology in teaching. This takes time and dedication to learn and develop the necessary skills.

App interaction and control: Students and teachers should learn how to interact and control apps used with hologram and AR technology. This can be a challenging process for some.

Security and Privacy: To ensure that student information and activities are protected and private, it is important to have clear security and privacy policies and procedures.

Advantages:

Rich and Involved Learning Experiences: Hologram and AR technology provides a new and rich experience for learners. They can learn in an involved and interactive way, helping to make sense of learning.

Personalized learning opportunity: These technologies allow learning to be tailored to each student according to their needs and learning style.

Helping students understand complex topics: For subjects like science, math, and technology, holograms and AR technology can help students understand and visualize complex concepts in a new way.

Preparing for the technological future: By using these technologies, students develop the knowledge and skills necessary to adapt to an updated and technological environment.

Student motivation and engagement: The use of hologram and AR technology can make learning more interesting and motivating for students, helping them engage more in learning.

The use of hologram technology and augmented reality in education brings with it challenges, but has great potential to improve student learning and understanding in a way not seen before. Their use should be done with care and preparation to ensure a rich and engaging learning experience.

23.6 Future prospects

Wider integration into the school curriculum, we can expect hologram and AR technology to become a common part of the teaching of various subjects, including science, mathematics, language and many others. The development of specialized applications for education will create special applications that adapt to the needs and different levels of education, including higher and professional education. The opportunity to use this technology can be increased so that it is more comprehensive and does not create separation between students. Developing teaching methodologies that use technology to make learning more efficient and engaging. Students who have experience with hologram and AR technology will be better prepared to adapt to a rapidly evolving technological job market.

Hologram and AR technology have a great potential to change the paradigms of education. Using them in teaching can bring about huge advances in the way students learn and build their knowledge. However, it is important that these technologies are used carefully and appropriately integrated into the educational context.

24. Conclusion

In this study, we examined the impact and prospects of using hologram technology and augmented reality in the field of education. These technologies provide a rich and engaging learning

experience, bringing about significant improvements in the way students learn and construct their knowledge.

With the use of hologram and AR technology, students have the opportunity to explore and understand topics in a new and engaging way. This brings a significant improvement in the memory and understanding of the students in the various subjects.

However, the use of these technologies is not without challenges. The cost of implementation, the need for teacher training, and information security are some of the challenges that can be faced in this process.

However, as developments in this field continue, it is expected that hologram and AR technology will be an integral part of future learning. By adapting and using these technologies with care and purpose, new doors can be opened for more efficient and rich teaching for students at all levels of education.

In conclusion, changes and innovations in education technology are leading to a great advancement in the way teaching and learning is done. Hologram technology and augmented reality are just the beginning of this journey towards a more inclusive and improved education.

Hologram technology and augmented reality are new tools that have great potential to improve teaching and learning. However, it is important to handle it carefully and integrate it appropriately in the educational context. With proper preparation and use, these technologies can provide a rich and engaging learning experience for students.

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GLOBAL SECURITY – MODERN SCIENTIFIC CHALLENGES AND PERSPECTIVES

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Abstract.

Global security is a security science and a separate teaching-scientific discipline that has the following contents as the subject of research: territorial security; security of state sovereignty; social security; societal security; environmental safety; economic and energy security; information security; Security environment – global challenges and key risks and threats to global security;

Activities of the European Union and the NATO Alliance in the suppression of global security threats and challenges.

With the increasing volume, diversity and destructiveness of security challenges, risks and threats, the context of security is continuously changing. Knowing the problems is a necessary condition for solving them. This led to the development of security sciences, among which is Global Security as a security science, where by applying special methods, existing knowledge about security phenomena is systematized and new knowledge is found.

The subject of research are the modern challenges faced by global security as a separate teaching-scientific discipline.

The aim of the research is to identify the new challenges faced by this scientific-teaching discipline and by solving these challenges, innovative approaches can be created to overcome obstacles and advance scientific progress, as well as create new knowledge and new potential solutions and a policy of trust and security.

The content will be created based on the analysis of foreign literature and using electronic content. In preparing the content of the paper, the author will apply the general scientific methods: the descriptive method, the normative method, the comparative method and the content analysis method as a special scientific method.

Keywords: modern challenges, risks and threats to global security; scientific knowledge.

1. Introduction

Like other social sciences, Global Security is a science and represents a systematic body of knowledge that can be researched, verified, learned and transferred. Global security as a teaching-scientific discipline uses scientific methods of observation, experimentation and research. These methods are based on studied phenomena and systematic data classification and analysis. These analyzes and studies of the observed phenomena are used to establish a causal relationship between two or more variables. The generalization of these relationships results in hypotheses. Because hypotheses have been tested and proven to be true, they are called principles. These principles, when applied in practice, assist practitioners in describing and analyzing problems, solving them and predicting outcomes.

Global Security as a science that has its own conception, principles (which result from the shaping of practical experiences), methods and techniques, approaches and overall categorical equipment. Of course, in theory, solutions for all practical problems cannot be found.

This practically means: to do the right things in a given situation, while at the same time being faced with the reality that exists.

With the increasing volume, diversity and destructiveness of security challenges, risks and threats, the context of security is continuously changing. Knowing the problems is a necessary condition for solving them. This led to the development of security sciences, among which is Global Security as a security science, where by applying special methods, existing knowledge about security phenomena is systematized and new knowledge is found.

ANALYSIS OF CONTENTS RELATED TO A SOVEREIGN NATION STATE

Global security is a security science and a separate teaching-scientific discipline that has the following contents as the subject of research: security of state sovereignty; territorial security;

social security; societal security; environmental safety; economic and energy security; information security; Security environment – global challenges and key risks and threats to global security; Activities of the European Union and the NATO Alliance in the suppression of global security threats and challenges.

When we talk about a sovereign nation-state, it is very important that each national state realizes territoriality as the right of exceptional political authority over a certain geographical space (internal sovereignty) and autonomy – meaning that no external factor – such as another state – has authority within the defined borders of states (external sovereignty).

According to Bozidar Javorovič, "national security implies internal and external security of the state, in relation to internal and external dangers and threats. It is about global security that ensures the survival and normal functioning of the state with all the elements of its independence, freedom and territorial integrity, and constitutional order (including the possibilities for its democratic changes and development (Gerginova, 2023).

The security of state sovereignty implies political independence, independence of states. The state authority and the state are sovereign, when they are not subordinated or subordinated to any higher authority inside the state or outside it, that is, when they have the legal opportunity to determine the framework of their competence and interventions by their own decision and to apply all necessary measures to protect it.

Social security – the social community undertakes activities aimed at achieving the well-being of citizens, i.e. physical well-being, moral and intellectual development, guarantee funds, which are sufficient to meet life's needs at any stage of life, but also funds that will protect citizens and the social community from all major risks (social insecurity).

According to Weaver, societal security encompasses situations that society understands as threats to its identity (Weaver et al., 1993). He defines societal security as "the ability of society to survive and preserve its essential character in the face of changed conditions and possible or actual threats". It is a matter of sustainability of traditional peculiarities of language, culture, religion, national identity and customs within acceptable conditions for development (Gerginova, 2023). When we talk about societal security, we focus on, in addition to society, various influences that can change certain values such as: language, culture, religion and national identity in an unacceptable way.

When it comes to society object, it is necessary to note that there is a clear difference between society and the state, first of all, in relation to the challenges and threats that have an impact on their security. There is a difference between the terms "state security" and "society security".

In the being of both phenomena is existence or survival; the state that loses its sovereignty ceases to be a state and the society that loses its identity ceases to exist as a sovereign entity. The state provides legitimacy and protection to society, but it is also a key link in the approach to security as a supranational phenomenon.

Building the concept of societal security also means analyzing the conditions under which society can independently, without the intervention of the state, with its own capacities, solve certain problems that could arise between nations, ethnic or religious groups. Such an effort will have much more success in conditions of a high degree of individual security and when the state allows various forms of expression of the specific interests of groups. Otherwise, societal security would be just an idea.

Health security – deals with the threats to human life and health caused. With diseases from air or water pollution, from inadequate access to health services; as well as with infectious and parasitic diseases, HIV-AIDS and other viruses. The danger associated with the spread of infectious diseases and infections and the disease of addiction is a security risk that could grow in the future.

Environmental protection is one of the three most important areas of globalization. It is related to the environmental safety that it signifies: safety of the environment (protection of the environment) – its protection, maintenance and improvement, i.e. its protection from threats from phenomena of natural, human or technical-technological origin (risks and threats to the environment) and the safety of people, states, international communities and the planet, i.e. the threat to their safety from the degraded environment (ecological risks and threats) (Gerginova, 2023). The threat to the environment (damaged ozone protective layer, climate change, destruction of forests and animal species, water pollution, etc.) towards the end of the 20th century became a global security problem. It refers to environmental problems that are a consequence of the action of various social, political and economic dynamics in the world or is a consequence of certain natural processes.

Economic security – As economic threats to national security, we can single out: economic insecurity; poverty; hunger; depression; economic diplomacy, threats of unemployment, job insecurity; poor working conditions in the workplace, income inequality, poorly developed social security network. Economic and energy security implies the protection of economic and energy potentials from physical threats with the absence of dangers that can threaten economic and energy stability and independence.

Today, the subject "Global Security" represents a special and young scientific discipline, which in its study uses already known methods of the social sciences, but also applies specific research methods and techniques that are characteristic and adapted to its subject of research.

Scientific knowledge is more conditioned by the epistemological foundations of the subject of research and by a theoretical fund, and the method is known to be the most dynamic constituent of the security sciences (Milošević & Milojević, 2001, 28).

THE MODERN SECURITY ENVIRONMENT END BUILDING RESILIENCE

The contemporary global security environment is unpredictable. Rapid, complex and dynamic social, political, economic and technological developments, associated with changes in the balance of power have a great impact on the security challenges, risks and threats we face. The concept of security now includes threats to the national security of states, but also threat to the citizens living in them.

Today, many member states face common threats that can be more effectively addressed at the level of the European Union. The European Union can be used as a platform to strengthen national efforts and, through its regulatory capacity, establish common benchmarks that can help raise the level of protection and resilience across the EU. The EU can therefore play an important role in improving our collective situational awareness, in building Member States' resilience to hybrid threats and in crisis prevention, response and recovery.

Modern threats have a complex content, and therefore the need to respond to the entire society is imposed. This implies the need to build national capacities to enhance resistance to these threats through a broader, more integrated and better coordinated approach at the national level.

Resilience is defined in the EU's Global Strategy from 2016 as "the ability of states and societies to reform, thereby enduring and recovering from internal and external crises" (According to *"Shared Vision, Common Action: A Stronger Europe"*, A Global Strategy for the European Union's Foreign and Security Policy, 2016).

Resilience is the ability of an individual, a household, a community, a country or a region to withstand, cope, adapt, and quickly recover from stresses and shocks such as violence, conflict, drought and other natural disasters without compromising long-term development (See more: https://ec.europa.eu/echo/files/aid/countries/factsheets/thematic/EU_building_resilience_en.pdf).

The notion of the resilience of NATO member states through maintaining and developing their individual and collective defense capacity is rooted in the Alliance's 1949 Founding Treaty. This is, in particular, established in Article 3 where the internal dimension of resilience is implicitly defined in terms of capabilities and the capacity for collective defense is determined through NATO's defense planning and capability development process.

NATO defines resilience as "a society's ability to resist and recover from such shocks" as natural disaster, failure of critical infrastructure, or a hybrid or armed attack (According to Resilience and Article 3", NATO, 2021).

This definition touches on two features of resilience: First, resilience concerns the ability to absorb and recover from a state of crisis (Ben Caves et al., 2021).

Second, resilient actors must be able to respond to a range of potential shocks, both expected and unexpected. This relates to the ability to survive; as one widely adopted definition of resilience puts it, an actor must be able "to maintain its core purpose ... in the face of dramatically changed circumstances" (Andrew Zolli & Ann Marie Healy, Resilience, 2012).

Hence, each member state has an obligation to Build Resilience in accordance with Article 3 of the North Atlantic Treaty – the obligation to collectively and individually develop capacities to respond to any form of threat or crisis that aims to threaten society and democratic values and to destabilize the functioning of state institutions. Resilience is first and foremost a national responsibility.

In 2016, the Summit was held in Warsaw. NATO has agreed on seven basic requirements for national resilience against which Allies can measure their level of preparedness; these requirements reflect the essential functions of continuity of government, essential services to the population and civilian support of the military.

At the Brussels Summit in 2021, NATO adopted a Commitment to Enhanced Resilience. This document establishes the principle that NATO will monitor and evaluate the resilience policies adopted by member states and national resilience remains a matter for individual members of the alliance. Here it is established as a policy recommendation that NATO can resolve the tension between its collective responsibility among member states to implement resilience measures by addressing resilience within deterrence and defense.

This aligns with the concept of deterrence used in NATO's 2019 military strategy and the 2020 concept of deterrence and defense of the Euro-Atlantic area, which focuses less on crisis response and more on how deterrence can be used in constant competition (Jonny Hall & Hugh Sandeman).

The importance of Deterrence by Denial is emphasized here. Considering resilience in the context of deterrence will establish the overarching logic of NATO's engagement with resilience issues and encourage the practicalities of moving towards "collective resilience".

As a form of deterrence, resilience policies will need to meet the three key criteria for all forms of deterrence: commitment, capability and communication.

During 2015, the European Commission and the High Representative adopted a Common Framework for Countering Hybrid Threats and Fostering the Resilience of the European Union, its Member States and Partner Countries, while increasing cooperation with NATO to counter these threats (See: [http://europa.eu/rapid/press-release MEMO-16-1250 en.htm](http://europa.eu/rapid/press-release_MEMO-16-1250_en.htm)

https://ec.europa.eu/commission/presscorner/detail/en/MEMO_16_1250

The Joint Framework proposes twenty-two operational Actions aimed at:

- *raising awareness* by establishing dedicated mechanisms for the exchange of information between Member States and by coordinating EU actions to deliver strategic communication;
- *building resilience* by addressing potential strategic and critical sectors such as cyber security, critical infrastructures (Energy, Transport, Space), protection of the financial system from illicit use, protection of public health, and supporting efforts to counter violent extremism and radicalization;
- *preventing, responding to crisis and recovering* by defining effective procedures to follow, but also by examining the feasibility of applying the Solidarity Clause (Article 222 TFEU) and the mutual defense clause (Art. 42(7) TEU), in case a wide-ranging and serious hybrid attack occurs;
- *stepping up the cooperation and coordination between the EU and NATO as well as other partner organizations*, in common efforts to counter hybrid threats, while respecting the principles of inclusiveness and autonomy of each organization's decision making process.

The Framework is designed to provide a robust foundation to support Member States in countering hybrid threats collectively, supported by a wide range of EU instruments and initiatives.

CONCLUSION

Today, Global Security is determined as an authentic and special scientific discipline, primarily because it has a separate, clear specific object of study, theoretical and logical foundation, a basis for its knowledge, a specific research methodology with a series of research, general, special and individual methods, as well as a developed conceptual and categorical apparatus. The independence of this scientific discipline results from the very content of its subject, the specific application and selection of scientific methods in the processing and systematization of those subject contents. This scientific discipline has an interdisciplinary and multidisciplinary character.

The most important element or constituent, part that makes global security a scientific discipline is actually its object of study and research.

Today, Global security is defined as security that includes the following contents: territorial security; security of state sovereignty; social security; societal security; environmental safety; economic and energy security; information security etc.

Global security represents the expansion of security from a predominantly military sphere to other areas, primarily economic, energy, social and environmental security, including the security of the individual and society as a whole.

Today, Global Security is a science that provides an overview of the current state of the national, regional and global security environment, assessments of threats, risks and challenges.

The modern world faces asymmetric, hybrid, cyber and other non-military threats, as well as threats posed by non-state actors. Natural and technical-technological disasters, epidemics and the impact of climate change continue to represent an additional risk for the region and the wider world. The security environment is further complicated by the presence of large quantities of illegal weapons as a result of previous conflicts. The influx of migrants and refugees also has the potential to destabilize countries in the region. The region remains influenced by history and faces issues that can lead to instability. In contrast, regional cooperation and good neighborly relations have a positive impact on security in the region.

We recognize the following as basic threats, risks and challenges:

Economic and political conditions – slow economic growth, corruption, organized crime, underdeveloped institutions, unemployment, weaknesses in the judicial system and the politicization reforms are underway. Modern terrorism is characterized by a close connection with violent extremism, especially with religious extremism.

Violent extremism and radicalism in all its forms (national, political and religious), in certain cases originates from historical circumstances and disagreements and is reinforced by the slow social and economic development of the region. Externally funded non-state actors can exploit weaknesses to cause internal, inter-ethnic discord and conflict. Illegal migration – the nature of this risk will depend on the future dynamics of migration and the consolidated international response to it. Organized crime manifests itself primarily through the illegal trade in among other things, narcotics and people. Security in the region is further threatened by the presence of illegal arms and ammunition that may become available to criminal and extremist groups. Computer crime and the threat to information security is a current and growing challenge to global security. The most serious potential consequences of cybercrime is the threat to the functioning of critical infrastructure elements, including the security system and the defense system.

Natural disasters, technical-technological disasters, epidemics and climate change are indirect threats that are difficult to predict and can seriously burden security and other state institutions.

Degradation and destruction of the environment is closely related to climate change and global warming.

The states in the region are aware that cooperation and good neighborliness are a prerequisite for building mutual trust. Integrating into European and Euro-Atlantic structures and improving regional security, stability and economic growth. The strengthened cooperation in the field of defense between the countries in the region has contributed to the improvement and strengthening of mutual relations and the building of trust measures.

Building resilience is a long-term process that needs to be context-specific and embedded in national development policies and planning. In order to realize the protection of national interests and create national resilience of society, each country needs to build an effective concept for dealing with a series of challenges as well as defense against cyber and hybrid threats – each country should be able to adapt to the unpredictable, complex and a changing security environment.

It is necessary to undertake activities in the direction of continuous monitoring and assessment of security threats and risks; Organizing, preparing and training for contribution to cooperative and collective defense and security. Strengthening regional and global security and stability.

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AR-GE FAALİYETLERİNE UYGULANAN HARCAMA VE VERGİ TEŞVİKLERİ: TÜRKİYE ÖRNEĞİ

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ÖZ

Günümüzde ekonomik büyüme ve gelişmenin en önemli itici güçlerinden birisi de teknolojik gelişmelerdir. Teknolojik gelişmenin ileri olduğu ülkelerde verimlilik ve rekabet gücü yüksektir. Bu rekabetçi ortamda yeni teknik ve gelişmeleri takip edip uygulayabilen kurumların katma değer yaratma kapasitesi artmaktadır. Teknolojik gelişmeyi sağlamak ancak Ar-Ge alanında yatırım yapmakla mümkündür.

Özellikle 2000 yılından sonra endüstri 4:0 devrimi ile birlikte teknolojiye yaşanan yenilikler ve küreselleşme ekonomide uluslararası rekabetin artmasına neden olmuştur. Ekonomideki bu rekabet ortamında Ar-Ge ve inovasyon (yenilik) harcamalarına önem veren ülkeler ve kurumlar kazançlı çıkmaktadır.

Araştırma-geliştirme harcamaları, bilimsel ve teknolojik alanda yeni bilgiler elde etme çalışmalarıdır. Ülkeler ve şirketler rekabet güçlerini yükseltmek için ar-ge alanında büyük yatırımlar yapmaktadır. Devletler de ar-ge faaliyetlerine vergi teşvikleri ile destek vermektedir.

Türkiye’de Ar-ge faaliyetlerinin oranı AB ve OECD ülkelerinden daha düşüktür. Özel sektörün ar-ge alanında çalışmalarını teşvik etmek amacıyla, bu faaliyetlerden elde edilen gelirler vergi dışında bırakılmıştır. Bu teşviklere rağmen özel kesimin ar-ge yatırımları yeterli değildir. Ar-ge harcamalarının milli gelir içindeki payı % 1.40 seviyesindedir. Ar- ge harcamalarının büyük bir kısmı kamu sektörü tarafından yapılmaktadır.

Yapılan bu çalışmada, Ar- ge yatırımlarının önemi, Türkiye’de Ar- ge harcamalarının hangi seviyede olduğu ve bu harcamaları teşvik etmek için yapılan vergisel önlemlerin neler olduğu ve yeterliliği incelenmiştir. Çalışmada literatür taraması, mevzuat incelemesi ve istatistiki verilerden yararlanılmıştır. Sonuç kısmında Ar-Ge yatırımlarını teşvik etmek için yapılması gereken önlemler sunulmuştur.

Anahtar kelimeler: Ar-ge, İnnovasyon, katma değer, teknolojik gelişme, rekabet, ekonomik büyüme, vergi teşvikleri

TAX INCENTIVES RECOGNIZED FOR R&D ACTIVITIES: THE CASE OF TURKEY

Abstract

Today, one of the most important driving forces of economic growth and development is technological development. In countries where technological development is advanced, productivity and competitiveness are high. In this competitive environment, the added value creation capacity of institutions that can follow and apply new techniques and developments increases. Achieving technological development is only possible by investing in R&D.

Especially after 2000, with the Industry 4.0 revolution, technological innovations and globalization have increased international competition in the economy. In this competitive environment in the economy, countries and institutions that attach importance to R&D and innovation expenditures benefit.

R&D is the work of obtaining new information that will enable the development of science and technology. Countries and companies make significant R&D investments to increase their competitiveness. States also support R&D activities with tax incentives.

The rate of R&D activities in Turkey is lower than in EU and OECD countries. In order to encourage the private sector to work in the field of R&D, income from these activities is excluded from taxes. Despite these incentives, more than R & D investments of the private sector are required. The public sector makes up the majority of R&D expenditures.

In this study, the importance of R&D investments, the level of R&D expenditures in Turkey, and the tax measures taken to encourage these expenditures and their adequacy were examined. Literature review, legislative review and statistical data were used in the study. In the conclusion, measures to be taken to encourage innovation investments are presented.

Keywords: R&D, Innovation, added value, technological development, competition, economic growth, tax incentives

Giriş

Günümüzde ekonomik büyüme ve gelişmenin en önemli itici güçlerinden birisi de teknolojik gelişmelerdir. Teknolojik gelişmenin ileri seviyelerde olduğu ülkelerde verimlilik ve rekabet gücü yüksektir. Yüksek Teknoloji üreten ülkelerin yarattığı katma değer ve dolayısıyla milli gelirleri de yüksektir.

Teknolojik gelişmeyi sağlamak ancak Ar-Ge harcamalarının arttırılması ve bu amaçla araştırma geliştirme faaliyetlerine vergi alanında teşviklerin uygulanması ile mümkündür.

Günümüzde teknolojide yaşanan yenilikler ve küreselleşme ekonomide uluslararası rekabetin artmasına neden olmaktadır. Ekonomideki bu rekabet ortamında Ar-Ge ve inovasyon (yenilik) harcamalarına önem veren ülkeler ve kurumlar kazançlı çıkmaktadır. Ayrıca rekabet ortamında hızla gelişip büyüyen işletmelerin genellikle yeni bilgi arayışına önem veren işletmeler olduğu görülmektedir.

Teknoloji günümüzde uluslararası rekabete konu olan ve alınıp satılabilen bir meta ve güç haline gelmiştir. Hatta ülkelerin ve Şirketlerin teknolojik gücü sahip oldukları patent sayısı ile ölçülmektedir.

Bu nedenle bütün ülkeler gibi Türkiye’de Ar-Ge faaliyetlerinin geliştirilmesi amacıyla özel sektöre vergi alanında birçok teşvik uygulamaktadır.

1. Ar-Ge ve inovasyon ’un Tanımı ve Kapsamı

Ar-Ge faaliyetleri yeni bilgi arayışına yönelik yapılan araştırma ve faaliyetlerdir. Yeni bilgi ve araştırmaları destekleyen firmalar ve ülkelerin rekabet gücü, bu alana yatırım ve destek sağlamayan firma ve ülkelere kıyasla daha yüksek olacaktır.

“Frascati Kılavuzu’na göre Ar-Ge; “insanlığın, kültür bilgisi ve toplum da dâhil olmak üzere bilgi stokunu arttırmak ve mevcut bilginin yeni uygulamalar tasarlamak amacıyla yürütülen yaratıcı ve sistematik çalışmayı içermektedir (Ülger, 2019, s. 3-4).

TÜBİTAK’a göre Ar-Ge faaliyeti; “bilim ve teknolojinin gelişmesini sağlayacak yeni bilgileri elde etmek veya mevcut bilgilerle yeni malzeme, ürün ve araçlar üretmek, yazılım üretimi dahil olmak üzere yeni sistem, süreç ve hizmetler oluşturmak veya mevcut olanları geliştirmek amacıyla yapılan düzenli çalışmaları ifade eder”

“5746 sayılı kanuna göre Ar-ge “Araştırma ve geliştirme, kültür, insan ve toplumun bilgisinden oluşan bilgi dağarcığının artırılması ve bunun yeni süreç, sistem ve uygulamalar tasarlamak üzere kullanılması için sistematik bir temelde yürütülen yaratıcı çalışmaları, çevre uyumlu ürün tasarımı veya yazılım faaliyetleri ile alanında bilimsel ve teknolojik gelişme sağlayan, bilimsel ve teknolojik bir belirsizliğe odaklanan, çıktıları özgün, deneysel, bilimsel ve teknik içerik taşıyan faaliyetleri,” kapsamaktadır (Sanayi ve Teknoloji Bakanlığı, 2008).

5746 sayılı kanuna göre inovasyon(yenilik): Sosyal ve ekonomik ihtiyaçlara cevap verebilen, mevcut pazarlara başarıyla sunulabilecek ya da yeni pazarlar yaratabilecek; yeni bir ürün, hizmet,

uygulama, yöntem veya iş modeli fikri ile oluşturulan süreçleri ve süreçlerin neticelerini” kapsamaktadır (Sanayi ve Teknoloji Bakanlığı, 2008).

“5746 Sayılı kanuna göre ”Pazarlama çalışmaları, piyasa araştırmaları, Kalite kontrol ve sosyal bilimler araştırması, petrol, doğalgaz, maden arama ve sondaj faaliyetleri, ilaç üretim izni öncesinde en az iki aşaması yurt içinde gerçekleştirilmeyen klinik çalışmalar ile üretim izni sonrasında gerçekleştirilen klinik çalışmalar, kuruluş ve örgütlenmeye ilgili araştırma giderleri ve reklam amaçlı tüketici testleri... gibi faaliyetler “ ar-ge Faaliyeti sayılmaz (Resmi Gazete, 2016).

2. Türkiye’de Ar-Ge Harcamalarının Gelişimi

Türkiye’de R&D faaliyetlerine 2746 sayılı kanun ile önemli vergi ve sosyal güvenlik teşvikleri getirilmiştir. Bu teşviklere rağmen bu alanda yapılan harcamalarının seviyesi oldukça düşük düzeydedir.

Tablo 1: Türkiye’de Ar-Ge Harcamalarının GSYİH içindeki Payı

2001	2005	2010	2015	2020	2021	2022
0,52	0,56	0,79	0,97	1,37	1,40	1,32

Kaynak: TÜİK, Araştırma Geliştirme Faaliyetleri İstatistikleri

2001 araştırma-geliştirme harcamalarının gayri safi yurt içi hasıla içindeki payı %0,52 seviyesine iken 2020 yılından itibaren artmaya başlamış ve 2020 yılında %1,37 iken, 2021 yılında %1,40'a yükselmiştir.

Aşağıda 1 nolu tabloda seçilmiş bazı ülkelerde Araştırma-Geliştirme harcamalarının Gayri safi yurt içi hasıla içindeki payları incelenmiştir.

Tablo 1: Seçilmiş Ülkelerde Ar-Ge Harcamalarının GSYİH İçindeki Payı

Ülke / Yıl	2022 (%) GSYİH
ABD	3,46
Almanya	3,13
Avusturya	3,2
Belçika	3,44
Çekya	1,96
Çin	2,41
Danimarka	2,76
Finlandiya	2,95
Fransa	2,18
Güney Kore	4,93
Hollanda	2,3
İspanya	1,44
İsveç	3,4

İsviçre	3,31
İtalya	1,33
Letonya	0,75
Malta	0,65
Japonya	3,34
Portekiz	1,71
Romanya	0,46
Slovenya	2,11
Türkiye	1,4
Yunanistan	1,48

(EUROSTAT) Eurostat: R&D Expenditures, <https://ec.europa.eu/eurostat/statistics-explained/index.php>

AB'ye Üye Devletleri arasında 2022'de en yüksek Ar-Ge harcaması Belçika (%3,44), İsveç'te (%3,40) gerçekleşmiştir ve ardından Avusturya (%3,20), sonraki en yüksek oranlar Almanya'da (%3,13), Finlandiya'da (%2,95) gerçekleşti. 2022'de Ar-Ge harcamalarının GSYH'lerinin %1'inin altında gerçekleşen ülkeler ise AB'ye 2004 yılında veya daha yakın zamanda katılan Üye Devletlerdir ve en düşük Ar-Ge harcaması Romanya (%0,46), Malta (%0,65) ve Letonya'da (%0,75) olarak gerçekleşmiştir.

AB dışındaki ülkelere bakıldığında, Ar-Ge harcamalarına en yüksek pay % 4,93 ile Güney Kore,%3,46 ABD, % 3,44 Belçika, % 3,4 İsveç, %3,34 Japonya, %3,31 İsviçre ve % 3,13 oranı ile Almanya'dır.

OECD ülkelerinde Ar-Ge harcamaları ortalaması 2000-2022 yılları arasında %2- 2,5 arasında gerçekleşmiştir (OECD).

Türkiye'de ise Ar-Ge Harcamaları Gelişmiş AB ve OECD ülkelerinden daha düşük seviyededir.%1,4 ile Yunanistan ile aynı seviyededir. OECD ülkeleri ortalamasının altındadır

Türkiye'de Ar-ge harcamaları son yıllarda artmakla birlikte AB ortalamasının altında yer almaktadır. Türkiye'de Ar-ge faaliyetlerine sağlanan teşviklerle son yıllarda oran yükselmiştir. 2010 yılında yüzde 0,79 seviyesindeyken 2021 yılında yüzde 1,40'e ulaşmıştır.

Türkiye'de Ar-Ge harcamaları içinde özel şirketlerin payı %61,3 olurken, bunu %34,2 ile yükseköğretim takip etmiştir. Kâr amacı olmayan kuruluşlar tarafından yapılan Ar-Ge harcamalarının da içinde olduğu genel devlet Ar-Ge harcamalarının toplam Ar-Ge harcamaları içindeki payı ise %4,5 olmuştur. Ar-Ge harcamaları içerisinde personel harcamaları %48,9 ile en büyük harcama kalemini oluşturmuştur (TÜİK, 2021).

Ar-Ge personeli öğrenim durumuna göre incelendiğinde, Ar-Ge personelinin %34,9'unun lisans eğitim düzeyine sahip olduğu görülmüştür. Bunu sırasıyla %31,2 ile doktora veya eşdeğeri, %24,3 ile yüksek lisans, %4,8 ile meslek yüksekokulu ve % 4,8 ile lise ve altı kategorileri takip etmiştir (TÜİK, 2021).

3. Türkiye'de Ar-Ge Faaliyetlerine Uygulanan Vergi Teşvikleri

Araştırma- geliştirme faaliyetlerine vergi teşviklerinin uygulanmasının amacı, ülkemizin ekonomik ve teknolojik alanda gelişmesi için özel sektörün Ar-Ge faaliyetlerine yoğun yatırım yapmasını sağlamaktır. Ancak bütçe olanaklarının yetmemesi nedeniyle ülkemizde kamu kesimi Ar-Ge faaliyetlerine yeterli kaynak tahsis edememektedir (Güzel, 2009, s. 35). Bu kısıt nedeniyle özel sektörün teşvik edilmesi önem kazanmaktadır.

Türkiye’de yeni teknoloji arayışına destek olmak amacıyla çeşitli vergi ve harcama destekleri uygulanmaktadır.

Uygulanan Ar- Ge Teşvikleri iki ana grupta incelenebilir. Birincisi doğrudan elde edilen gelirden tamamı indirilebilen harcamalar, İkincisi ise Gelir Vergisi, Kurumlar vergisi, Damga Vergisi, Gümrük Vergisi Muafiyetleri ve SGK primi desteğidir.

3.1. Elde Edilen Gelirden Tamamı İndirilebilecek Harcamalar

“5746 sayılı Kanunu açıklayan yönetmeliğe göre Ar-Ge kapsamındaki harcamalar 6 grupta toplanmıştır. Bu Harcamaları; İlk madde ve malzeme giderleri, Amortismanlar, personel harcamaları, genel giderler, dışarıdan satın alınan hizmetlere ödenen giderler olarak sınıflandırılmaktadır (Arslan).”

3.1.1. İlk madde ve malzeme giderleri

Araştırmada kullanılacak ilk madde, yardımcı madde, işletme malzemesi, ara mamul, yedek parça, prototip ve benzeri giderler ile VUK’ göre amortismanla tabi tutulması mümkün olmayan maddi kıymetlerin giderleri bu grupta yer almaktadır.

3.1.2 Amortismanlar

Ar-Ge faaliyetinde kullanılan; Bina, makine, demirbaş, cihaz, taşıt, maddi ve maddi olmayan duran varlıklar için ayrılan amortismanlar (aşınma payı) kazançtan indirilebilir (Kardaş, 2009, s. 73). Ancak Ar-Ge faaliyetleri dışında kullanılan iktisadi kıymetlere ilişkin amortismanlar araştırma-geliştirme harcaması kabul edilmez ve gider olarak indirilemez (Özeroğlu, 2011, s. 107).

3.1.3. Personel Harcamaları

Teknoloji geliştirme bölgelerinde çalıştırılan AR-GE personeline ödenen ücretler ile bu kapsamdaki harcamalardır ve tamamı elde edilen gelirden indirilebilir (Ernst & Young, 2011, s. 10).

3.1.4. Genel giderler

Ar-Ge faaliyeti ile ilgili elektrik, su, bakım- onarım, haberleşme, nakliye ve sigorta giderleri, faaliyetle ilgili bilimsel yayın giderleri, Faaliyetin yapıldığı tesisin kira giderleri, faaliyet ile ilgili ödenen vergi, resim ve harçlar (Kardaş, 2009, s. 73).

3.1.5. Dışarıdan sağlanan hizmetler

Ar-Ge ve yenilik faaliyetleriyle ilgili olarak işletme dışından satın alınan; mesleki veya teknik destek, test, laboratuvar ve analiz hizmetleri ile bu nitelikteki diğer hizmet alımları için yapılan ödemeler Ar-Ge indirimine konu edilir. Bu şekilde alınan hizmetlere ait harcamalar, proje için gerçekleştirilen toplam harcama tutarının %50’sini geçemez (Arslan).

3.2. Vergi Muafiyetleri ve SGK Prim Desteği

Araştırma ve geliştirme faaliyetlerinden elde edilen kazançlar; Gelir, kurumlar, gümrük ve Damga verisinden ve KDV'den istisna tutulmuştur.

“5746 sayılı Kanuna göre, ticari kazanç elde eden bütün gelir vergisi mükellefleri, bütün kurumlar; faaliyet alanına, büyüklüğüne ve tam veya dar mükellef olup olmadığına bakılmaksızın Ar-Ge indiriminden yararlanabilirler. Ar-Ge indirimi, Ar-Ge harcamaları üzerinden %100 oranında hesaplanarak kurum kazancından indirilecek tutarı ifade etmektedir. Ayrıca beş yüz ve üzerinde tam zaman eşdeğer Ar-Ge personeli istihdam eden Ar-Ge merkezlerinde o yıl yapılan Ar-Ge ve yenilik harcamasının bir önceki yıla göre artışının yarısı da ayrıca indirim konusu yapılabilecektir” (Çelebi & Kahrıman, 2011, s. 47).”

3.2.1 Gelir Vergisi İstisnası

7263 Sayılı Kanun ile Teknoloji Geliştirme Bölgelerinde çalışan araştırmacı, yazılımcı, Ar-Ge ve destek personelinin ücretleri 31.12.2028 tarihine kadar gelir ve damga vergisinden istisnadır.

“5746 sayılı Kanuna göre Ar-Ge faaliyet ve projelerinde çalışan Ar-Ge ve destek personelinin ücretleri üzerinden hesaplanan gelir vergisinin doktoralı personelde %90'ı, diğer personellerde %80'i gelir vergisinden istisna tutulmuştur” (Çelebi & Kahrıman, 2011, s. 49) (Resmi Gazete, 2008)

Teknoloji geliştirme bölgelerindeki yazılım ve ar-ge faaliyetlerinden elde edilen ticari kazançlar 2028 yılının sonuna kadar gelir vergisinden istisna tutulmuştur.

3.2.2 Damga vergisi İstisnası

“ 5746 Sayılı Kanuna göre Ar-Ge ve yenilik faaliyeti kapsamında düzenlenen kâğıtlar damga vergisinden istisnadır. Düzenlenen kâğıdın Ar-Ge ve yenilik faaliyeti ile ilgili olması, değerlendirme raporunun olumlu olması, kâğıtların damga vergisinden istisna olması için yeterlidir” (Çelebi & Kahrıman, 2011, s. 50) (Resmi Gazete, 2008).”

3.2.3. Kurumlar Vergisi İstisnası

Teknoloji geliştirme bölgelerinde faaliyet gösteren mükelleflerin, bu bölgedeki yazılım ve Ar-Ge faaliyetlerinden elde ettikleri kazançlar, 31.12.2028 tarihine kadar kurumlar vergisinden istisna edilmiştir (TÜRMOB, 2022, s. 76). Mükelleflerin bölge dışında gerçekleştirdikleri Ar-Ge faaliyetlerinden elde ettiği kazançlara vergi istisnası uygulanmayacaktır.

3.2.4 Katma Değer Vergisi İstisnası

“7103 sayılı Kanunla KDV Kanununa eklenen geçici 39 uncu madde ve 7104 sayılı Kanunla, KDV Kanununun 13 üncü maddesine eklenen (m) bendine göre; Teknoloji geliştirme bölgelerinde ve Ar-Ge ve tasarım merkezlerinde, bu faaliyetlerinde kullanılmak üzere yapılan yeni makina ve teçhizat teslimleri 1/5/2018 tarihinden itibaren Katma Değer Vergisinden istisnadır (VERGİNİT, 2018).”

3.2.5 Gümrük Vergisi İstisnası

“5746 Sayılı Kanuna göre Araştırma- geliştirme faaliyetleri ile ilgili olarak ithal edilen malzemeler, gümrük vergisi ve fonlardan istisna tutulmuştur. Ayrıca bu kapsamda düzenlenen kâğıtlar ve yapılan işlemlerden damga vergisi ve harç alınmamaktadır” (Resmi Gazete ,2008)

3.2.6. SGK Prim Desteği

“4691 Sayılı Kanuna göre ücreti gelir vergisinden istisna tutulmuş olan personelin, gelir vergisi istisnasının uygulandığı sürece, gelir vergisinden istisna tutulan ücretleri üzerinden hesaplanan sigorta primi işveren payının yarısı, her bir çalışan için beş yıl süreyle Maliye Bakanlığı bütçesine konulacak ödenekten karşılanacaktır.”(Resmi Gazete, 2008)

SONUÇ

Ar-ge harcamaları, üretimde katma değer yaratan, kalkınma üzerinde pozitif etkisi olan, işletmelerin ve ülkelerin ekonomik rekabet gücünü olumlu yönde etkileyen harcama türlerindedir. Bu nedenle, firmalar ve devletimiz Ar-Ge faaliyetlerine daha fazla bütçesel kaynak ayırmalıdır.

Türkiye’de Ar-ge harcamaları ve yatırımları 2015 yılından sonra artış trendine girmiş ve 2020 yılında GSYİH içindeki oranı % 1,40 seviyesine yükselmiştir. Bu artışta, hükümetin uyguladığı harcama, vergi ve SGK desteklerinin payı yüksektir. Bütün vergi ve harcama teşviklerine rağmen Türkiye’de Ar-ge/ GSYİH oranı yükselmesine rağmen hala AB üyesi ülkeler ortalamasının altında seyretmektedir.

Gerek özel sektör gerekse kamu sektörünün ar-ge faaliyetlerini AB seviyesine çıkarabilmesi için öncelikle nitelikli iş gücünü yetiştirip istihdam etmesi gereklidir.

Özel sektöre uygulanan vergi teşvikleri devam etmeli, kamu kurumları ve üniversitelere ar-ge faaliyetleri için daha fazla kaynak ayrılmalı ve çalışanlar bu konuda motive edilmelidir.

Ayrıca, üniversite ve sanayi işbirliği kurularak ortak araştırma projeleri yapılmalı, üniversitedeki yetişmiş iş gücü sanayi kesimine entegre edilmelidir. Ar-ge yapmak isteyen kurumlara her türlü hibe destekleri sağlanmalıdır ve bürokratik engeller ortadan kaldırılmalıdır.

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Leadership in times of crisis. Case study NGO QJP

Valentina Murati²⁶

Abstract.

This paper analyses the strategies that an Organization managed to successfully implement in a time of crisis in their workplace. Due to our changes in personalities, and the different politics and economy conditions, we often face obstacles at work or even in everyday life that we don't know exactly what to do, and to overcome those crises, we need certain skills. The methodology used for this paper is based on the review of different sources such as books, researches, and also from the insights of the NGO "QJP". A good leader and manager know how to act in any kind of situation, not just because they have those abilities, but also because of the experience they went through to learn how to act on those situations. From the case study, we see the measurability of a leader-manager who knew how to act in a period of crisis for the company and with the right qualities to save the business but also the staff. It's really important in these situations to stay calm and be open to your team especially on changes when tough decisions will be made. Communication and collaboration are really important, as is the ability to adapt and problem-solving for guiding the team through challenging times.

Keywords: leadership, crisis, organization, management

2 Introduction

Often times the terms leader and manager are misunderstood by people, as not every leader is a manager just as not every manager is a leader.

Not only organizations but also every company that works better needs leaders more than managers, yes it is true that by nature we are different people and many of us if we are not controlled then the work will not work well in most of cases, especially employees want someone to motivate them, to appreciate them for what they do, someone they can talk to and be heard, and at the same time this person is an example or a role model for them to follow the example his from behind.

As long as we talk about the work environment, we often find that in many places there are conflicts from the most obvious where they vary from situations created by one or two parties.

Related to customers, related to staff, related to production, shareholders and many other cases and being a leader manager able to face these situations and find the best possible side is not something that many people can do especially in times of crisis when everyone is looking for a solution as quickly as possible.

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“Leadership represents the most important factor of business development, it refers to the precepts and expectations of group members in achieving the objectives of any private or public organization, organizational culture affects leadership as much as leadership affects organizational culture.” (Latifi, 2018)

This paper aims to understand better how a leader or a manager of an NGO acts in times of turbulences during their performance. How a good leader risks and acts to save not just the Organizations but also the staff that works there. The first part shows literature review from different sources, while the second an interview with the Director of NGO- QJP (the center for independent life), an NGO for the people with disabilities.

2.1 Leadership and it's types

According to Magura (2022) for someone to consider as a good leader, that person must possess a friendly personality. This means even greeting others in a warm way, using polite language, and avoiding the ignorance and distance. So, a good leader needs to be polite because you will also be in a position where you show respect for the employees and being tolerant for their opinions and treating them with empathy by showing attention and care on their interests.

Organizations should organize or hire as many leaders as managers to function better or to train these managers as future leaders, offering their organization or company a higher performance. According to Toor et al. (2007) from the debate above argue that this does not mean that leaders are always better than managers or that leadership qualities are the only solution to the challenges that modern business faces.

We see leadership as a social leadership where a person motivates, delegates or influences others to reach a certain objective. Different types of leadership can have different effects in different organizations, especially the impact on the performance of workers.

(Ling, Lo, & Sing, 2011) conducted a research in Malaysia where they discovered the influences of leadership styles on job satisfaction in public sector organizations. They took factors such as wages, work, job security, autonomy and flexibility. And from these factors they found that the transformational leadership style has a strong relationship with job satisfaction.

Leadership is not a style where we can put all the styles in one place and then lead. (Kendra Cherry, 2023) Some of the types of leadership are :

- Autocrat
- Democrat
- Bureaucratic
- Transactional
- Laisses-faire

- Charismatic

3 What are some of the skills a leader should have in case of crises?

Organizations often face some critical or unpleasant moments as in rarer periods as in daily ones depending on the type or field of the organization in which it operates. Events can happen one after another and often we don't know how to react but these events require leaders who do not waver easily as it needs a constant consistency and strength. All these crisis situations can be avoided or reduced with the right skills or training of a manager or leader.

“During crises, both parties (employer and employees) are expected to sacrifice. The devotion of an employer is as essential as that of employees. As a modern approach, instead of dismissing staff randomly, volunteer dismissals may be accepted and/or part-time working models may be implemented as a solution“ (Vardarlier, 2016).

According to Aiknawy (2019) during emergencies, the top executives are responsible for guiding the organization towards safety and preventing a system collapse. This can be a daunting task that requires mental focus to instill resilience and confidence in employees, clients, and stakeholders. The company may face disorder, unhappy clients, and bad press, causing leaders to question their competence.

Sometimes managers don't know all the answers and to that that answer we will see, I don't know, while leaders have more than one plan in their mind during crisis. Ambiguity is a constant in leadership; it's part of the job. Ambiguity increases exponentially in times of crisis. Leaders need to control their own reactions to ambiguity because fear spreads quickly throughout organizations.

(Burnison, 2021) How do they accomplish that? By adhering to our six leadership steps:

- Anticipate – predicting what lies ahead
- Navigate – course correcting in real time
- Communicate - continuously
- Listen - to what you don't want to hear
- Learn – learning from experience to apply in the future
- Lead – improve yourself to elevate others

Same as Burnison, also in an article by (Everbridge) it is shown that a manager must have the following skills:

- Situational awareness
- Improvisation
- Creativity and adaptability
- Decisiveness
- Action
- Communication and
- Reassessment

So, without some particular skills, some managers will not escape a crisis that easy.

An example from the director of Starbuck Kevin R. Johnson (2023), shows that in 2018 when 2 black people in a shop in Philadelphia were wrongly arrested in the shop, based on the racial profiling by employees and the manager of the shop, Starbucks found themselves in a very bad situation, threatened to damage the reputation , but it was their Director's leadership that helped them come through. He apologized truly, didn't throw the manager under the bus but said that they need improvements, and decided that more than 8thousand shops will be closed on an afternoon, where 175.000 workers would receive training for racial bias training. From this he changed the whole narrative and today this incident can also be used as an example on the leadership.

4 Methodology

This paper is based on primary and secondary sources. Besides books, different sources from researches and websites, primary sources were also collected by an interview from the director of the NGO QJP.

The interview was transcribed and highlighted the most important part to make the topic more interesting on the leadership part.

Research question:

What happens when you become a leader instead of a manager in times of crisis?

What kind of leadership is necessary in these times?

What are some qualities that a leader needs to have in these situations?

What could happen different with different leadership styles?

5 Case study- NGO QJP

Seeing the importance of the organization QJP this year, the sum of 200,000 euros was approved in the assembly so that next year a completely new facility of 500 square meters will be built for the workers and all the people with disabilities that get social services there. But this was not always like this.

The reason why this center is different from other centres is because it is a day center that takes care of people with disabilities by providing them with food, transportation and various activities. The organization was founded in September 1999 and the director's dream came true, because she said this idea in a refugee camp when Kosovo was in war time and the Italian army took care of this.

“The moment NATO entered in Kosovo, they looked for my family and informed us that the dream is coming true and we will support you for it. Initially, we realized the activities for two years in the physiotherapy department in the Peja hospital until 2001 when we moved to the special school for the blind in Peja.

From there we moved in 2007 to our facility in Vitomeric, which was built by the Italian company and the land was donated by the municipality. This Italian organization has secured funds from the Italian state for all the expenses of our organization, the construction of houses, construction of new roofs, renovation of roofs, food aid, hygiene, etc. And we knew that the gundi project from them was from 2007 to 2010, so 3 years total, when the project also ended.

We tried with all our might and could not find funds. In 2010, the last project supported by Italy was completed. And since I was the founder, I had the right from the donors, since there are no funds, to sell the cars and inventory and to compensate the staff with a sum for a while, most of them were with loans and family” (Haxhihasani, 2023)

After trying for funds, the Director wanted to sell some cars or stuff so she can pay the staff but they decided to go for a break first. The center got closed for a week and the staff stayed for an indefinite leave, they know they had no jobs and the director told them to inform her if they find some job. After this the director went to all the businesses door by door in that time and managed to get some funds for all her workers and manage to get money for her staff.

After collecting all the money, she called the staff for a coffee and put all the money in the table, explained to them how the situation was, and asked them to start work on Monday who is willing to continue. Everyone was worried because of the lack of fund and how will it continue, but she promised them that she will try and risk everything for them and all their beneficiaries. She took a risk without knowing what will happen.

The center opened and they called the media so that they could secure more funds for the Ngo to continue their activity. She went by herself to different businesses around Kosovo that managed to communicate with and get more funds. And a lot of company accepted and even sent them foods or school products for these kids and adults instead of money.

And so, continued for another 13 years with funds from different businesses and Institutions, they made postcards for holidays and sold them in different areas so all the money could go for the care of these people.

When KFOR saw how much the NGO was struggling and working hard for these kids, and that the staff had been working without payments for 8 months because they had so much trust and

loved their director they secured funds through some projects and some supplements as well, when after all these years work and chase the NGO finally got a support from the Municipality, had visits from former President Atifete Jahjaga and other ministers as well and now is building their new facility of 500 square meters and having more support.

6 Conclusion

We live in a world where crises happen every day and not everyone has the skills or guts to react to it or do something about it. This study talked about how an NGO could have been closed if its leader hadn't done anything about it

R1. Sometimes being a leader instead of a manager can change the situation, and only real leaders will be able to "save the world" when things are going bad because only that is when you show everyone that you are truly a leader.

R2. The most successful leaders in times of crisis frequently combine different leadership philosophies, customizing their strategy to fit the unique requirements of the circumstance. Effective crisis management involves adjusting to particular difficulties, keeping people in the forefront, and encouraging a feeling of unity and purpose among the organization's members.

R3. During times of crisis, one must take a more proactive, strategic, and people-focused stance to become a leader rather than a manager. Although managers and leaders have important roles in organizations, during times of crisis it is frequently necessary to adopt a more leadership style to inspire teams, manage uncertainty, and promote positive change

R4. Different situations would've happened in different times, and also with different people and maybe the outcome wouldn't have been the same.

Leadership styles nowadays are ever-evolving, adjusting to meet the needs of various individuals, personalities, and backgrounds in culture. From the study we can see that in various organizations, different styles of leadership can have varying effects, particularly about how employees perform. Effective leadership abilities in a manager will also push the team to greater heights and improve performance.

7 Recommendation

Each organization has different types of crisis, they can be small or very big and difficult, and each of them needs to be checked with patience. According to the situation that the leader of the NGO did, some of the recommendations from this paper are:

- Leaders need to understand the crises very deep so they can know what steps they need to take
- They need to have a clear communication with the staff, which is also the same thing that the manager did- talking with the team about the fragility of the situation, being open and real to the team help them to understand what will also happen
- Changes always happen, no matter good or bad, managers and staff need to be prepared for anything that can happen
- Trust your team- the most important thing for these situations is to have full trust on your team as well, when you decide having your team on it as well tells just as much for your ability as a leader, as well as for the strength of the team
- Take care for your team,

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The role of social media in marketing to SMEs in Kosovo:

The case of internet advertising

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Abstract

Technology and digitization in the 21st century have greatly influenced the way of life of individuals and the practices and behavior of businesses and organizations. Its growth and development has transformed the Kosovar economy into an industrial country using new technological innovations. The rapid growth of the Internet has opened many doors for businesses and customers to interact with each other. Technological changes in information and communication have presented a need for new business and marketing practices, offering businesses the opportunity to activate new marketing methods, in favor of an interaction with the consumer. Even in Kosovo, as in other countries of the world, electronic business is growing and ongoing, where many companies benefit from this type of business. Through e-business customers are enabled to buy special mobile phones online, pay bills, top up their accounts and much more. Online shopping has many advantages compared to physical stores, since online shopping is closer to the consumer thanks to the development of marketing, takes less time and is more accessible than the usual physical stores. Conducting marketing campaigns through the Internet is the latest innovation that IT has offered to businesses. Through various smart mobile applications, it offers an excellent opportunity to communicate with different market segments, as it manages to attract 100% of their attention using various marketing techniques.

The purpose of this paper is to research and analyze the main factors that influence the use of the Internet for the marketing needs of NMV. Surveys were used in the paper, where there were 70 participants in SMEs in Kosovo, which aims to collect primary data. The questionnaire was analyzed qualitatively using data methods and data display analysis.

Keywords: Family businesses, small and medium enterprises, digital marketing, e-business

Introduction

Today, businesses in general are developing their business activity in an environment that is currently undergoing dynamic changes. Of course, everyone is aware of the competition that takes place silently, and for this reason, everyone strives and fights to take the most favorable position and strengthen their position in the market competition. Digitization can rightly be called the second industrial revolution, and it represents the integration of digital technologies in everyday life, digitizing everything as well as the process of converting digital information. The direct understanding of digitization gives the world a clear idea of how dependent we are on new technology systems. Being part of this period of the digital revolution, then it definitely has an impact on the global economy as well as on SMEs here in Kosovo. I have focused my study more on the digital transformation of businesses. SMEs, which use the latest digitalization

developments, called social, mobile, analytics and cloud, have achieved huge profits. Digital transformation often starts with meeting the internal needs of businesses, i.e. the technical part, then direct engagements with the essence of creating businesses by connecting with the customer, how to know the customer better, to improve the level of service, and digitalization of the customer experience. Usually this transformation extends to three other areas: digitization of operations, products and services. The purpose of this research is to analyze the role of media within the strategy of businesses, the potential to use this asset for marketing and the readiness to implement digital transformation. Since the beginning of the last century, the field of marketing has changed, transferred and is evolving. Large companies within their marketing departments have begun to incorporate Internet banners and digital ads as a replacement for traditional ads such as flyers, newspapers or radio to reach the audience, at a very high cost. The use of media has obviously reduced costs and expenses and has successfully met the company's objectives. This has the effect that their performance is quite profitable and the possibility of expansion is much greater. During the creation and popularity of social networks, the marketing plans of companies were forced to change again, adapting to the new circumstances by creating profiles on Facebook or Twitter as a new opportunity to be closer to consumers and maintain an edge over the competition. . This creation of company profiles on multiple social networking platforms has brought many opportunities for companies to spread their message domestically at a lower cost, as well as interact with existing and potential customers on a higher scale. For SMEs in Kosovo using social media, the opportunity to capture a wider market, target a new audience, and connect with consumers is huge. In our companies, new positions are created within the marketing departments, some of them are specified only for social media and communication. consumers, between the marketing mix instruments and the factors that influence them.

The Republic of Kosovo, as a small country, offers good opportunities for SMEs to reach their audience through the Internet even in the most rural parts of the country, where according to the STIKK report ("Penetration and use of the Internet in Kosovo"), Internet penetration and use in Kosovo is comparable to developed countries. So we are not behind compared to European countries. Marketing in SMEs appeared as a response to the need to ensure the maximization of the Enterprise's profit. While the formation of marketing as a science began at the beginning of the 20th century as a topic in leading American universities, focusing mainly on trade and advertising. The result of the practical implementation of marketing theory was the creation of marketing departments in large enterprises, and offered products and services. Now we have a situation where we cannot think about how to fulfill the needs of the consumers, but also how to fulfill the wishes of the consumers, while for this we definitely need to have certain data and information. All this can be achieved with an integrated information system. According to (Evans, 2008), social media are authentic self-generated conversations by people about a particular topic of mutual interest, built on the thoughts and experiences of the participants. Therefore, social media is to share and aim for a collective vision, often with the aim of offering a more suitable or alternative choice in the choice of some business problems. Social media are also constantly evolving, investments in them were being made more and more and are part of the high technology of the Internet, which are regularly updated with additional features or by replacing them with different software packages. Social media covers a wide variety of Internet and mobile, word-of-mouth forums including social networking sites, blogs, company-sponsored discussion boards and chat rooms, consumer-to-consumer email, consumer products or website classification services and forums, online discussion boards and forums, and sites containing digital audio, images, movies, or

photographs, to name a few" (Hollensen, 2011). What social media present today and how it can be used for marketing needs:

Social media, or social media sites, can be defined as online communities of people who typically share a common interest or activity, offering a variety of ways for users to interact and have the ability to moderate/facilitate communication. Therefore, the value of social media for the needs of the business community is irreplaceable these days.

Products and services can be presented by the business with as many quality features and promotional tools as possible, but what really matters are the comments and ratings left by customers. People deliver the content, and that's why social media marketing is so scary and challenging for marketers. And this really represents a challenge for SMEs in Kosovo. Consequently, the ability to influence the crowd effectively is the main quality needed by the marketing team (Evans, 2008). The main benefit for businesses when implementing a social media strategy is increased brand exposure. Brand exposure occurs when the customer becomes aware of a product, service or advertisement through at least one of their five senses, whether or not they have been paying attention to it. Thanks to social media platforms, new brands can establish themselves and drive awareness. According to (Stelzner, 2014), increased exposure is the primary benefit of media marketing. So, by creating pages and profiles on social media, opportunities can be provided for the brand to be seen, explored and reached by its audience. Exploration is the first step for new brands. Without any exposure, the company will simply fail to launch. Additionally, marketers can use social media channels to promote their products and services. The brand page on social media offers opportunities to present products and services in a more interactive way. Customers will have the opportunity to choose whether or not they want to read the product description, see photos or videos, as well as read impressions and comments about these products or services. Social media marketing increases brand awareness by expanding product and brand presence online (Red Bridge Marketing, 2008). In fact, social media marketing has become a very effective way to drive targeted traffic to websites or blogs (Evans, 2011). 61% of marketers in the US have admitted that the main reason why their company has implemented a social media strategy is to increase "lead generation" (HubSpot, 2012). Every person who likes the company's Facebook page, or follows the profile on Twitter is a potential customer. Therefore, by gaining more and more followers online, the brand can increase their chances of generating new customers. The challenge is to encourage people to visit companies' social media sites, and once they get there, companies need to create enough value to keep them there. On blogs, pages, and company profiles, customers can leave feedback, expressing their thoughts, comments about the brand, and their true feelings about a company. Thanks to this communication, marketers get the opportunity to respond to these opinions, but also to educate consumers, analyzing the opinions of consumers. In fact, the report (HubSpot, 2012) explains that 63% of companies using social media say it has increased marketing effectiveness among other benefits. Witek and Grettano (2012) explain how Facebook works and how it offers multiple communication opportunities. They talk about the three main functions of Facebook, which are "feeds", comments and "shares". Zaglia (2013) supports this idea of "Niche" social portal, where she explains that LinkedIn groups and created communities are specialized consumer communities and that users access LinkedIn groups focusing on business issues, as well as common interests. According to Kietzmann et al, (2011), businesses when using LinkedIn should focus on building relationships. They explain that LinkedIn offers various features that allow its users to manage their network in a very efficient way. Singh et al (2008) enlighten us on some benefits of blogs that businesses can have. Indeed, they show that a corporate blog can

be really valuable for the internal communication chain, as well as for communication with customers. Twitter This platform is also ideal for businesses because it allows them to engage their audience in real time, and to build or strengthen their relationships with their customers, responding immediately to the feedback they have from them as well as sharing information (Twitter, 2016). Pace (2008) supports the fact that YouTube is also a platform to create communities, but in a more original and engaging way than blogs. Indeed, a video is more engaging than text or image, something that businesses should not ignore.

LITERATURE REVIEW

Indeed, the Internet allows people to interact with each other, both professionally and personally, removing geographical and physical boundaries (Gattiker et al, 2000). Certainly, the Internet has affected businesses as well as the way businesses do marketing, and it is clear that the Internet has affected business marketing strategies, enabling companies large and small to provide information on a global scale (Herbig and Hale, 1997). Indeed, small companies are now able to reach target markets at a minimal cost and are able to compete with larger companies on an equal footing (Palumbo and Herbig, 1998). Marketing is a universal process that can be applied to develop and promote many entities, including products, services, experiences, places, properties, ideas, issues and information (Kotler, 2008). Given the revolutionary changes in marketing, marketing is presented as a result of the development of science and technology, then in this topic a part of marketing has been elaborated which was necessary. (Jakupi, 2000). The function of marketing is to help the enterprise to better understand the needs of the consumer in order to develop products or services that will be liked by the consumers. (Reshidi, 2004). We must bear in mind that the consumer decides to buy a certain product, even driven by the effect of the differences that a product contains in its characteristics, such as after-sales services and promotion. (Ukaj, 2010) We should have the situation in the enterprise where SIM will be part of a group (set) of systems that exist in the enterprise, and that all these together form a basis for governance with activities of marketing in the enterprise. (Bardhyl Ceku, Nail Reshidi, 2006). Companies that have a social orientation take care of the needs of consumers as well as the resources of the planet, developing social responsibility in the company (Fahy and Jobber, 2012). Companies that do not do business in this way are internally oriented, placing price and product performance as key and segmenting the market solely on the basis of product (Fahy and Jobber, 2012). Social Media began in 1978 when the first "Bulletin Board Systems" exchanged data over telephone lines with other users (Appendix 1). According to (Evans, 2008): Social media is growing every day. Although 90% of Internet users are 18-24 years old and use social media through some device at least once a month, social networks also have an impact on every age group, but at much higher rates for the over age group. 35 (HubSpot, 2012). Social media marketing is marketing that focuses on people, not products (Diamond, 2008). Studies have shown that the behavior of online consumers differs from the behavior of consumers in the traditional (off-line) market. On the other hand, managers seem to have a good understanding of customer needs to meet them effectively and efficiently in the electronic environment (Theodhori, 2005). The unique possibility that the web has to combine texts, images, photos, sounds, video clips in a multimedia document has increased its use to a high degree compared to other traditional media, turning it into a global media (Buhalis 1998).

Research methodology

To carry out this work, the following research methodology was used: Secondary research (secondary research) - which was used to study the theoretical concepts of the Marketing Information System, to better understand the way it works. Many research articles have been used for this. For the work of this subject of the degree, literature was used mainly from the field of marketing and the use of social networks for business needs. Considering that this field requires special scientific methods and techniques, in this case these two methods will be combined. Theoretical parts are included to acquire basic notions, concept, activity, decisions, strategies, as well as information systems Primary research (primary research) - which is based on data and information using the survey method through random sampling of 70 businesses based on the business register. The research will be supported by the following methods: Interview method. Survey through questionnaires, data processing method.

General purpose and research questions

The topic addressed aims to give a clear description of social media as a marketing opportunity for SMEs in Kosovo. The study focuses on the fact that SMEs in our country must be online and use social media if they want to be one step ahead of the competition in the market. For this study, various publications, professional literature were used, but also the experience of businesses from the practical part of using social networks was researched, as a result, a summary was made about the use of social media in marketing. The purpose of this paper was to deepen the knowledge gained in the faculty during the course of study, as well as the implementation of the practice of using social media in marketing in personal business, and to present it in the form of this paper, making and an analysis of the market in SMEs in Kosovo. I believe that we managed to, however slightly, to a modest extent include the basic points related to media indicators in marketing and that anyone who reads it, will be able to understand the essence of what has been the main point of the paper.

While the following three questions will be addressed throughout the topic:

Question 1: Why is social media marketing ahead for SMEs in Kosovo?

Question 2: What are the benefits of social media marketing for SMEs?

Question 3: What are the main methods to achieve benefits from social media marketing?

Formulation of hypotheses

The hypothesis is the most important part on which the research is done, the formation of one or several hypotheses, namely the raising of preliminary assumptions about the nature, causes, consequences or consequences of the phenomenon, problem or issue to be researched, scientific research is necessary. The hypothesis gives direction to the research it does.

Testing hypotheses

H1: The marketing strategy used through social media is quite present in SMEs in Kosovo.

H2: . Most SMEs in Kosovo use social media to advertise products and services.

H3: . The difference between successful and unsuccessful firms lies in the role of management in social media, the level of sales and the size the firm has achieved.

EMPIRICAL ANALYSIS

With the aim of getting to know closely the functioning, the organization and the benefits of using social media in the function of marketing of SMEs in Kosovo, I have also done a research from the field. The methodology used to collect data in the field is based on the development of interviews in the field, visiting 70 SMEs, which would answer the questionnaire, which contains 15 questions, of which 7 will be identifying and 8 thematic. In the survey I included a total of 70 samples of respondents aged between 25 and 65, 45% are women and the rest are men. The participants in this questionnaire were selected according to a sample that was requested to be as comprehensive as possible so that the results are comprehensive. The owners of SMEs selected in different municipalities of Kosovo have also tried to be as proportional as possible in order to be as wide as possible, being able to preserve the proportion of the geographical extent of SMEs, where in the capital in Prishtina has the largest number of SMEs, therefore the largest number of respondents, then other municipalities will be included with respondents. Moreover, the questionnaire was conducted in a comfortable area at the SME, where the respondents did not feel unsafe. Before developing the questionnaire, the researcher ensured that the interviewee understood and agreed to the consent form.

Research Analysis

This chapter presents the responses collected from the interviews conducted with SME managers. An explanatory qualitative analysis was conducted to document the views and reactions of each respondent from the questionnaire.

Descriptive Statistics

Table 1: Descriptive statistics about the sample (n=70)

variables		FREQUENCIES	percent
gender	WOMAN	17	24.2
	man	53	77.1
Age	18-23	2	2.8
	24-30	2	2.8
	31-40	8	11.4
	41-50	12	17.1
	Over 50	46	65.7
EDUCATION	Primary school	0	0
	High school	6	8.5
	University	15	21.4
	Masters (MSc)	48	68.5
	Doctorate	1	1.4

Table 1 summarizes descriptive statistics about the sample. 70 people participated in the research. 17 of them (24.2%) are women, while 53 (77.1%) are men. 2.8% of the participants are in the age

group of 24-30 years, 2.8% are in the age group of 18-23 years, 11.4% are in the age group of 31-40 years and 65.7% are in the age group over 50 years. Regarding education, 21.4% of the participants have completed basic studies (bachelor's), 68.5% have completed master's studies, 8.5% have completed high school and 1.4% have completed studies of doctorate.

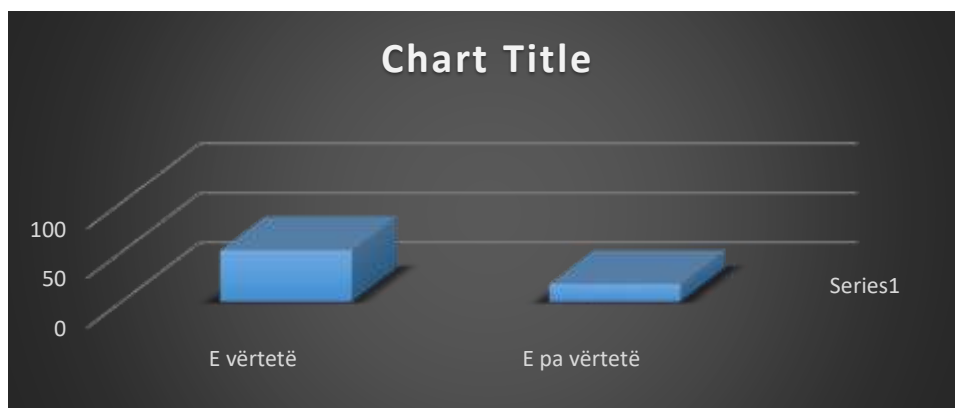
INTERPRETATION AND RESEARCH RESULTS

The research was carried out by means of a questionnaire which contains relevant questions regarding the importance of social media for marketing to SMEs in Kosovo, as well as their growth in the framework of business strategy.

SECTOR	NUMBER OF ENTERPRISES	NUMBER OF EMPLOYEES
Produce	20	5-80
MERCHANTS	45	15-50
SERVICES	5	20-30
TOTAL	70	

H1: The marketing strategy used through social media is quite present in SMEs in Kosovo.

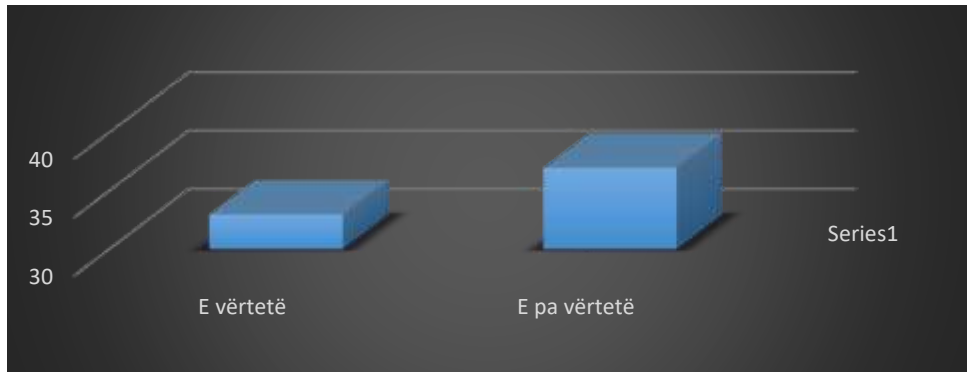
In 70 small and medium enterprises in Kosovo, surveyed, it turns out that 52 of them, or in percentage 74.2% of them use marketing through social media, while 18 SMEs, or in percentage 25.8%, have given negative answers. it can be seen that the hypothesis raised by us is supported by the research and remains correct.



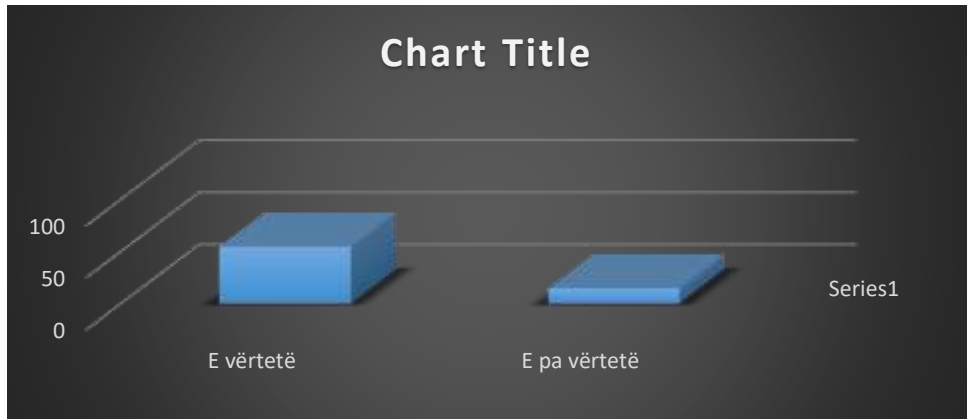
H2: Most SMEs in Kosovo use social media for advertising products and services

In the companies surveyed, it turns out that only 37 of them or a percentage of 52.8% use social media to advertise their products or services. While 33 companies, or 47.2% of them, do not use social media for advertising products or services. From this it can be observed that our hypothesis

is supported by the research and proved to be correct. Considering the large number of likes that these companies have on Facebook, it was desirable that they have more likes and comments on their posts, therefore the only recommendation that could be, especially for companies that do not use the media for marketing to find ways to engage consumers even more. As for new companies in Kosovo to work on communication strategies and be more active and consistent in posts. Businesses should use social media and provide content to customers who are constantly looking for it, because customers or people provide the content and own the information. The performance of businesses is definitely affected in this way and they have no chance to face their competitors if they do not integrate social media marketing strategies.



H3:The difference between successful and unsuccessful firms lies in the role of management in social media, the level of sales and the size the firm has achieved. Based on the research, it can be seen that most of the small and medium enterprises in Kosovo are present in at least one social media. Facebook is the most famous channel because everyone uses it, while YouTube is the second most used channel by companies, then Instagram, while Twitter is the least used, businesses use it.



In order to evaluate the activity and performance of these businesses on Facebook, it was necessary to create an evaluation with the main functions that businesses use from the Facebook platform, researching the performance that these companies have within the field of marketing, customer service, sales, communication and public relations (PR). From the 70 SMEs surveyed, it turns out that 55 of them or 78% had good performance by being present on these platforms, while 15 or 21.4% with no presence on these platforms did not show any good performance and the balance

of the weaker have had success. From this it appears that our raised hypothesis is supported by the study and proved to be correct.

CONCLUSIONS AND RECOMMENDATIONS

This paper focuses on how e-commerce and telemarketing in recent years has had a great boom and success within SMEs in Kosovo. My interest in the use of these marketing elements that would help businesses in the Kosovo market served as the impetus for the realization of this topic. In the function of telemarketing, many Kosovar women will socialize and use this marketing element as a great help for selling products, contacting consumers and their requests, where they will help businesses in many decisions during their participation in the market. Based on this research we have done, we think that marketing through social media is one of the most important business activities, it is a process of communicating the value of a product or service to customers, in order to sell that product or service. Trade marketing can be said to be a marketing discipline that deals with increasing wholesale, retail or distributor demand at the level and not at the level of consumption. However, there is a need to continue with brand management strategies to support the need at the end of consumption. A buyer, who can be his or her own customer, is the one who identifies and buys a product from a retailer. To ensure that a retailer promotes a company's product to its competitors, the company must market its product to the retailer. In general, SMEs should have a well-developed communication strategy through Facebook, being present close to consumers, through regular posts, engaging with the audience, the type of posts - where they seem to be aware of the types of posts that relate to marketing strategy, as well as actively responding to the customer. On the other hand, some companies seem to have no communication strategy compared to the needs and demands of consumers. Through this research, it has been explained in detail how the Internet has evolved, today social media play an extraordinary role and consequently the field of marketing has also evolved with it, adding new opportunities to be used by companies. We have analyzed the field of social media marketing, with special emphasis on marketing and defining the different types of social media channels as well as their role. Whether a business is developing its presence on every social media channel, or just a few of them, the benefits to the business can vary in terms of value and volume. Therefore, from this research we can summarize some facts that help SMEs in Kosovo to orientate investments in staff training for managing social networks as well as investments in promotions through platforms in order to increase the performance of businesses.

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Budget Deficit and Public Debt the Case of Kosovo

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Abstract.

This paper explores the relationship between the budget deficit and public debt, as well as their effects on GDP in Kosovo. The aim of the paper is to determine the empirical relationship between Kosovo's public debt and budget deficit in macroeconomic terms. So, the main purpose of this paper consists in the analysis of the progress of the budget deficit as well as the public debt in the Republic of Kosovo and in developing countries. In the framework of the paper, the level of the budget deficit and public debt in the Republic of Kosovo is shown. It also reflects the level of public debt in Kosovo and in the countries of the region.

In order to cover the budget deficit, states take the steps of going into debt, which is negatively expressed in economic flows. The countries of the region, including Kosovo with a low level of development, are faced with public debt in recent years (Berisha & Morina, (2018). The fiscal system and the state budget). In financial theory and practice, public debt is one of the forms of public revenue to finance public functions of the state, or public needs (Berisha, (2022). Public Finance). For the finalization of the paper, mainly the method of analysis and synthesis, tabular and graphic separately, comparative methods, etc. are used. Through this study, we aim for the given conclusions and recommendations to be taken into consideration and serve the actors in the field of public finance.

Empirical studies on debt sustainability in the last decade have been numerous and have gained importance after the most recent global financial and debt crisis. Most of these studies address the issue of good management for the creation of affordable debt. However, studies on public debt and fiscal deficit in Kosovo are scarce, and as such this paper is mainly guided by a literature review of studies that focus on either external public debt or internal public debt and their effects on GDP.

Keywords: Budget deficit, budget, public debt, Gross Domestic Product

Declaration of conflicting interests: declare that there is no conflict of interest.

1.Introduction

It should be noted that today the budget has an important macroeconomic role that aims to balance the economic life of the country. Currently, the state budget balance is seen as something

serious only when it is accompanied by economic imbalance. A fiscal deficit occurs when a government spends more than it collects on taxes and other revenues in a given time (Glllogjani & Balaj, 2021). When state budget revenues are greater than expenditures, then the difference between revenues and expenditures is called the state budget surplus. In cases when expenditures are greater than revenues, the difference is the state budget deficit (Salko, 2010, Basics of Finance). In this context, there are theories that today argue that under certain circumstances and within reasonable limits the budget deficit can be considered a good way to combat the economic downturn. The deficit grows into a recession and falls into a boom, even without any change in fiscal policy (Mankiw, & Taylor, (2012). Economics/Macroeconomics). To cover the budget deficit, governments are forced to borrow. The government can borrow domestically and abroad to finance the budget deficit. Governments finance budget deficits by borrowing in the bond market, and the accumulation of past government borrowing is called government debt. National debt is the accumulated borrowing from all past deficits, excluding loans repaid. State or public debt, as it is otherwise called, represents the accumulated value of loans that the state has borrowed to finance past deficits. Government debt for a certain period of time is equal to the budget deficit of the same time.

In this perspective, the main purpose of this study is to analyze the budget deficit and the progress and effects on the economy of the public debt in the Republic of Kosovo in recent years.

The research questions of this study include:

RQ1: How does the budget deficit affect borrowing (public debt)?

RQ2: What is the effect on the economy and the participation of public debt in GDP in Kosovo?

The study is structured as follows. Section 1 presents the introduction, including the main aim of the paper, research questions and hypotheses. In Section 2 the literature review is presented. In Section 3 demonstrates the methodology and methods. Section 4 of the paper provides the result and discussion, as well as the correlation between public debt and GDP. Section 5 concludes the study.

2. Literature review

In financial theory and practice, public debt is one of the forms of public revenue to finance the public functions of the state, or public needs. Consequently, the budget deficit is the sum by which the costs of a government such as defense, social security, energy and infrastructure costs and the like exceed its revenues, which mainly come from taxes, customs and collection from the tariffs (Kryeziu & Durguti. 2019). Loans accumulated by the government to cover the budget deficit constitute government or public debt (Koka, (2014). Macroeconomics). National debt, also called public debt, is the total value of government debt at a given time (Baumol & Blinder (2010). Economics: Principles and Policy). To cover the budget deficit, the state must incur debt, which is negatively expressed in economic flows. These two concepts, deficit and debt are closely related because the government accumulates debt by reducing the deficit or reducing its debt by exceeding revenues.

Debt at a given time is the sum of all past budget deficits. So, in a year with a deficit, the debt increases, in a year with a surplus, the debt decreases (Rosen, (2003). Public Finance). The relationship between debt and deficit or surplus can be explained by a simple analogy. As you enter water into a tub ("run a deficit"), the accumulated volume of water in the tub ("debt") increases. Otherwise, if you release the water from the tub ("run a surplus"), the water level ("debt") drops. Analogously, budget deficits increase national debt, while budget surpluses reduce it (Baumol & Blinder, (2010). Economics: Principles and Policy, Eleventh Edition). If borrowing is done continuously, the size of the debt increases over time. When the government has a budget deficit, its debt increases, and when there is a budget surplus, its debt decreases. Debt financing is the use of borrowed funds to finance government spending (Hyman, (2011). Public Finance). The state loan can be considered useful if the funds from the loan are used for: (Kadriu, (2012). Public Finance).

- *Long-term investments in those spheres of activity in which the rapid economic-social development is ensured,*
- *Financing of irregular expenditures,*
- *Rehabilitation of the situation after the war or elimination of the economic crisis.*

The ever increasing debts of the state, the ever increasing to be financed by means of borrowing, the ever present tendency in many countries for the expansion of the state’s financial activity are increasingly actualizing the problem of the debt entry limit the state (Berisha, (2022). Public Finance). The debt crisis in Europe has drawn the attention of many governments and international organisations to the rising levels of debt in many emerging or developed countries. Most economists agree that some government debt is necessary and not harmful to an economy, but opinions diverge when the debt levels rise. Kosovo, unlike many other countries in the region and beyond, managed to maintain a low level of public debt (V. Qehaja, D. Qehaja, (2018).

Public debt in the Republic of Kosovo is mostly issued with fixed interest, therefore it is exposed to very little interest risk. As long as the interest rate paid for public debt is lower than the rate of economic growth, the impact of debt on economic growth and social welfare can be positive (Riinvest, 2019).

According to the Law on Public Debt (Law No. 03/L-175), the State may borrow:

- to cover the budget deficit;
- to finance investment projects that are of national scope and foreseen in the medium-term spending framework;
- to refinance state debt received earlier;
- to pay state guarantees in case the parties fail to meet their obligations;
- to pay the costs of general debt service as well as various expenses in case of various national emergencies announced by the assembly.

3.Methodology used

Official data from local and international institutions were used to conduct this study. This paper provides a theoretical overview of public debt and the progress of public debt in Kosovo, from 2020 to 2022. For the finalization of this paper, the presented material has support including scientific literature, as well as reports and publications from the Ministry of Finance, the Kosovo Statistics Agency, which deal with issues related to public debt, namely the impact and economic effect of public debt in Kosovo. The methodology of the study is based on a broad dimension in

the review of theoretical and empirical literature. In order to achieve the main objective of this paper, different sources of data were used, as well as the method of analysis, comparative method.

4. Results of the study

When the government spends more for a longer period of time on public needs and cannot cover these expenses with regular revenues such as taxes and other non-tax revenues, it owes debt. Government loans, although treated as irregular inflows, are considered an important resource for both developed and developing countries. The state loan can be considered useful if the funds from the loan are used for: (Kadriu, (2012). Public Finance).

- *Long-term investments in those spheres of activity in which the rapid economic-social development is ensured,*
- *Financing of irregular expenditures,*
- *Rehabilitation of the situation after the war or elimination of the economic crisis.*

In the Republic of Kosovo, the matter of public debt is regulated by Law no. 03 / L-175, on public debts in the Republic of Kosovo, which defines the forms of debt and the manner of its management. In Kosovo, the limit of state debt entry is provided in Article 5 of Law no. 03 / L-175, on public debts in the Republic of Kosovo, which set limits on the General Debt, which should not exceed 40% of Gross Domestic Product (GDP).

The Government through the Ministry of Finance, in addition to the basic legislation on public debt has drafted relevant rules and procedures to increase management transparency and the definition of management responsibilities. To cover the budget deficit, governments are forced to borrow. In this context, public debt becomes a tool for covering the budget deficit (Ristiq, K. Ristiq, Zh (2014). Fiskalna Ekonomija i Menagment javnog sektora). The value of the nacional debt for a certain period of time is equal to the value of the budget deficit of the same time (Limani, (2018). The economy of Kosovo). To cover the budget deficit, governments are forced to borrow. In this context, public debt becomes a tool for covering the budget deficit (Berisha, (2022) Public Finance). The following table presents the budget deficit and the radio to GDP. Data for 2023, 2024, 2025 are budget projections provided in the budget law.

Table 1: Budget deficit to GDP in the Republic of Kosovo in the period 2020-2025

-in million euro

Description	2020	2021	2022	2023*	2024*	2025*
Budget incomes	1,722.2	2,200.9	2,430.4	2,884.1	2,982.2	3,196.1
Budget expenditures	2,234.9	2,299.3	2,898.2	3,223.6	3,219.6	3,323.8
GDP	6,772	7,958	8,594	9,843	10,605	11,401
Deficit as % of GDP	-5%	-1%	-4%	-2%	-1%	0.00%

Source: Law No. 08/L -198, On Budget Allocation for the Budget of the Republic of Kosovo for 2023, page, 20.

*Remark. It has to do with projection- Years 2023, 2024, 2025.

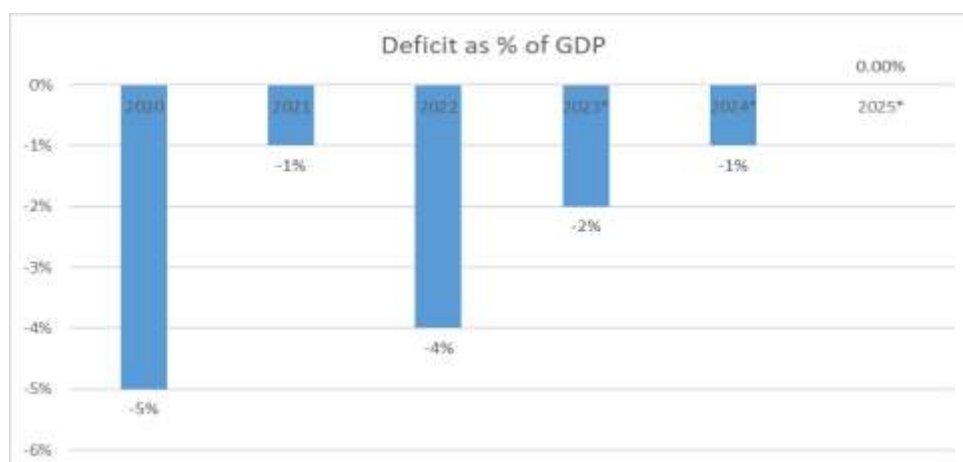


Figure 1: Budget deficit to GDP in the Republic of Kosovo in the period 2020-2025

The budget deficit is maintained at the levels set through the fiscal rule below 2% of GDP. The budget deficit is mainly financed by domestic borrowing and external borrowing.

Law No. 03 / L-175, On public debts in the Republic of Kosovo, Article 1 of this law gives the right to the Government of the Republic of Kosovo to borrow money, to provide loan guarantees, to pay the costs of borrowing and to paid the principal and interest of its State Debts. Total Debt is defined by the Law on Public Debt as the totality of state debt and municipal debt. Kosovo's total debt is a state debt, as the Republic of Kosovo does not yet have a municipal debt. The sources of financing to which the Government of the Republic of Kosovo has access are internal sources - domestic debt, and external sources - international debt. Based on Law no. 03/L-

175, On Public Debt, enables the Government to borrow, to provide loan guarantees, to pay off borrowing costs, and to pay principal and interest on its public debt.

Domestic debt is part of the public debt that the state owes to economic entities and its citizens (Limani, (2013). Macroeconomics). External debt is the debt that a country owes to foreign countries or international financial institutions from which it has borrowed (Limani, (2013). Macroeconomics). Kosovo's external debt is the debt owed to Kosovo by external creditors, with most of the debt owed to the World Bank and the IMF. The nacional debt, also called the publik debt, is the total value of the governments indebtndness at a momentin time (Baumol & Blinder, (2012). Macroeconomics- principles and Policy). The following table shows the total debt by type.

Table 2: Total publik debt in the Republic of Kosovo, in the period 2012 – 2022

- in million euro

Category	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
International debt	336,60	323,76	326,35	371,17	373,77	422,15	416,43	409,10	525,80	576.75	641.20
Central level	336,46	324,32	316,54	339,87	323,93	365,18	364,53	359,45	479,50	532.30	594.19
Sub-borrowings	0,14	2,03	9,81	31,30	49,83	56,97	51,90	49,65	46,29	44.44	47.01
Municipalities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Domestic debt	73,31	152,51	256,52	377,78	478,97	574,27	676,62	791,94	961,90	1,106.14	1,112.00
Municipalities	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total general debt	409,92	476,27	582,87	748,95	852,74	996,42	1.093,05	1.201,05	1.487,69	1,682.89	1,753.20
Public Guarantee	0,00	0,00	10,00	10,00	20,00	44,00	44,00	42,68	31,65	30.63	29.61
Total debt (% GDP)	8.10	8.94	10.65	13.05	14.58	16.63	17.12	17.51	21.83	23.34	20.74

Source: Ministry of Finance, Annual Bulletin 2017, On Public Debt, p. 8. Ministry of Finance, Annual Bulletin 2018, On Public Debt, p. 7. Ministry of Finance, Annual Bulletin 2019, On Public Debt, p. 7. Ministry of Finance, Quarterly Data on Total Debt, Fourth Quarter 2021, Pristina, 2021, p. 5. Ministry of Finance, Anunual data on the gjeneral debt January-December 2022, Pristina, 2023, p. 5.

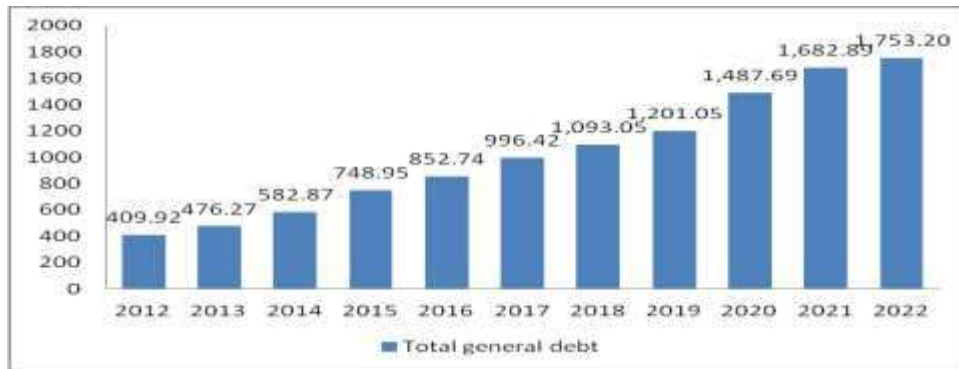


Figure 2: Total public debt in the Republic of Kosovo, for the period 2012 – 2022.

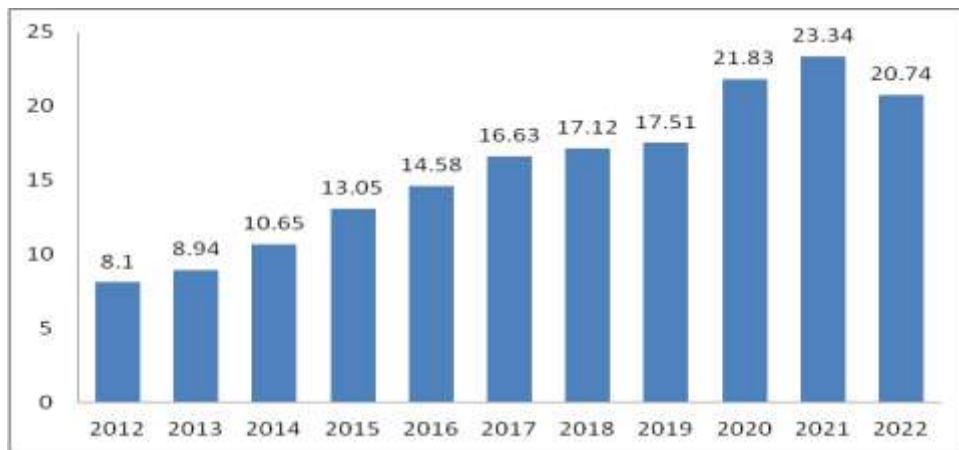


Figure 3: Total public debt in relation to GDP in the Republic of Kosovo, in the period 2012-2022 (in%).

The table and graph show that the public debt of the Republic of Kosovo includes, in addition to external debt, also domestic debt. Public debt in Kosovo in the period 2009-2022, has had an increasing performance, increasing from 249.01 million euros as it was in 2009, to 1.75 billion euros in 2022. Regarding the public debt in the Republic of Kosovo, there is a performance in growth over the years, which mainly results from the new issues of Securities, belonging to domestic debt. At the end of 2022, the Total Debt reached the value of 1.75 billion Euros, compared to the previous year which marked an increase of 195.20 million Euros. In 2022, within the total debt, the domestic debt reached the value of 1.1 billion euros, while the international debt in the amount of 641.20 million euros. Also, public debt in the Republic of Kosovo has increased in terms of share in GDP, increasing the share of public debt in relation to GDP from 6.12% in

2009, reaching this share in 2022 at 20.70%. In this regard, during the last two years the debt/GDP ratio has increased slightly, at the end of 2019 it was 17.51% while at the end of 2021 reaching 20.70%. The following table shows the performance of domestic debt and external debt to total debt in Kosovo in the period 2012-2022.

Table 3: Structure and performance of domestic debt and international debt to total debt in the period 2012-2022 (%)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
International debt	82.12	67.98	56.00	49.55	43.83	42.37	38.08	34.06	35.34	34.27	36.57
Domestic debt	17.88	32.02	44.00	50.44	56.17	57.63	61.92	65.94	64.66	65.73	63.43
Total debt	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: The Government of Kosovo, Ministry of Finance, Quarterly data on total debt – Q3, Q4 Pristine, 2017, page,12. Ministry of Finance, Quarterly data on total debt, Quarterly 2021, Pristine, 2022, page, 14. Ministry of Finance, Anunual data on the gjenral debt January-December 2022, Pristina, 2023, page,14.

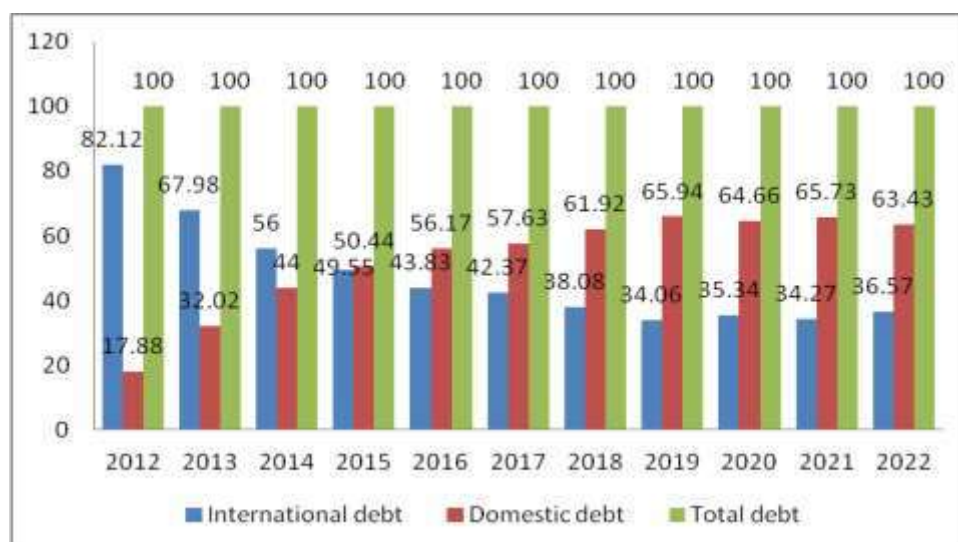


Figure 4: Report of domestic debt and international debt to total debt in the period 2012-2022.

Looking at the table and graph it can be seen that, while in previous years public debt was dominated by external debt, at the end of 2022 domestic debt had a higher share in total public debt. External debt in the period 2012-2022 is observed to have a declining trend in terms of participation in total debt, where in 2012 the external debt was 82 percent, having a declining performance in the following years. Thus, in 2022 there was a share in the total debt of 36.57 percent. Domestic debt in the period 2012-2022 had an increasing performance of the share in the total public debt, where in 2012 the domestic debt had a share in the total public debt of 17.88 percent, increasing in the following years. So in 2022 the share of domestic debt in total public debt was 63.43 percent.

Increasing debts of the state, the growing tendency of the legislative and executive bodies of the government, to finance many expenditures from the competence of the state with loan means, the tendency always present in many countries to expand the financial activity of the state are actualizing the problem of the state debt entry limit (Jelcic, (1985). Science on Finance and Financial Law). In Kosovo, the state debt entry limit is provided in Article 5 of Law no. 03/L-175, On public debts in the Republic of Kosovo, where the limits are set on the General Debt, which should not exceed 40% of GDP. State debt in particular is present in underdeveloped countries, which burdens, even in many problems, the economy and the population of these countries, especially when it is known that government debt poses a great burden on the economy and population of the country, as it is returned with interest and as such burdens, respectively reduces, national income.

The following table presents the international debt contracted and ratified during the years 2009-2022 for the financing of projects belonging to the sectors of the economy.

Table 4: Ratified International Debt by Sectors

- in million euro

Types of Sectors	Amount of funds ratified from 2009 to 2022	Division by %
Education Sector	10.69	0.98
Financial Sector	27.52	2.53
Agriculture Sector	35.95	3.31
Export Sector	14.30	1.32
Energy Sector	103.61	9.53

Railway Sector	119.90	11.03
Water Infrastructure Sector	184.73	17.00
Central Heating Sector	28.20	2.59
Public sektor	110.68	10.18
Road Infrastructure Sector	228.86	21.06
Health Sector	106.57	9.81
Social Welfare Sector	75.90	6.98
Private Sector Financial Support	40.00	3.68
Total	1,086.92	100.00

Source: Ministry of Finance, Annual Bulletin 2022 on State Debt and State Guarantees, p.

18.

The table shows the sectors of the economy in Kosovo in which projects have been financed by international debt from 2009 to 2022. International debt has influenced through the financing of projects in various sectors of the economy by creating preconditions for economic development. The public debt in Kosovo, respectively the international debt over the years in Kosovo is mainly oriented to the economic sectors such as the Road Infrastructure Sector of 21.06%, the Water Infrastructure Sector of 17.00%, the Railway Sector of 11.03%, etc.

5. Discussion

The ever-increasing tendency of the countries entering the public debt, that many expenses from the competence of the state are financed by means of loans, are increasingly actualizing the problem of the limit of entering the state's debt. The public debt present in developing countries, including internal debt and external debt in recent years, represents the trend of increasing the share of debt in GDP.

From the obtained results, it can be seen that we have an average positive correlation between public debt and GDP. Public debt in the Republic of Kosovo compared to countries in the region remains at a lower level in relation to GDP, but developing countries and Kosovo should continue to be careful in managing public debt.

6. Conclusion

This study is very important due to the nature of the research. Government debt is present in various countries, especially in underdeveloped countries, which burdens, already faced with many problems, the economy and population of these countries. Kosovo, unlike the countries in

the region, has the lowest level of public debt in relation to GDP. Kosovo has a low level of public debt in relation to GDP, but there is an increasing trend in 2020-2022.

From the analysis carried out regarding the budget deficit and public debt in recent years, we present some of the conclusions and recommendations:

The budget deficit must be carefully managed and allowed within the limit set in relation to GDP. The public debt mainly finances the sectors of the economy that promote economic development in the country. Public debt from internal borrowing and external borrowing should be oriented towards public investments and development projects. Public debt, especially its internal component, has reached a significantly higher intensity and dynamics in recent years, therefore in the management of public debt attention should be paid in the medium and long term as well as its effects on macroeconomic processes, on fiscal stability and effects on economic growth and social welfare.

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Impact Assessment of Mountain Tourism as viewed by the local community (Case of Thethi)

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Abstract.

Generally, it is accepted that there is a positive impact of Mountain Tourism in stimulating local economic growth and social change because this kind of tourism has a high potential to stimulate local economic growth and social change by effecting job creation, income, standard of living, savings and real estate. In Albania, tourism is reaching up to 20% of GDP and Mountain Tourism in an important and increasing component of this industry.

The purpose of this research study is to measure the impact of mountain tourism on economic, environmental, sociocultural and infrastructure aspects as perceived by the local residents, taking Thethi destination as an example.

Primary data gathered from a survey will be used to show a descriptive outlook of how tourism is viewed in that region. The positive effects of mountain tourism outweigh the negative ones and it is obvious that mountain and rural tourism has an encouraging impact on such rural destinations as compared to coastal zones of Albania.

Keywords: Tourism, Mountain tourism, economic impact, social impact, environmental impact

1. INTRODUCTION

The tourism industry is seen as a promising sector for developing countries. Evidence of successful growth through tourism in developing countries is usually given by increased numbers of international arrivals and gross tourist expenditures in hard currencies. The International tourism arrivals to developing countries have increased by 6.5% annually since 1988, a higher rate than average world growth of arrivals.

Meanwhile, mountain tourism is receiving a greater consideration, not only as a growing and desired form of tourism, but also for the impact it has on the community of mountainous areas. Researches studies show that mountain tourism can have positive impact for the rural areas and especially can be a good source of income and employment for local community. At the same time, the development of mountain tourism impacts the environment, infrastructure and socio-cultural aspects. (Wong. P. P, 2004).

The Albanian government has identified tourism as a key economic sector, touting its potential to spur development of the entire country. Located in the Mediterranean region, Albania could well represent Europe's last tourism “secret”.

In Albania, tourism is reaching up to 20% of GDP and Mountain Tourism in an important and increasing component of this industry. According to the data from CEIC, there is a significant increase in the number of tourists in Albania, as described in the *chart 1*.



Chart 1. Albania's Visitor Arrivals from Jan 2021 to Jul 2023

Although it is a small country, Albania is considered one of the most mountainous countries in the world where 71% of the country’s territory is occupied by mountains. The data show that the number of tourists who prefer mountain tourism in Albania has increased year after year. Therefore, mountain tourism can be seen as a good opportunity for economic development of rural areas in Albania.

At the same time, this development may also bring some problems and challenges to face on. In order to have a coherent aspect of the impact derived from the development of mountain tourism, it is important to have an assessment of the perception of the local community of these areas.

According to *Nejati.M.B & Mohamed, 2014*, the success or failure of tourism development can be determined by the perception of the local community on the impact of tourism. Furthermore, *Diedrich & Garcia-Buades, 2008*, emphasize that understanding and assessing tourism impacts in local communities is very important in order to maintain the sustainability and long-term success of the tourism industry. Scientific research studies in tourism concluded that the development of tourism impacts economic, environmental and social cultural aspects.

The number of studies assessing impact of mountain tourism on economic, environmental, sociocultural and infrastructure aspects based on local community perception is limited, even more limited in the case of such remote mountain destinations in Albania. Hence, this research study aims:

- a) to measure the impact of mountain tourism on economic, environmental, sociocultural and infrastructure aspects as perceived by the local residents, taking Thethi destination (in Shkodra, Albania) as an example.
- b) To evaluate the impact of mountain tourism in such dimensions as job creation, income, standard of living, savings and real estate, etc.

This study can serve to increase the understanding and address different issues related to mountain tourism impact on community.

2. LITERATURE REVIEW

Mountains are important tourism destinations worldwide and attract visitors for their scenic beauty, sports attractions and rich cultural heritage. Tourism represents a source of income and economic opportunities for remote rural mountain communities. It can also help to revitalize local traditions and food systems. Mountain tourism represents between 9 and 16% of international tourist arrivals worldwide, translating into 195 to 375 million tourists for 2019 alone. (*Johnson H., 2023*).

The growth of this form of tourism in the last decades has been seen as a good opportunity in order to stimulate local economic growth and socio-cultural change. Studies show that the success of local tourism development depends not only from government policies support but local communities' approach, since they are an important stakeholder within tourism sector. *Chang et al. (2019)* points out that local community should get involved in the tourism process development.

This development impacts economic, environmental, social and infrastructural aspects of their lives, so the perception of the local community is the most accurate form to evaluate the impact of mountain tourism development in those areas (*Cottrell & Vaske., 2006*). This is further supported by the study of *Byrd and Gustke (2004)* who showed that perceived impact was one of the main predictors of stakeholders' support for sustainable tourism development in their community.

Eshliki.S.A & Kaboudi.M, 2012, state that the perception of the community on the impact of tourism development can be positive or negative. According *Allen et, al (1993)*, community perception of tourism impact will be less positive as the level of tourism in the community is increased.

Ramseook-Munhurrun and Naidoo (2011) search for attitude toward perceived benefit of tourism by local communities. Study reveals economic, social and cultural aspects have positive impact on tourism development and environment aspect has negative impacts.

Overall, studies show that the community perception about the environmental and social impact of tourism varies across different areas. This study will provide a better understanding of local community perception toward the impacts of mountain tourism development and their support for further tourism development

3. RESEARCH METHODOLOGY

The primary data gathered from an online survey will be used to show a descriptive outlook of how tourism is viewed in that selected region. The random sampling technique was used clustering 273 residents living in the region of Thethi, in Shkodra, Albania.

Such techniques as Descriptive Statistics and Bivariate Analysis will be used to conclude about the research question and hypothesis.

Bivariate Analysis will be used to study the relationship of some demographic variables, such as income and location of respondents with economic, environmental and socio-cultural impact variables.

The findings among other things, showed a positive effects of mountain tourism outweighing the negative ones and it is obvious that mountain and rural tourism has an encouraging impact on such rural destinations.

4. DATA ANALYSES AND FINDINGS

Using collected data, a descriptive analysis of the study sample was prepared, on the basis of which the profile of the targeted respondents was charted. Further the analysis follows with the data about assessing the economic, environmental, socio-cultural and infrastructural impact of tourism development on the mountain tourism as perceived by local community of Thethi region, in Albania.

4.1. Demographic data of the sample

From the data gathered, 69% of the sample are male and 31% are female, which clearly shows a dominance of males in the group of the respondents in the area of the study.

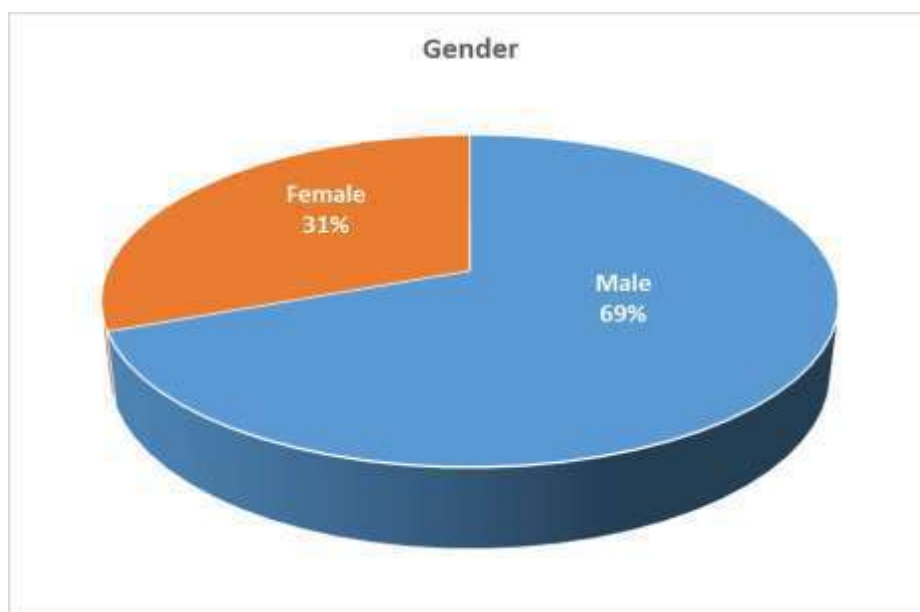


Chart 2. Gender

Regarding the age group of the respondents, the data are shown as in the chart below accordingly; up to 18 years old (7.7%), 19-25 (61.5%), which are the majority age group, 26-35 (7.7%), 36-45 (2.6%), and over 45 years (20.5%).

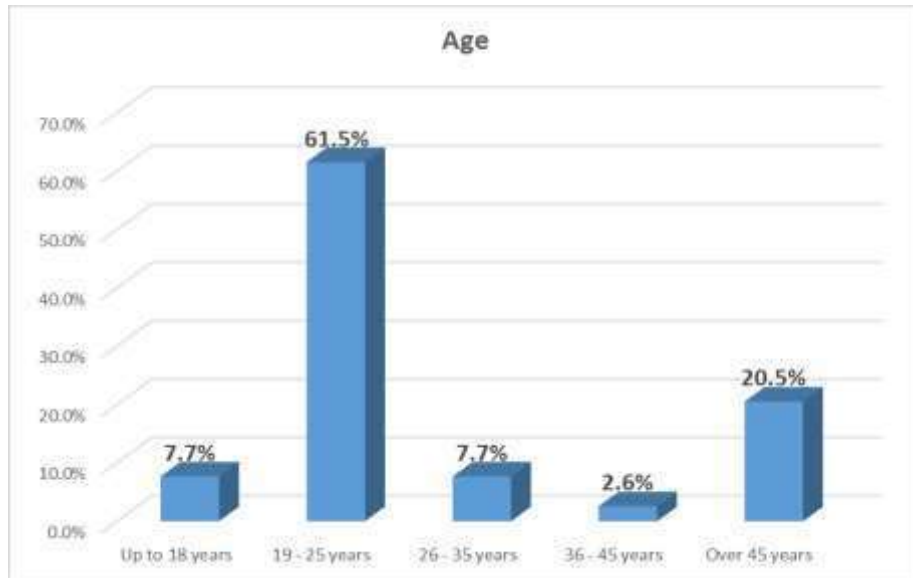


Chart 3. Age

This can be explained by access to the Internet and technology that makes the 19-25 years age group the majority of the sample, since the data were gathered using an online survey.

Regarding the level of education, the findings are; Elementary school (3%), High school (23%), University (51%) which are the majority, and Post Graduate (23%).

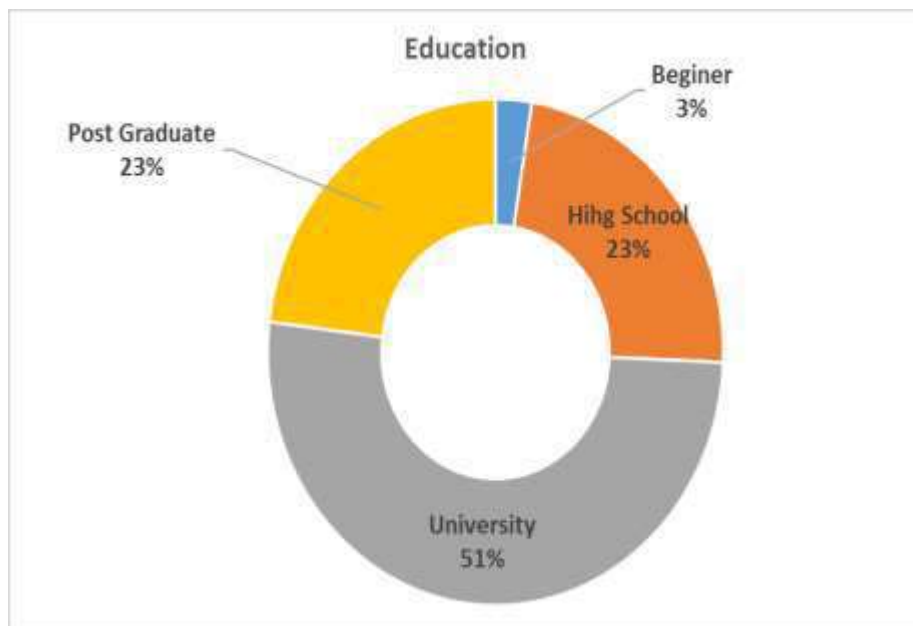


Chart 4. Level of education

These results show that the majority of respondents may have adequate knowledge of the impact of tourism on different dimensions, as economic, environmental, etc.

Analysing the sample data, regarding their family income, the data are as; 40,000 – 60,000 ALL (41%) belonging to the majority of the respondents, 61,000 – 80,000 ALL (15.4%), 81,000 – 100,000 ALL (10.3%) and over 100,000 ALL (33.3%).

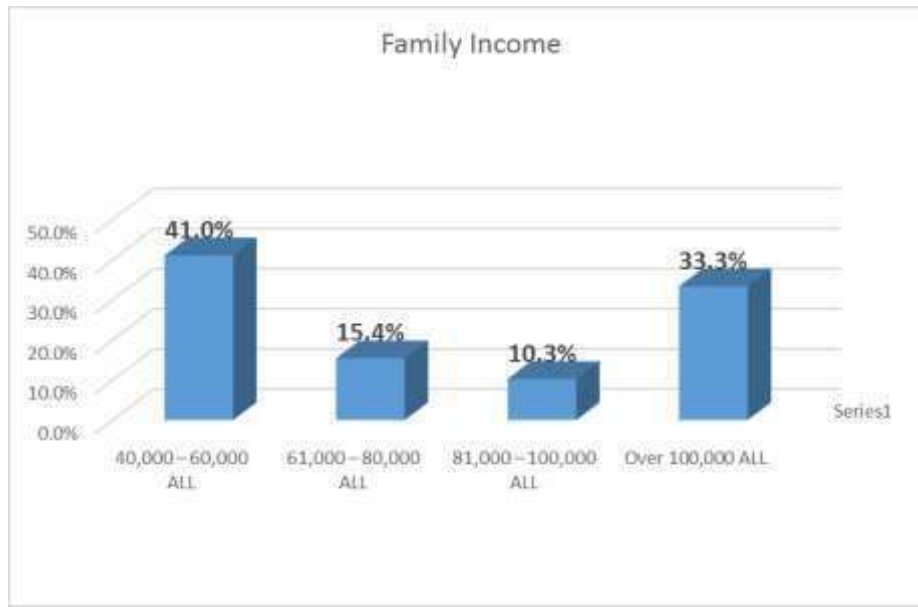


Chart 5. Family income

These results show that the sample was representative regarding different levels of income of the community targeted to survey about the tourism impact.

4.2. The Economic Impact of Mountain Tourism

It's been evidenced a perceived impact of mountain tourism on income level of respondents (4.6), job creation (4.5), living standard (4.4) and real estate value (4.3), etc, which fall under the economic impact of mountain tourism, shown in chart 6.

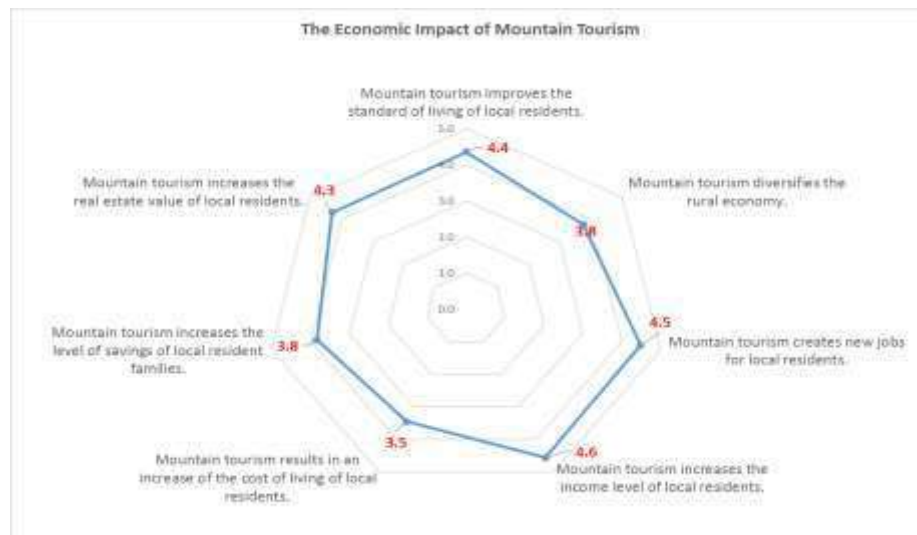


Chart 6. The economic Impact of Mountain Tourism

Those earning more than 100,000 ALL are perceiving a greater impact of mountain tourism on increased savings of local residents (4.2) and increased value of real estate (4.4) than the other residents income groups. On the other side, the residents earning 81,000 – 100,000 ALL responded a greater impact on standard of living (5.0), income level (4.8) and diversification of rural economy (4.3), than the other income groups, as shown in *chart 7*.

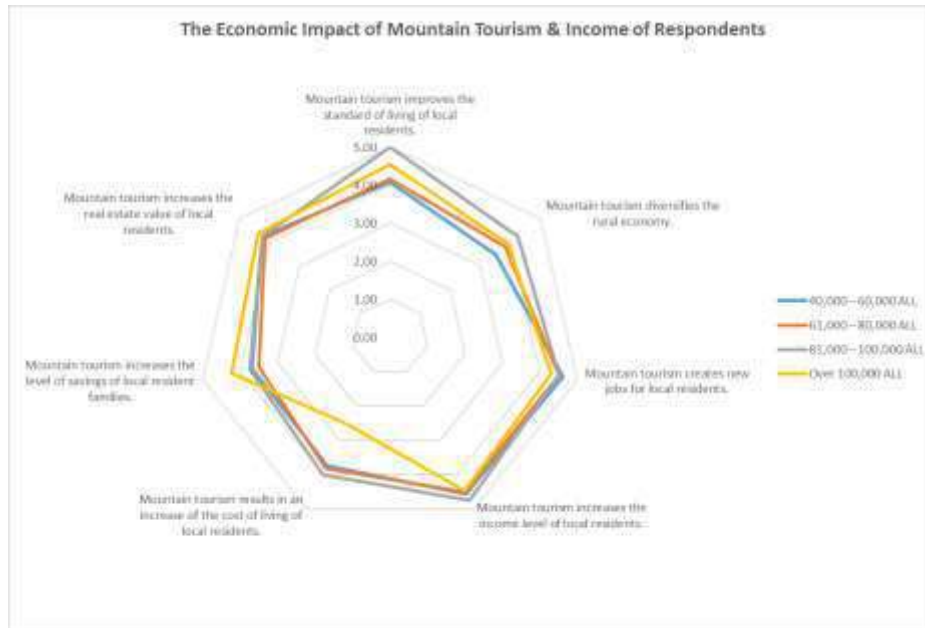


Chart 7. The economic Impact of Mountain Tourism & Income of Respondents

4.3. The Environmental Impact of Mountain Tourism

As per the environmental impact of mountain tourism, it’s been evidenced a perceived impact of mountain tourism on increased water consumption (3.9), traffic issues (2.9), and damage of the environment (2.8) etc, as shown in *chart 8*.



Chart 8. The environmental Impact of Mountain Tourism

Those earning more than 100,000 ALL are perceiving a lower impact of mountain tourism on increased increased water consumption (3.5) and increased damage of natyral landscape (2.6) than the other residents income groups. On the other side, the residents earning 61,000 – 80,000 ALL responded a greater impact on increasing traffic problems (2.9), construction destroying the environment (2.5) and increased air pollution (2.2).

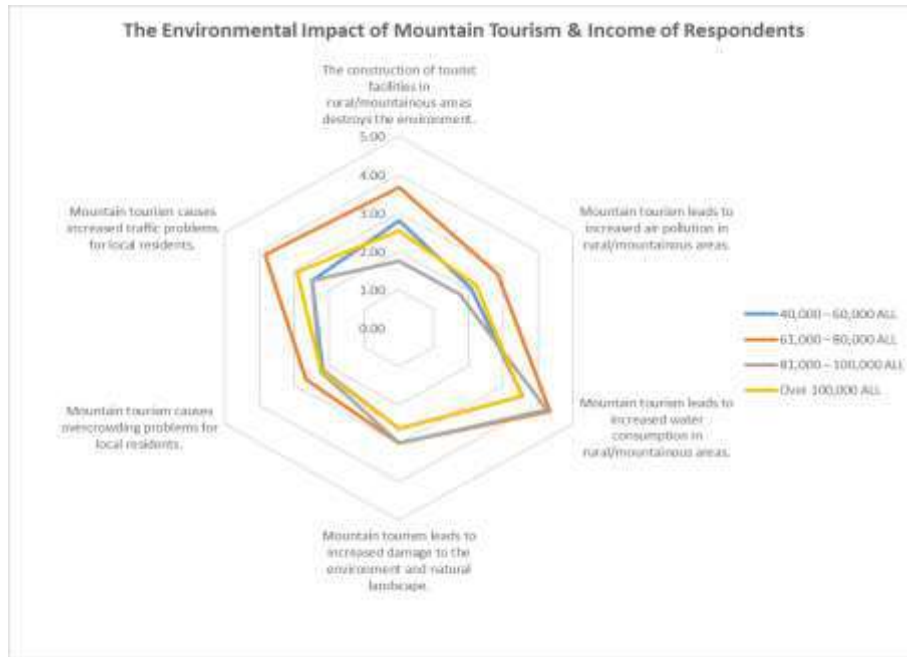
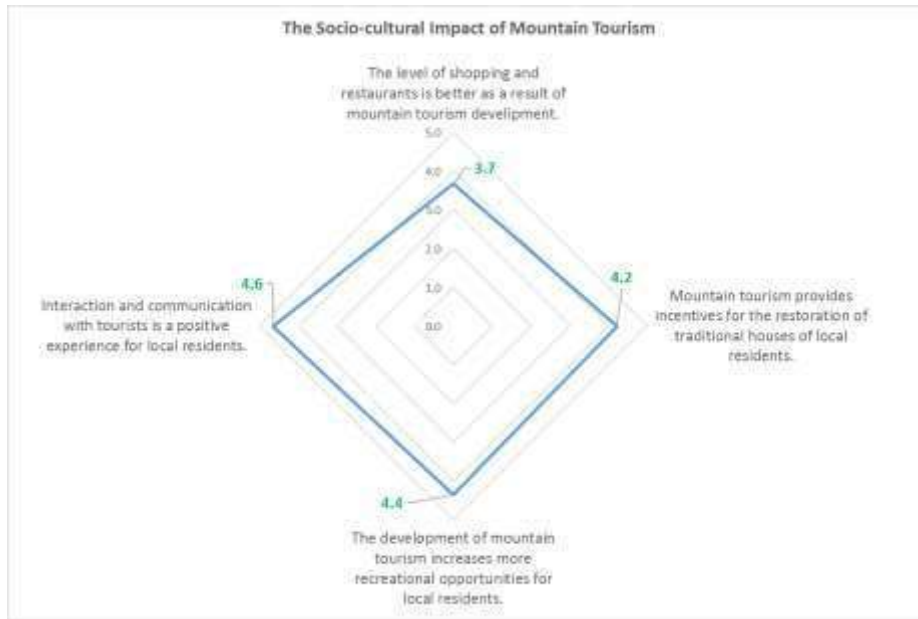


Chart 9. The environmental Impact of Mountain Tourism & Income of Respondents

4.4. The Socio-cultural Impact of Mountain Tourism

Looking at the socio-cultural impact of mountain tourism, it’s been confirmed a perceived impact of mountain tourism on interaction and communication as a positive experience (4.6), increasing recreational opportunities (4.4) and incentivising the restauration of traditional houses (4.2) etc, as shown in *chart 10*.



Those living in rural areas are reporting a greater impact of mountain tourism on incentivising the restoration of traditional houses (4.5) and recreational opportunities (4.5), while the respondents living in urban areas are reporting a greater impact on shopping (3.8), as it is shown in *chart 11*.

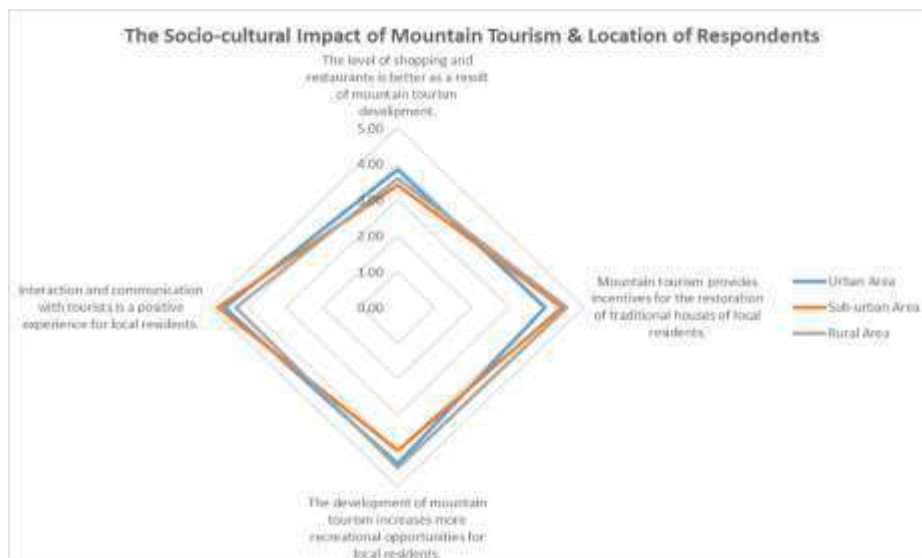


Chart 11. *The Socio-cultural Impact of Mountain Tourism & Location of Respondents*

4.5. The Infrastructural Impact of Mountain Tourism



Chart 12. The Infrastructural Impact of Mountain Tourism

Regarding the infrastructural impact of mountain tourism, it's been evidenced a perceived impact of mountain tourism on improving infrastructure (4.5), increasing the quality of public services (4.4), and improving other service facilities, as water and electricity supply (4.4) etc, as shown in *chart 12*.

5. CONCLUSIONS

According to the findings of this study there is a perceived positive impact of mountain tourism development on income level, jobs creation, standard of living and real estate value.

The data revealed a positive impact on socio-cultural aspects coming from interaction and communication with tourists and increased recreational opportunities.

While there is a perception of positive impact on infrastructure, the respondents revealed some negative environmental impact, as in increased water consumption, traffic issues, and damage of the environment.

The findings among other things, showed that mountain tourism has a *high potential to stimulate local economic growth* and social change by effecting income, job creation, standard of living, real estate and savings.

The positive effects of mountain tourism (*Economic, Socio-cultural & Infrastructure*) outweigh the negative ones (*Environmental*) and it is obvious that mountain tourism has an encouraging impact on local community.

Based on the research findings, the authors recommended an *increase of investments on mountain tourism*, putting in place relevant incentives in order to further stimulate this perceived impact on local community.

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Demographic Factors as Predictors of Career Orientation in Adolescents

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Abstract.

The current study aimed to understand how demographic factors predict career orientation in adolescents. To achieve this goal, we surveyed 150 high school students from the "Abdyl Ramaj" vocational high school in Suharekë. Participants in this research included adolescents from various fields of study, with the opportunity to complete the questionnaire provided to a mixed-gender sample. Their ages ranged from 15 to 18 years. In this study, we employed a quantitative methodology, and using the Career Exploration Survey (CES) instrument, we collected data on demographic factors as predictors of adolescents' career orientation. The data analysis results indicated that demographic factors such as gender, academic success, and the father's level of education significantly influence adolescents' career orientation. Unstandardized and standardized coefficients demonstrated that changes in these factors were associated with changes in career orientation. Furthermore, the t-test results confirmed the statistical significance of these influences.

Keywords: demographic factors, career orientation, prediction, adolescent.

1. Introduction

One of the most important decisions a young adolescent has to make is choosing a profession. A large number of career options are available at this age, and the more options there are, the more difficult it is to decide. Career construction is a dominant construct that allows individuals to build connections between actions, assess efforts, make plans, set goals and consequences, describe internal insights and cognitions, and use reactions that lead forward (Young & Valach, 1996).

Career orientation refers to the direction an individual takes from a career perspective throughout their life. If an individual consistently chooses or pursues a specific type of job or a job in a particular field, this can be seen as their career orientation (Luzzo, 1995).

Career orientation involves a series of processes designed to enable individuals to make informed choices and plans regarding education and work (Powell & Luzzo, 1998). It includes concrete preparations for a profession, practical work experiences, general vocational education measures, specific decision-making support, and assistance leading towards successful entry into a profession or vocational education determination (Altman, 1997).

Adolescents face significant choices as they progress through high school. After school, they must transition to either a job or further education. Making that choice can be difficult, especially if they lack experience beyond school. Young people may or may not have work experience. Some may have a certain awareness from their parents or part-time jobs, but many will at best have a vague idea of the possibilities ahead (Coertse & Schepers, 2004).

Studies conducted in the United States show that around 20%-60% of adolescents entering higher education institutions are undecided about their career choices. Personal factors such as age and gender, peer and parental influence, job availability, advancement opportunities, job security, and prestige have been studied as predictors of career decision-making. Young people also choose their careers based on external benefits associated with specific professions, such as financial rewards, job security, job access, and satisfaction (Paton & Creed, 2001).

Another factor that influences career choice is gender; women are considered to have a higher level of career orientation than men. Women undergo a faster development phase and tend to interact with more people, providing individuals with access to information about a specific career or education. The older women get, the higher their career maturity (Rogers et al., 2008). Some studies report that males show higher outcomes in career maturity than females, including Ackerman & Heggstad (1997) in Nigeria, Naidoo (1998) in South Africa, and Cleveland (2000) in India. Other studies have failed to find significant gender differences in career maturity, such as Herr & Enderlein (1976) and Kelly & Colangelo (1990).

In addition to gender, socio-economic status (Socio-economic status is an individual's or group's position on the socio-economic scale, determined by a combination of social and economic factors, such as income, quantity and type of education, and the type and prestige of the profession) of individuals' circumstances is also a factor linked to the level of career maturity. Few studies have been conducted regarding cross-cultural comparisons. Living in rural or urban areas has shown to be associated with educational and professional aspirations among young people (Savickas, 2005).

Barcinas (1989) concluded that adolescents from urban areas have higher educational and professional aspirations than adolescents from rural areas (Barcinas, 1989). There is significant rural diversity in America, and some themes highlight the need for more attention to rural adolescents in career development and the profession selection process. Firstly, young people from rural communities face numerous issues related to career development and preparation, including limited access to higher education, narrow school curricula, limited exposure to the job market, and a lack of diversity in job models (Apostal & Bilden, 1991).

Research also shows that when students feel supported and loved by their parents, they have more confidence in their ability to explore careers and choose a career that would be interesting and exciting. This is crucial because studies show that adolescents who feel competent in career decision-making tend to make more satisfying career choices later in life (Keller, 2004).

Middleton and Loughhead (1993) discuss how parents' professions can have a significant and positive impact on the decisions that influence a young person's professional development. However, they also warn that excessive involvement in the decision-making process can damage parental effects as a positive influence. Excessive parental control over adolescents' professional decision-making results in negative outcomes (Middleton & Loughhead, 1993).

The study conducted by Cleveland (2000) clearly indicates that the educational background of parents influences the career choices of their children. Parents with higher education tend to impact their children to choose professional careers more than parents with lower education. The findings of this research align with existing literature, as observed in studies such as Herr & Enderlein (1976), where it was noted that the educational background of parents tends to influence the career choices of adolescents. Furthermore, the findings of this study are consistent with the theory of social learning in career decision-making, which explains that people's career choices are influenced by their social learning, including their experiences with people, events, and other institutions. Adolescents with highly educated parents may choose professional careers based on their parents' advice and their perception of how successful their parents are (Naidoo, 1998).

A survey was administered among tertiary-level students in Bangladesh. The results revealed that age, religion, place of residence, study attitude, parents' education, and parents' profession have positive influences on the career choices of students. Additionally, it also showed that family members have an impact on the overall career decision-making process of students. On the contrary, fathers' income has little influence, while mothers' monthly income has a positive impact. Again, gender differences were found to have a negative impact (Kelly & Colangelo, 1990).

2. Literature Review

Demographic factors as predictors of career orientation

Demographic factors of a population are a statistical expression of variables such as age, gender, educational level, income level, religion, family size, and mortality rate (Tibbets, 1975). Lubinski (2000) views demography as the study of a population based on factors such as age, race, gender, economic status, income, educational level, and employment, among others. These are used by government, corporations, and non-governmental organizations to learn more about population characteristics for various purposes, including policy development. According to Lubinski (2000), demographic variables are aspects of societies or cultures that are measurable and can be used to categorize individuals. These include religion, income, gender, marital status, child status, and race. By their nature, there may be significant relationships among certain demographic characteristics such as age, gender, socio-economic status, and class level.

Gender as a Predictor of Career Orientation

The subsequent results indicated that females were interested in a significantly greater number of careers and exhibited greater flexibility in gender roles in their career aspirations than their male counterparts. For example, females are more likely than males to aspire to and achieve the higher status professions, even those traditionally dominated by males (Bandura, 1979). Females preferred subjects such as biology, while males preferred physics and chemistry. Males lean more towards realistic careers than females, while social careers are more preferred by females than males. Males seem to place a higher value on external prestige and rewards, while females tend to be more drawn to internal rewards (Schuette, 2012). However, other researchers found no differences between males and females in career aspirations and expectations. They suggested that this reflects societal changes related to gender equality (Braza & Guillo, 2015).

Adolescent career orientation based on school success

Academic achievements predicted the educational aspirations of high school adolescents (Salami, 2008). Consequently, it may occur that adolescents who succeed in school have higher career aspirations than those who do not. Females with high achievements surpassed the aspirations of females and males with average achievements and were similar to those of males with high achievements. Similarly, adolescents with lower previous achievements and lower socio-economic backgrounds were more likely to have uncertainties in their career aspirations. Young people who believe they have the ability to succeed and attribute work success to effort rather than luck or fate have higher aspirations than their peers (Morris, 2016). Furthermore, females who perceived themselves as hardworking and internally motivated were more likely to aspire to male-dominated careers. In contrast, males' career aspirations appeared to be primarily unrelated to their perceived self-motivation for achievement (Nelson, 1978).

Adolescent residence as a predictor of career orientation

In his analysis, Abdulraheem, (2016) concluded that the development of a country directs its teenagers in career according to the needs of the country. In other research, it has been elaborated that the influence of the home environment affects the career path of the child. Similarly, parental education has been proven as a factor influencing the choice of (Braza & Guillo, 2015).

Parents' socio-economic background as a predictor of adolescent career orientation

Metz & Fouad, (2009) shows that the most important factors related to children's career preference seem to be professional status which determines their socio-economic status. Furthermore, Adewale, (2012) found that ninety-three percent of high school teenagers in his study reported that they had similar occupations and values to their parents. This is important because it dispels the myth that children and teenagers tend to challenge their parents' values and expectations. Instead, it may be more accurate to say that children are quick to adopt their parents' professions and values, perhaps without ever exploring their own. This may be due to children's natural desire to bond with their parents (Morris, 2016).

Parental education as a predictor of career orientation in adolescents

It seems that the adolescent's own aspirations are more strongly influenced by parental aspirations. If the parents' aspirations are high, so are the teenagers' aspirations. Furthermore, occupational aspirations expressed in adolescence differed between females and males and were related to parental education and math test scores (Jodi & Michael, 2001). Parents' educational commitment to their children, as measured by parents' academic drive, showed positive effects on adolescents' career aspirations. Thus, adolescents are more likely to internalize parental academic expectation to promote higher career aspirations. Further, parents' educational and socio-economic level are related to children's career aspirations. Family socioeconomic status is strongly associated with educational aspirations for males. For example, adolescents whose mothers are employed are likely to consider a greater number of occupations than those whose mothers are not employed (Quatman & Edler, 2002).

Work experience, employment status and working conditions of parents

Work experience, employment status and working conditions of parents have a direct or indirect impact on adolescent career search and development (Akinsanya & Ajayi, 2011). In turn, it includes parent-child attachment, parental support, and parenting style (Rasheed &

Saunders, 2009). For example, parenting behaviors predicted change in ninth-grade German adolescent career exploration over the observed period. Furthermore, frequent conversations with peers about career-related issues were significantly associated with the intensity of information-seeking behaviors and, at the same time, predicted the intensification of career search over the following 6-month period. These two aspects influence each other and play an irreplaceable role in the career development of teenagers.

3.Methodology

The main goal of this paper was to identify demographic factors as predictors of career orientation among teenagers aged 15 to 18 years in the municipality of Suhareka.

Study design

The study overview required the identification of demographic factors as predictors of career orientation in adolescents. We have collected primary and secondary data for this purpose. Primary data were collected through a questionnaire conducted using the quantitative method, while secondary data were obtained from books and articles dealing with demographic factors as predictors of career orientation among teenagers. The study is of a descriptive, regression and correlational type, including the description of demographic factors, the analysis of their influence as predictors of career orientation, and the evaluation of the interaction between demographic factors and career orientation.

Participants

The research was conducted with 150 high school students from the "Abdyl Ramaj" vocational high school in Suharekë, coming from various fields of study. They had the opportunity to complete this questionnaire as part of a gender-mixed sample. Their age ranged from 15 to 18 years.

Measurement Instruments/Questionnaires

The questionnaire, titled "Career Exploration Survey (CES)," is standardized and translated into Albanian by (Gashi, 2013). Developed by (Super, 1957), this questionnaire is divided into several sections, comprising a total of 28 questions. The first part includes 7 demographic questions (gender, place of residence, school success, socio-economic status, mother's education level, father's education level, and parents' profession). The second part contains data on the chosen profession, while the third part provides information on career decision-making orientation. The third part is divided into five sub-themes (career planning, career exploration, decision-making skills, knowledge about the world and the preferred profession), each containing five questions, except for the last one, which has two questions. The questionnaire responses have various rating scales. Six questions have a 5-point rating scale (1. I still haven't thought about it, 2. I have thought a little about it, but haven't made any plans yet, 3. I have some plans, but I'm not sure about them yet, 4. I have made definite plans, but I still don't know how to realize them, 5. I have made definite plans and know what to do to achieve them). In total, 11 questions have a 4-point rating scale, 5 questions have a 3-point rating scale (1. No, 2. Maybe, 3. Yes), and one question is open-ended: "What is the profession you prefer the most?"

Hypotheses

The hypotheses of this study are:

H1 Demographic factors, such as gender, place of residence, school success, socio-economic status, mother's education level, father's education level, and parents' profession, are predictors of adolescents' career orientation.

H2 Respondents residing in rural areas have higher career aspirations compared to respondents living in urban areas.

H3 Adolescents with parents of high socio-economic status are more influenced by their parents in career orientation than adolescents with parents of low socio-economic status.

4.Results

Results from Demographic Data

In total, data for 150 respondents were considered. The results show that: 33.1% of the respondents were 15 years old, 47.0% were 16 years old, and 19.2% were 17 years old. From the presented results, it is observed that 63.6% of the respondents are female, while 35.8% are male. This indicates a dominance of the percentage of females in the respondent group. The results show that 91.4% of the respondents live in the city, while 7.9% live in rural areas. This indicates a dominance of urban residence for the respondent group. Information about the place of residence is important to understand the social and cultural context in which they live and may influence their preferences, perceptions, and behaviors. The results show that: 2.6% of the respondents have exemplary success in school, 23.2% have excellent success in school, 32.5% have very good success in school, 26.5% have good success in school, and 14.6% have sufficient success in school. 4.6% of the respondents have a not-so-good economic condition, 13.9% of the respondents have a somewhat not-good economic condition. 33.1% of the respondents have an average economic condition, 40.4% of the respondents have a good economic condition, and 7.3% of the respondents have a very good economic condition. This indicates that a large proportion of the respondents have a good or very good economic condition. However, there is also a portion of respondents reporting a not-so-good or average economic condition. The results show that 15.2% of the respondents have fathers with elementary education, 47.7% of the respondents have fathers with secondary education, and 36.4% of the respondents have fathers with a Bachelor's degree. This indicates that a large proportion of the fathers of the respondents have secondary education or a Bachelor's degree. The results show that: 18.5% of the respondents have mothers with elementary education, 53.6% of the respondents have mothers with secondary education, and 27.2% of the respondents have mothers with a Bachelor's degree. This indicates that a large proportion of the mothers of the respondents have secondary education or a Bachelor's degree.

Results related to hypothesis testing

H1 Demographic factors such as: gender, place of residence, school success, socio-economic status, mother's education level, father's education level and parents' profession are predictive factors in the career orientation of teenagers.

Table 1. The influence of demographic factors as predictors on the career orientation of teenagers

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519 ^a	.269	.238	.78724

Table 1 shows the influence of demographic factors as predictors on the career orientation of teenagers. The model has a correlation R value of .519, indicating how well the predictor variables (demographic factors) predict the career orientation of adolescents. The percentage of explained variability is .269, which means that 26.9% of the changes in career orientation can be explained by demographic factors.

Table 2. ANOVA analysis for the influence of demographic factors as predictors on the career orientation of teenagers

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.609	6	5.435	8.770	.000 ^b
	Residual	88.623	143	.620		
	Total	121.232	149			

Table 2 presents the ANOVA analysis for the influence of demographic factors as predictors on the career orientation of teenagers. In this analysis, the F-value is 8.77 and the p-value is .00, indicating that there is a statistically significant difference between the group of demographic factors and the career orientation of teenagers.

Table 3. Coefficients for the influence of demographic factors as predictors on the career orientation of teenagers

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	.837	.594		1.409	.161
	Gender	.215	.140	.115	1.5	.127

				33	
Residence	.095	.258	.029	.369	.712
Success in school	.333	.065	.391	5.155	.000
Economic situation	-.190	.070	-.204	-2.705	.008
Mother's level of education	.027	.094	.021	.285	.776
Dad's education level	.311	.100	.233	3.103	.002

Table 3 contains the influence coefficients of demographic factors as predictors in the career orientation of teenagers. In this model, the predictor variables are: gender, residence, school success, economic status, mother's education level, father's education level and parents' occupation.

This table presents the unstandardized and standardized coefficients of demographic factors as predictors of adolescent career orientation. These coefficients show the change in the career orientation of teenagers depending on the change of each demographic factor.

Unstandardized coefficients (B) show the absolute change in career orientation per unit change in the demographic factor. For example, if the economic condition increases by one unit, career orientation increases by -0.190. In the same way, the standardized coefficients (Beta) show the relative change in career orientation in a standard deviation of the change of the demographic factor. For example, an increase of one standard deviation in school success leads to an increase in career orientation with a value of 0.391.

In this case, some demographic factors such as economic status, school success and father's level of education have significant statistical significance in the career orientation of teenagers (the value of Sig. is lower than 0.05). Regarding the hypothesis, based on in the analysis of the tables, we have evidence that demographic factors, such as (success, economic status and father's education) are predictors in the career orientation of teenagers and from these results we say that hypothesis H1 is accepted.

H2 Respondents with residence in the countryside have higher career aspirations compared to respondents with residence in the city.

Table 4. Descriptive analysis for differences in residence in the context of career aspirations

	Residence	N	Mean	Std. Deviation	Std. Error Mean
Career planning	City	138	3.005	1.27318	.10838

		8		
Countryside	12	3.200	.78161	.22563
		0		

Table 4 presents the descriptive analysis for differences in residence in the context of career aspirations. The mean of the respondents who live in the city is 3.00, with a standard deviation of 1.27, while the mean of the respondents who live in the countryside is 3.200, with a standard deviation of .78. The mean and standard error are also shown for each group.

Table 5. t-test analysis for differences in residence in the context of career aspirations

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Si g.	t	d f	Si g. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Career planning	Equal variances assumed	3.383	.068	-.519	148	.605	-.19420	.7420	-.93368	.4527
	Equal variances not assumed			-.776	191	.449	-.19420	.5031	-.72331	.33490

Table 5 contains the t-test analysis of differences in residence in the context of career aspirations. Levene's test for equality of variances shows an F value of 3.38, with a statistically useful significance level of .068. Based on the results of tables 15 and 16, a difference in career aspirations can be observed between respondents who live in the city and those who live in the countryside. The mean of career aspirations is higher in the village group (3.20) compared to the city group (3.0058), however the difference is not statistically significant ($p = .605$). Therefore, there is not enough evidence to verify the hypothesis H3 that respondents living in the countryside have higher career aspirations compared to those living in the city.

H3. Adolescents whose parents have a high socioeconomic status are more influenced by their parents in career orientation than teenagers whose parents are of a low socioeconomic status

Table 6. Descriptive analysis for parents with high socioeconomic status in the context of career orientation in teenagers

	N	Mean	Deviation. Std
Not good at all	7	3.3214	.58797
Somewhat not good	21	3.5000	.46984
Average	50	2.3110	.95737
Good	61	2.8656	.68911
Very good	11	2.0909	1.09768
Total	150	2.7340	.90202

Table 6 presents the descriptive analysis for parents with high socioeconomic status in the context of career orientation of teenagers. The table shows the number of teenagers in each category of career orientation (not at all good, somewhat not good, average, good, very good), their mean and standard deviation.

Based on the data presented in the table, it is observed that the average career orientation varies depending on the socioeconomic status of the parents. Adolescents who have parents with high socioeconomic status tend to have higher career orientation averages compared to those who have parents with low socioeconomic status.

Table 7. ANOVA analysis for parents with high socioeconomic status in the context of career orientation in adolescents

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29.289	4	7.322	11.548	.000
Within Groups	91.943	145	.634		
Total	121.232	149			

Table 7 presents the ANOVA analysis for parents with high socioeconomic status in the context of adolescent career orientation. Analysis of variance (ANOVA) is used to assess statistically significant differences in the means of different career orientation groups.

From the results of the ANOVA analysis, it is observed that there are statistically significant differences in the means of the career orientation groups based on the socioeconomic status of the parents. In this case, the F-test is 11.548 and the p-value is .000

(less than .05). This means that the differences in the means of the career orientation groups are statistically significant.

According to the results, it appears that teenagers who have parents with high socioeconomic status are more influenced by their parents in their career orientation compared to teenagers who have parents with low socioeconomic status. Therefore, hypothesis H5 is verified.

5. Conclusion

From the analysis of this study, we conclude that demographic factors, such as gender, place of residence, school success, economic status, mother's education level, father's education level and parents' profession, have a significant impact on the career orientation of teenagers. The results showed that demographic factors have a statistically significant influence on the career orientation of teenagers. Variables such as school success and father's level of education have shown a positive and significant influence on career orientation, while the economic situation has shown a negative influence.

The percentage of variability explained by demographic factors was about 26.9%, indicating that this group of factors can explain a good part of the changes in the career orientation of teenagers.

Regarding the hypotheses, the results of the analyzes showed that there were no significant gender differences in the preference for realistic and social careers. As for the differences in career orientation between the city and the countryside, the results showed a small difference, where respondents living in the countryside had higher career aspirations compared to those living in the city.

The results also showed that demographic factors have an impact on the career orientation of teenagers. At the same time, the results did not provide support for specific hypotheses related to gender and residence differences in career preferences. These results can be useful to understand the factors that influence career choice and help develop career orientation strategies for teenagers.

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Problems and Challenges of the Agriculture Sector in Albania

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Abstract.

The agriculture sector in Albania plays a vital role in the country's economy, contributing to rural livelihoods, food security, and overall economic stability. However, it faces a multitude of problems and challenges that hinder its growth and development. This sector's drawback is that it is also subject to outside influences, such as weather patterns, which makes it extremely dependent on government assistance and subsidies. An additional challenge facing Albania's agriculture industry is informality. Many farmers are unable to register with tax authorities and access digital services because they do not have the necessary documentation for their land. This paper provides an overview of the significant problems and challenges confronting the agribusiness sector in Albania. It highlights the sector's economic importance, identifies key issues such as mentioning land fragmentation, lack of irrigation capacity, limited rural infrastructure, and limited access to credit. The paper emphasizes the need for policy reforms and investments to promote sustainable growth and competitiveness in Albania's agribusiness sector.

Keywords: agriculture, agribusiness, economic development, problems, challenges

1. Introduction

Regarding its impact on the GDP, employment rate, economic growth, and general well-being of the rural populace, the Albanian rural sector is among the most significant and expansive sectors in the nation. Major structural issues for Albania's agriculture sector have included typical small farm sizes, excessive land fragmentation, low investments, inadequate infrastructure, and loss of agricultural land due to shift in use. Smallholder farmers face many difficulties, including poor quality food resulting in low pricing or post-harvest losses; lack of access to sufficient infrastructure, such as storage facilities; and lack of timely and trustworthy data on market prices and marketplaces. Using the agricultural value chain is one method to address the aforementioned issues. Strong market ties have the potential to drive the growth of value chains and raise smallholders' productive base. Farmers and smallholders alike can gain from increased chances for value addition brought about by an efficient market linkage.

With 20% of Albania's GDP and the majority of the population's income coming from it, agriculture continues to be the most significant economic sector in the nation. Approximately 37% of Albania's workforce is employed in agriculture, mostly in the nation's rural areas. During the past ten years, there has been a sharp increase in agricultural productivity. The

development of the rural sector is focused on enhancing investment and infrastructure, protecting the environment, managing agricultural land efficiently, and ensuring food security. Smallholders with a large number of small farms and a limited number of large farms dominate the agricultural systems of Albania. 86% of Albanian farms have up to 2 hectares, while 14% have more than 2 ha, based on the structure classification (FAO, 2020).

The purpose of this paper is to highlight the problems and challenges of the agricultural sector and agribusiness in Albania.

The objective of the study is:

- To analyze the current situation in the agricultural and agribusiness sector in Albania;
- To identify the problems faced by the agribusiness sector in Albania;
- To identify the challenges of the agribusiness sector in Albania.

2. Literature Review

The foundation of developing nations, agriculture has enormous potential to promote economic growth, development, and the reduction of poverty (Zeller, 2003). Agricultural development needs more attention and assistance because, despite its significant contribution to emerging nations, it is still an underdeveloped sector and most rural residents are impoverished (Zeller, 2003). In comparison with other economic sectors, the growth of Albania's rural sector is beset with challenges regarding the location of farmers and agricultural farms, the terms of product marketing, input costs, the influence of environmental factors on agricultural output, fluctuations in the sale price of products, and financing availability (Tomorri et al., 2018). While non-governmental organisations (NGOs) and other entities involved in agribusiness development have concentrated on marketing and value chain development (VCD), agricultural research organisations have concentrated on boosting agricultural production and productivity. The value chain is a crucial component of the measures these governments, development organisations, and donors have chosen to reduce rural poverty (Humphrey and Navas-Alemán, 2010). All operations involving the conversion, storage, and preparation of agricultural output for intermediate or final consumption—with a focus on food—combine to constitute the agribusiness sector. Because their increased revenue can create a market for goods and services, small farmers are sources of employment that contribute to rural development, even in other sectors of the economy (Sievers and Saarelainen, 2011).

In comparison to other economic sectors, Albania's rural sector is developing but is beset with issues such as where farmers and agricultural farms are located, how products are marketed, the cost of inputs, the effect of environmental factors on agricultural output, changes in the price of sales products, and financing availability (Tomorri et al., 2018). By engaging in contract farming with domestic processors, exporters, or foreign purchasers, rural farm households in developing nations can gain a lot from agri-food exports and the enhanced value in both the domestic and export sectors. One strategy for addressing market failures is contract farming, which involves integrating smallholders into contemporary agricultural value chains and giving them access to markets, inputs, and technical support. Furthermore, the financial and technical barriers that small farmers encounter in meeting strict standards might be lessened through well drafted contracts that include farm extension and assistance

programmes. By enhancing product quality, expanding input supply, and marketing products, farmer organisations have contributed to lower transaction costs in the input and product markets. Additionally, they have helped to negotiate better contract terms for small investors. The research indicates that the integration of smaller and less productive producers into high-value value chains can be improved by lowering certain transaction costs (for instance, by investments in infrastructure, producer associations, and third-party quality monitoring).

Development-related ramifications of these processes are significant. Growing potential for economic growth through agricultural export diversification and expansion are presented by rising prices in global food markets and increased demand for high-value products in developing nations. The establishment of high-value agrifood chains is widely acknowledged by developing nations as a crucial tactic for promoting growth that benefits the poor. One of the most important things that developing nations can do to combat poverty and boost earnings in rural areas is to modernise their agricultural value chains. All operations related to the processing, preservation, and readying of agricultural output for intermediate or final consumption—with a focus on food—combine to constitute the agribusiness sector. Since a rise in their income can open up a market for goods and services, small farmers are sources of employment that support the growth of rural areas as well as other economic sectors (Sievers and Saarelainen, 2011).

Due to their unique circumstances, smallholders and this sector, have a variety of obstacles, such as those pertaining to financial inclusion (credit, savings, and insurance), market information, value chains, input accessibility, and the quality and consistency of produce. A sourcing approach known as "smallholder inclusion" involves smallholders producing commodities for supply chains with high value addition from a business standpoint. A network of food-related companies that transfers goods from manufacturing to consumption while increasing their market value is known as a high value supply chain. In an attempt to reach regional and international markets, agribusiness in developing nations must overcome a number of transactional and production constraints. Low productivity, inconsistent quality, expensive transaction costs, subpar market institutions, and an unreachable rural banking system are a few of them (Wiggins et al., 2010). Reaching EU marketing requirements for our nation could also be difficult because most producers are unaware of the requirements and don't follow them. Different vertical coordination models exist in Albania, and they differ depending on the product/sector and farmer types. Show that informal (verbal) agreements are more popular than formal (written) contracts when it comes to the types of agreements that farmers and purchasers get into.

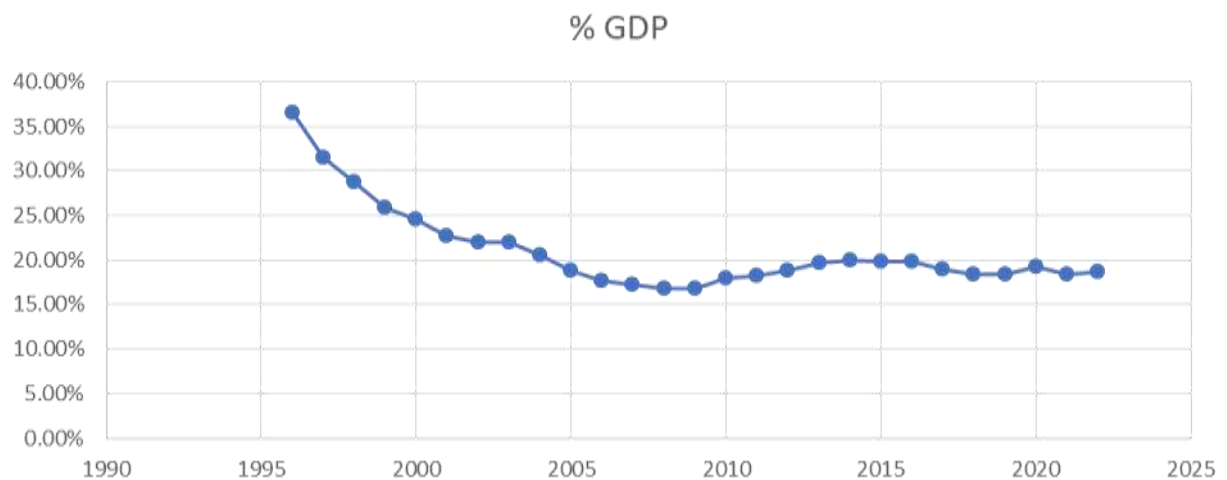
2.1 The actual situation of the agricultural sector in Albania

The rural sector is one of the most important and largest sectors in Albania, referring to the contribution to economic growth, the gross domestic product, the level of employment in the country and the increase in the well-being of the population living in rural areas. Albania has all the makings of a prospective exporter in the European markets thanks to its geographic location, natural resources, relief, and climate. There are roughly 2.87 million people living there. The agricultural industry employs one-third of the workforce. Albania has an abundance of water resources; 65 percent of its 43,900 km² area is covered with water. The primary industry in the nation and the source of both employment and money, agriculture is one of the most important economic sectors with significant development potential. In 2020, the agriculture industry will account for 18.39% of the GDP. 2020 will see an increase in the

production of agricultural products. The production of vegetables increased by 2.99% in 2020 over 2019. The counties of Fier, Berat, and Tirana have the largest yields of vegetables.

In Albania, agribusiness is one of the main drivers of the economy, accounting for 50% of employment and 20% of GDP. If rural clients have access to the right expertise for the implementation of business strategies geared towards business growth, as well as the right information about financial methods and mechanisms, they can realise many of the opportunities for the development of this sector through the right investment strategies. It aims to welcome tourists who are also interested in learning more about Albania and its culture, in addition to promoting the local economy by diversifying agricultural operations. savouring the regional specialties. For agrotourism businesses, Albania provides tax breaks such as a 5% profit tax, 6% VAT, and exemption from the infrastructure impact tax (AIDA, 2022). In comparison to other European Union countries, where the agricultural sector accounts for about 2% of GDP, the agricultural sector employs approximately 36.4% of the labour force, though some estimates also put that number above 40% (due to the informal nature of the sector, many work but are not registered as farmers, shepherds, etc.); it also contributes about 19% to GDP (World Bank, 2023). Small domestic growers with an average farm size of 1.2 hectares currently dominate the business.

Figure 1: Agriculture, forestry and fishing, value added (% of GDP) – Albania.



Source: World Bank, 2022.

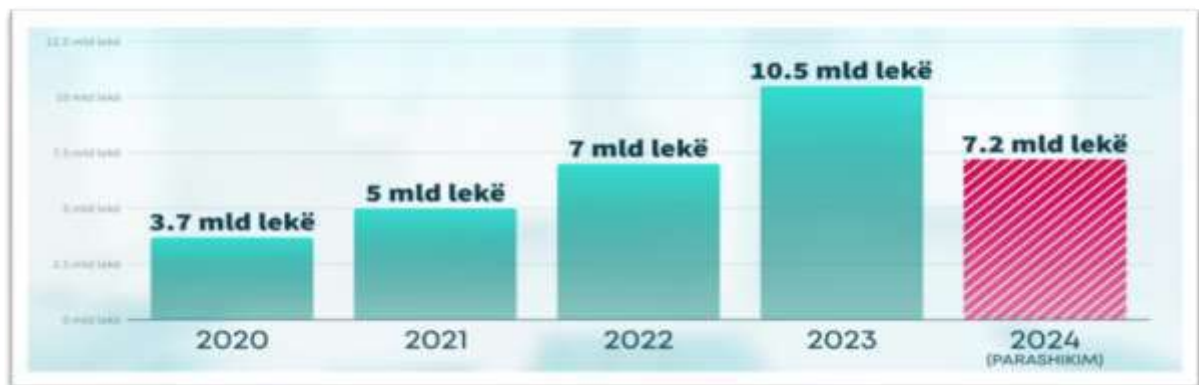
Referring to the World Bank data, it is noted that the contribution of the agricultural sector to the Gross Domestic Product has decreased. In 1996, this contribution was about 37%. After 2015, the value of this sector in GDP is below 20%. This sector is one of priority and strategic sectors of the national economy in terms of contribution to economic growth, gross domestic product, the level of employment in the country and increasing the welfare of the population living in rural areas.

According to data from INSTAT (2022), Fier county leads with more than 171,017 tons. Then, the district of Elbasan with a level of 95,376 tons and the district of Korça with 81,092 tons. Kukës district has the lowest level at the beginning of cereals with 14,540 tons. Also, the

region of Fier leads with 534,351 tons, the region of Berat with 139,775 tons and the region of Tirana with 136,951 tons (INSTAT, 2022). The districts with the lowest production of vegetables are: Kukes with 14,161 tons and Gjirokastra with 15,097 tons. As far as fruit production is concerned, Korçe County leads with 82,947 tons, followed by Elbasan County with 41,649 tons and Fier County with 36,155 tons (INSTAT, 2022).

The Albanian government offers several fiscal incentives and assistance schemes to agricultural firms, and its legal framework partly aligns with the EU Regulation on European Cooperative Societies. According to the Ministry of Agriculture (2023), the Albanian government grants special privileges and incentives to those deemed "strategic investors"—those who invest more than three million euros in a particular industry and generate over fifty new jobs. Among the incentives that are offered are grants, easier licencing and permission processes, favourable rental rates for agricultural property, support with auxiliary infrastructure, and administrative help. Of the almost 63,000 farmers who were formalised last year, half submitted applications; 25,618 of them, or around 80% of the total, were granted subsidies (AZHBR, 2023). In comparison to the previous year, support programmes have resulted in nearly twice as many applications to receive these subsidies and a 25% rise in farmers' formalisation for 2022 (AZHBR, 2023). Agriculture-related funding, estimated at 34 million euros in 2022, has climbed thrice from the previous year, while EU funds supporting agriculture through the Ipard programme, totaling 112 million euros, have increased by 56% (World Bank, 2023). The draft law, which establishes the notion of commercial receipts on future agricultural products, was created by the government in collaboration with the AMF, the American National Bank, and the National Association of Teachers. Their application will greatly boost agricultural funding.

Figure 2: Financing of agriculture from the state budget 2020-2024.



Source: Ministry of Finance, 2023.

Funds for agriculture, about 34 million euros for 2022, are 3 times higher than a year ago, while EU funds of 112 million euros, in support of agriculture through the Ipard program, have increased by 56% (World Bank, 2023).

2.2 The problems in the agricultural sector and agribusiness in Albania

The location of farmers and agricultural farms, the terms of product marketing, input prices, the effect of natural factors on agricultural production, seasonality, changes in the price of sales products, and the availability of financing are some of the issues that accompany the development of the rural sector in comparison to other economic sectors. The use of modern technology, the creation and strengthening of farmer associations, the development of a system for the marketing and trading of agricultural products, and other measures have all supported the consolidation of agricultural holdings.

Low level of knowledge of new technology and innovative practices: Improved broadband development will likely have a significant influence on the agriculture sector by facilitating organisational change and improving coordination to maximise productivity gains from ICT investments as a whole. Lack of institutional capacity and infrastructure, as well as the cost of fixed and mobile broadband connectivity, are major contributors to the ongoing Digital Divide, particularly in rural and low-income areas. There has been a discernible trend in the development and functionality of digital platforms for agriculture in recent years. There is little statistical information available regarding the extent of their use, but some of them are still in use today. They were mostly developed as byproducts of donor support programmes like JICA, GIZ, etc. The role of ICT in economic activity in these areas remains modest, given the degree of information system use in rural areas and the structural issues encountered by economic stakeholders.

Low level of production intensification: low productivity, lack of integration into the ABC system, lack of a regionalization strategy for production, and restricted access for farmers to inputs. Adverse effects include low productivity and production, a fragmented supply chain, a production system that is not focused on the market, and issues specific to the agriculture sector.

Average sizes of small farms: The majority of people in Albania receive their income from agriculture, which continues to be the most significant economic sector. The largest proportion of agricultural production in Albania is produced by small family farmers, who make up 74% of the country's farmers. Their holdings are often no more than 0.5 hectares.

High land fragmentation: One of the primary barriers to the growth of Albania's agricultural industry has been identified as land fragmentation. A fair distribution of land among farming families was the goal behind the drafting of Law 7501. But severely fragmented land plots are one of the consequences of this programme (FAO,2022). The division of agricultural land is the second factor contributing to the low lending rates in the industry. This fragmentation lowers this sector's efficiency, restricts the economy of scale's potential, and makes it less appealing to the banking sector. Based on data from the European Commission, an average farm in Albania possesses 1.2 hectares of land, while the average in Europe is approximately 14 hectares. In addition, 99.6% of agricultural enterprises employ one to four people, according to INSTAT data. Compared to the average of other economic sectors, this ratio is significantly greater (Bank of Albania, 2022).

Low level of investments: The industry has historically attracted little interest from investors, largely because of a number of problems that it faces, including the exodus of people from rural areas, inadequate product marketing, inadequate irrigation and drainage systems, low infrastructure and technological standards, a lacklustre level of farmer organisation, and a low degree of development in the processing sector. But given how quickly the energy and

transport infrastructure are developing, as well as the enthusiasm that international investors have shown recently, the industry appears to have bright futures (IIA,2022).

Lack of law enforcement in food safety: Increased vertical coordination within the agrifood value chains is necessary in Albania due to development gaps in the field of food safety. This research investigates the potential for enhancing vertical coordination by means of the growth of informal farmer organisations and agricultural cooperatives (Imami, D.,Valentinov,V., Skreli, E).

Poor financial position and lack of access to financing: Currently, agricultural sector benefits only 1.7% of the funding that banks provide to private business. To put it more specifically, the first factor contributing to the low loan rate is the significant perceived and actual risk associated with farm investment. The business of this industry is improving on the one hand because of the enhanced roots network, the enhanced assistance for agricultural output, and the integrated trade chain for the market's input supply. However, encouraging agritourism and agribusiness grows the value chain and increases the return on investment in agriculture (Bank of Albania, 2022). The absence of reliable collateral is another factor contributing to the low lending rate to agriculture. Ownership titles are frequently lacking, or their worth is negligible in comparison to the finance requirements (Bank of Albania, 2022).

Sensitivity to climatic conditions: The agriculture industry has suffered greatly as a result of climate change, and it is anticipated that these effects will only worsen over the course of the next century, according to numerous scientific facts and current events. The consequences of climate change are already having an impact on Albania's crops, which are highly sensitive. Although historical data for Albania's annual mean precipitation indicates changes in the precipitation regime, data for the country's annual mean temperature shows a rising tendency. Albanian crops have suffered greatly in recent decades due to the effects of climate change, according to data from the National Communications of Albania under UNFCCC (2009) and a World Bank study (Sutton et al., 2013).

Lack of technically qualified human capital: Issues with the calibre and qualifications of the workforce include: proper calibre of qualification, poor motivation for requalification and qualification, and insufficient familiarity with a wide range of inputs. Benefits to the economy include inefficient input usage, productivity gains, and efficient input use.

Agriculture still has a lot of hurdles despite advancements over the last few decades, particularly with regard to infrastructure restoration and modernization. Over time, the agriculture sector's crediting issues have been recognised, and some of them persist today. Only 2% of the economy's total credit has gone to the agriculture sector, according to banking figures (Banking Association, 2023). However, agribusinesses frequently fail to meet the conditions needed to be financed, and one of the biggest barriers to financing in this industry is the absence of collateral. There aren't many inputs available. Improvement seeds, fertilisers, and other chemicals are examples of agricultural inputs that can be costly and frequently fail to produce the intended outcomes. Agriculture is characterized by a spontaneous, unorganized development and a high fragmentation of the land, which constitute, according to them, serious obstacles in the organization of large productive farms. They have been severely impacted by recent crises since the cost of agricultural inputs has skyrocketed in a sector with already low production. Approximately thirty percent of chemical fertilisers are imported from Russia, according to official statistics. However, farmers assert that domestic market abuses exist in addition to the rise in prices on international markets. The problems are associated with lack of market information, lack of compliance with hygiene and safety

standards. Lack of packaging and labeling makes their products uncompetitive. Agricultural productivity is also hampered by limited technical knowledge and outdated equipment.

These days, this strategy is frequently enhanced by initiatives that support farmers in banding together for collective trading in input and output markets. Cooperation strengthens farmer negotiating power and expands access to markets for inputs and outputs. Productivity barriers may be removed by enabling access to essential services that smallholders are unable to obtain, such as guidance and training, credits, and inputs. Furthermore, farm performance can be enhanced by improved value chain organisation. Because of the potential to consolidate larger volumes and thereby lower transaction costs, better manage postharvest handling and thereby lower postharvest losses, and facilitate the diffusion of innovations and best practices, collective action may help achieve economies of scale that make it more appealing for buyers to deal with smallholder farmers. Consequently, organised farmers may have more negotiating leverage during the contracting process. Because of their tiny sizes and the high degree of land fragmentation, small farms in Albania are especially affected by this. Collaboration may also help to alleviate the constraints brought on by fragmentation. Small farmers may benefit financially from this and be able to provide better lives for their family.

3. Conclusion

The rural sector remains one of the largest and most important sectors in Albania, as the main source of employment and income. A rise in agricultural output boosts the economy, lowers unemployment, permits price reductions for the primary necessities that the populace consumes, and lessens the reliance of the nation on imports. Family farms and smallholders dominate the agricultural industry. The majority of farms in Albania are mixed, semi-subsistence operations that produce a variety of agricultural goods. A tendency of farm consolidation/enlargement has been observed in Albania recently, wherein the overall number of farms has decreased while the number of farms and cultivated areas has increased. In terms of the policies implemented, there has been a push for agricultural farm consolidation, which involves fewer farms overall but more farms and cultivated land; modern technology adoption; the establishment of a system for marketing and trading agricultural products; increased investments and improved infrastructure; environmental preservation; efficient management of agricultural land and food security; etc. More use of contemporary inputs (better seeds, fertilisers, irrigation, mechanisation), as well as enhanced access to (high-value) markets, will be necessary to raise Albanian agriculture's production.

The main goal of rural and agricultural development policies in our country is to contribute to the development of this sector, improve the quality of life in rural areas, reduce poverty and promote the sustainable development of the rural sector. By enhancing the business climate or providing short-term support to individual value chain participants, interventions often seek to boost agricultural value chains' efficiency while also achieving particular social or environmental goals. However, Albania's entry into the EU presents new obstacles for the rural sector, including raising the standard of agricultural products' safety and quality, enhancing infrastructure, protecting the environment, and boosting competition by bringing them up to par with EU requirements.

Recommendations

- Cooperation and linkages between research and educational institutions, extension services and agricultural policy institutions.
- More financial support of this sector in the form of grants, subsidies from the government and Financial support from EU Institutions.
- It is necessary to increase cooperation through banks, insurance companies and the state.
- Facilitation of lending conditions from the banking sector: offering banking products adapted to this sector and offering loans with low interest rates for this sector.
- Increasing the competitiveness of the agri-food sector, providing support for investment in farms and improving infrastructure in the rural sector.
- Increasing consumer awareness that the quality identified with traditional products is a good option for food safety.

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Perception of Public Sector Employees Toward Digital Transformation

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Abstract.

Except for private sector, digital transformation is expected to have an impact on the public sector in increasing transparency, improving efficiency, reducing costs, and increasing customer-focused services to citizens. At the same time the digitalization of public services is impacting the work space of public administration jobs and for improving the performance of public services provided by acquiring the benefits of digitalization, it is important to coordinate it with a public administration ready for it. The purpose of this paper is to measure the perception of public sector employees toward digital transformation by focusing on the organizations providing public services. The online survey was used to collect primary data and a deductive and quantitative approach was adopted. Research hypotheses were tested using such techniques as Descriptive Statistics and Bivariate Analyses. The findings among other things, showed that employees' perception and attitudes towards digital tools and digital transformation were positively correlated.

Keywords: Digital transformation, Perception, Public sector, Public administration, Albania

1. INTRODUCTION

Recently, digital transformation has not only affected the private sector in all dimensions but also a series of services provided by the public sector. Digitalization is being considered a powerful tool for providing transparent and efficient services to citizens and local businesses, and many governments in developed countries and in developing ones, have applied it.

At the same time, the digitalization of public services involves not only the transformation of the relationship between public service providers and clients from one side, but also the transformation of public administration work in the other side. In order to improve overall governance and help governments deliver the benefits of digitalization, it is important that this is done side by side with a public administration ready for it.

While the private sector has already been convinced that as a result of the digital transformation they must adapt and change their organization in order to survive in the market (*Porfirio, 2021*) in the same way it seems that the public sector should change in order to meet government and citizens demands.

Since 2014, the Government of Albania launched a general program for the improvement of public services with the aim of creating an administration that is focused mainly on the needs of citizens. This attention to digitalization is also reflected in the “The Digital Agenda of Albania 2015- 2020” which emphasize the main objective for increasing and promoting the digital public services for citizens and public administration.

Electronic public service in Albania is offered by the government portal “e-Albania” which provides over 1207 electronic services to around 2 million users (citizens and businesses) registered on the platform and from January 2021, 95% of all services delivered by the public administration are only provided online (*Jorgoni, 2022*).

The UN E-Government Development Index ranks Albania 63th (2022) out of 193 countries, with a score of 0.74 (*EGDI,2022*). Meanwhile, the European Bank for Reconstruction and Development's Transition Report 2021–22 (2022) also highlights Albania's progress in digitalization, placing it 17th on a list of 37 countries, with an overall score of 65.4, largely due to the progress in government services.

Despite the big steps taken by the Albanian government in the introduction of electronic government, there are research gaps on the digital transformation of public administration and impact on employees. In analyzing people's perception towards the adaptation of digital transformation, most of the previous studies target citizens, while those for public administration employees are fewer, especially in the case of Albania. This study tries to explore the readiness of public sector employees to support the use of technologies in digital public services, based on their perception toward this process.

Therefore, this study seeks to:

- a) measure the perception of public sector employees towards digital transformation by focusing on organizations that provide public services in Albania.

- b) identify the factors that can contribute or hinder the adaptation of digital technology by public administration employees.

This paper can serve to increase understanding and address issues related to the impact of digitalization process in public services.

2. LITERATURE REVIEW

Governments have a significant role in guaranteeing that public sector transformation becomes a catalyst for digital transformation in overall economy. As, *Kayani, Haq, Perwez & Humayun (2012)* pointed out, the transition from traditional public services to e-government has directed governments in a more efficient management, transparent, accessible and efficient services delivery.

Although technological revolution has brought phenomenal change in the organization process and system, it has brought also significant change in employee behavior, skills and competencies. According *Layne and Lee (2001)*, the complete benefit of the digital transformation of public services will only be realized when technological changes are accompanied by organizational changes.

Several studies have emphasized the importance of some factors that have contributed or hindered the adaptation of digital technology by public administration employees. A large part of these factors is related to the way employees perceive the digitalization process. *Law & Woodman (1995)* states that employee perceptions depend on how they consider and recognize the specific situation that changes cause and the impact of changes brought to them. Further, *Cullen, Edwards & Casper et al., (2014)* emphasizes that employees have a positive attitude when they perceive positive outcome and viceversa when they perceive negative outcomes.

One of the models that have been extensively used in order to explain degree of readiness of the government employees to adopt and support the use of technology is the Technology Acceptance Model (TAM).

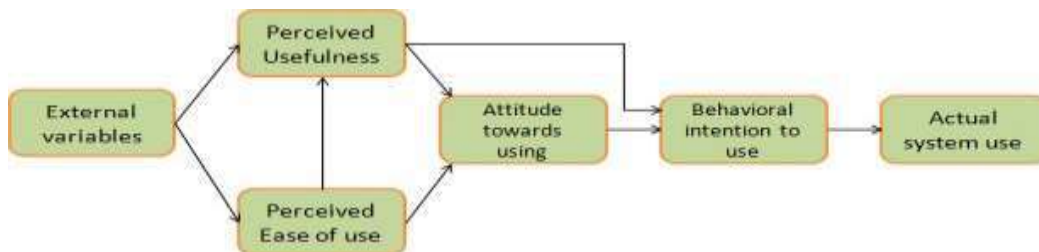


Figure 1. Technology acceptance model (TAM) (Davis, 1989)

According to TAM, perceived usefulness and perceived ease of use influence user attitudes regarding the use of a system. This further influences the user's behavioral intention, which ultimately determines the actual use of the system (Davis, 1989; Davis, 1993). Essentially, this model is based on the individual perceptions towards the new technology, which influences their actual usage. Later on, Venkatesh et al., (2003), proposed the Unified Theory of Acceptance and Use of Technology (UTAUT). This theory incorporated the TAM model with four significant factors (*performance expectancy, effort expectancy, social influence, and facilitating conditions*) and four other factors (*age, gender, experience, and voluntariness*).

Overall, the literature on the factors that can influence the perception and further the attitude of employees towards the digitalization process, highlights that there are several factors that can contribute or hinder the adaptation of digital technology by public administration employees.

Therefore, it is important that in the context of Albania, an approach to the perception of public sector employees towards the digitalization process is offered, to better understand and improve the benefit of the digital transformation of public services.

3. RESEARCH METHODOLOGY

The relevant data gathered through survey were processed, analyzed and a summary of adequate findings will be presented regarding the respondents' perceptions of the use of digital technology, contributing and hindering factors in the acceptance of digital technology as well as the level of adaptation of digital governance in the provision of public services.

The survey was designed to collect data from the public administration employees in Albania through an online data collection tool. Purposive sampling of participants was used in order to have the right sample for this research and a number of 268 respondents gave their anonymous responses through online survey. Research hypotheses were tested using techniques such as descriptive statistics and bivariate analysis. The findings, among other things, showed that public sector employees in Albania have supported the digitalization process in the workplace. Furthermore, they perceive that the digitalization process increases efficiency at work and offers citizens more efficient and effective access to public services.

4. FINDINGS AND ANALYSIS

The study results showed that 84.1 % of respondents do not encounter difficulties in using technology in the workplace, while 15.9% of the respondents have difficulties, listing as the main factors of these difficulties the knowledge needed to use digital technology and the high costs of learning and using it. However, the majority of the respondents think that the use of digital

technology increases work efficiency, thus supporting the purpose and objective of the digitalization process in the provision of public services.

4.1. Profile of surveyed sample

As per demographic data of the sample, out of 268 respondents, 72% were male and 28% were female.

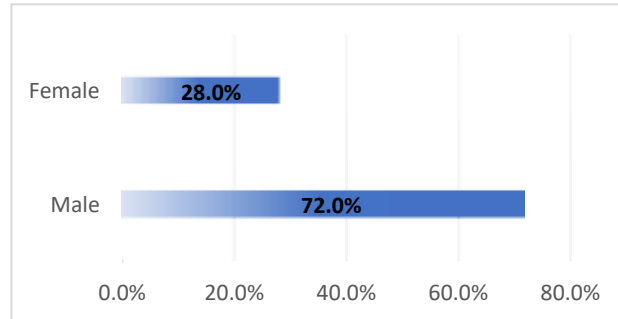


Chart 1. Gender of Respondents¹

Most of the respondents (47.7%) were at the age group of 26-35 years old, following the other age segment (25%) of those 36-45 years, showing a concentration of the sample to that age segment that most likely finds it easier to engage in the use of digital technology. From the data analyses it is also noted that the majority of them hold a master degree (79.5%), which means that they are qualified with appropriate academic qualification.

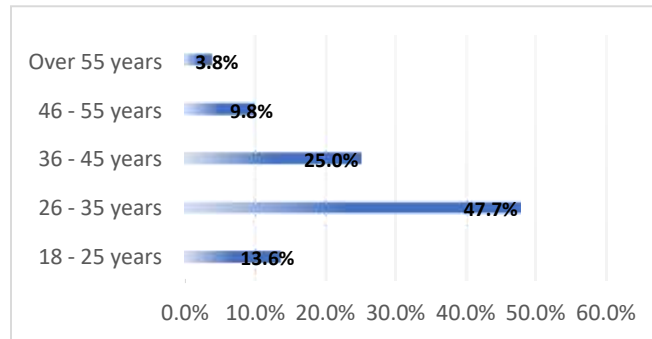


Chart 2. Age of Respondents²

Regarding length of work experience, about 34.8% of respondents, had 1-5 years of work experience, 20.5% had 6-10 years of work experience, 20.5% had 11-20 years of work experience.

¹ Source: Survey Data

² Source: Survey Data

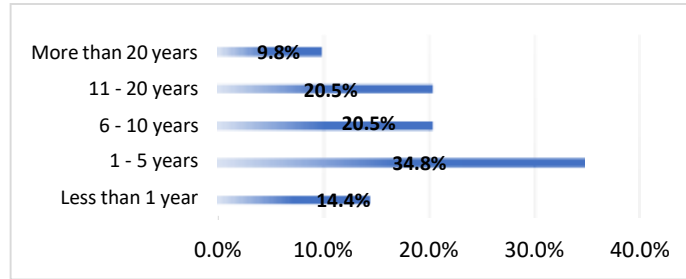


Chart 3. Length of work experience³

Fewer respondents had worked for less than 1 year and more than 20 years, accounting for 11.4% and 9.8% respectively, however showing an almost length of work experience representation on the study.

4.2. Factors contributing to the effective use of digital technology in the workplace

Using a Likert scale to approach the mean perception rating (*from 1 = strongly disagree, to 7 = strongly agree*), it’s been found that the respondents rated as the main contributing factor “The availability of experts or skilled persons to guide users in the use of digital technologies contributes to the effective use of digital technologies in your workplace” to (6.21), while “The current conditions of computers and their accessories contribute to the effective use of digital technologies in your workplace” to (5.76), as the least contributing factor, although rated above average.

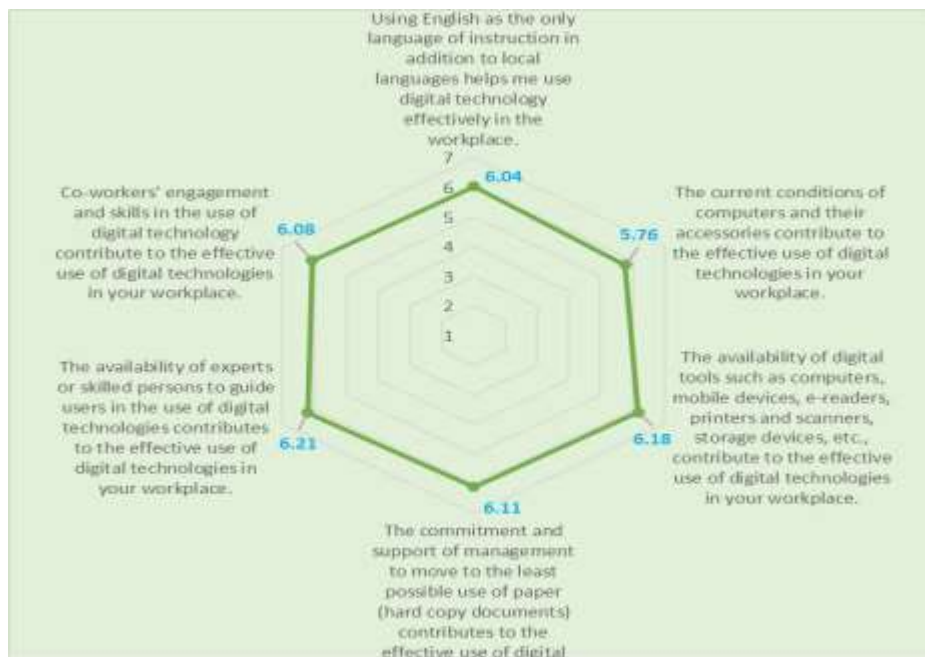


Chart 4. Contributing factors to the effective use of digital technology in the workplace⁴

³ Source: Survey Data

⁴ Source: Survey Data

Based on these results, it's been found that the respondents perceive above average that all factors together are considered very important for the effective use of digital technology. However, the presence of experts or management support in the use of digital technology are perceived as factors that would contribute even more than digital infrastructure. This requires a commitment of attention not only in the infrastructural and technical issue related to the use of technology, but mostly in the management and commitment of the employees themselves.

4.3. Barriers to the effective use of digital technology in the workplace

The mean perception rating (from 1 = strongly disagree, to 7 = strongly agree) to the barriers using of digital technology in the workplace, data showed that the respondents rated “Staff resistance to digital technology can affect its use” to (4.81), as the main factor that can hinder the use of digital technology.

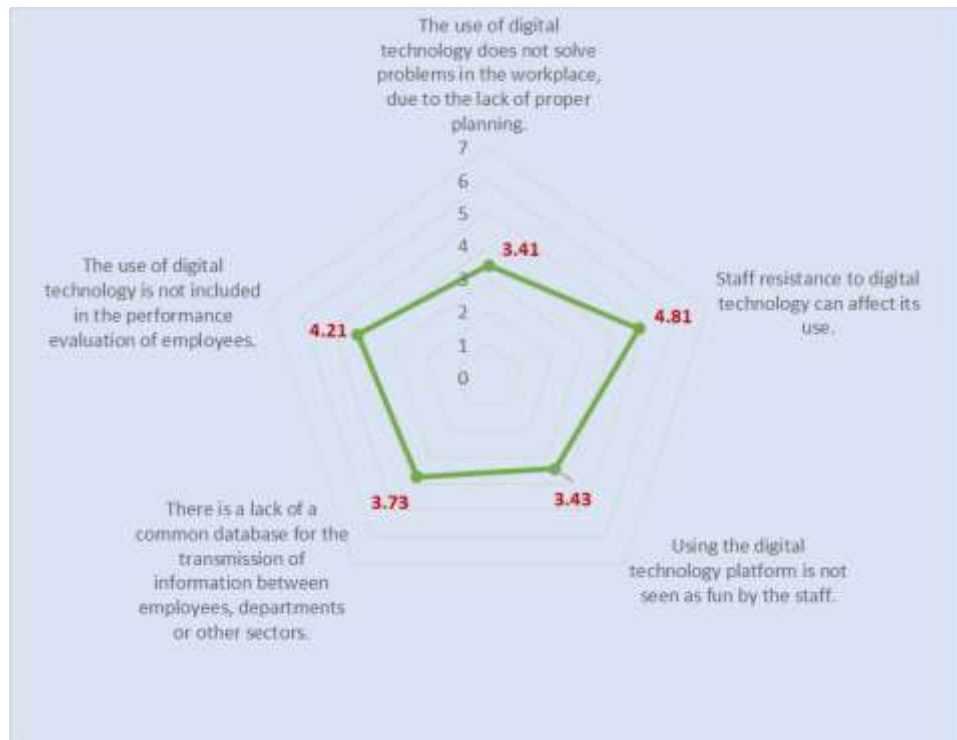


Chart 5. Barriers to the effective use of digital technology in the workplace⁵

Also, they rated the statements “The use of digital technology is not included in the performance evaluation of employees” to (4.21), “There is a lack of a common database for the transmission of information between employees, departments or other sectors.” to (3.73), “The use of digital technology does not solve problems in the workplace, due to the lack of proper planning.” to (3.43), and “Using the digital technology platform is not seen as fun by the staff” to (3.41).

⁵ Source: Survey Data

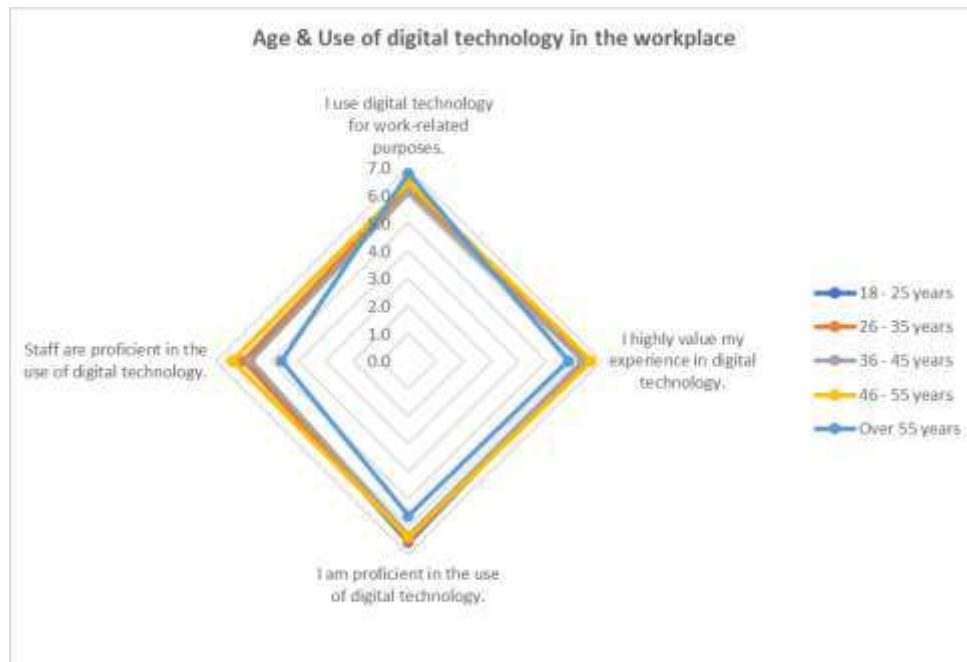
These results show that the respondents see as the main barrier that would affect the use of digital technology, the resistance of the staff to digital technology. In fact, studies showed that the staff resistance toward using the digital technology is an important barrier that could affect its adoption. Furthermore, when employees are more skilled in the use of digital technology, there is a positive attitude towards digital transformation and thus less resistance.

4.4. Bivariate analyses

Next, it is analysed whether factors such as age, level of education or work experience have an impact on the use of digital technology in the workplace, as perceived by the respondents.

As we can see from the results in *Chart.6*, the oldest group age (Over 55 years old) stated that they are less proficient in the use of digital technology (Score 5.6), while this group scored less agreeing that the staff are proficient in the use of digital technology (Score 4.6).

The second oldest group of respondents (46-55years) are rating more their experience in digital technology compared to the other age group of respondents (Score = 6.6), having also the same evaluation regarding their opinion about staff proficiency in the use of digital technology (Score = 6.4).



*Chart 6. Age & Use of digital technology in the workplace*⁶

⁶ Source: Survey Data

Based on these data, it's evidenced that age is an important factor in determining the usage of digital technology. Specifically, we can stand that age matters when it comes to staff self-assessment of their experience in digital technology, staff proficiency in the use of digital technology and the usage level of digital technology.

Regarding the relationship between the education and the use of digital technology, it can be clearly seen from the results in *Chart. 7*, that the low educational level group (High school) stated that they are less proficient in the use of digital technology (Score 4.3), having also the same evaluation regarding their experience in the usage of digital technology (Score 4.3).

Interestingly, respondents with a bachelor's level of education, value their experience in the use of digital technology (Scored 6.8) more than all those with master degree (Scored 6.0) or even doctorate (6.4)

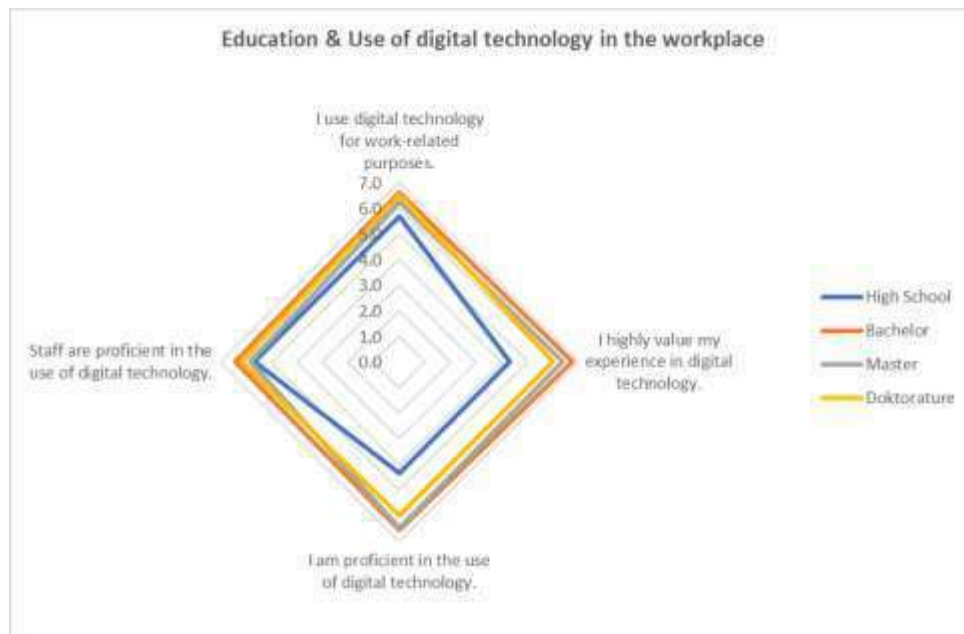


Chart 7. Education & Use of digital technology in the workplace⁷

Based on these data, it's evidenced that education is an important factor in determining the usage of digital technology. Specifically, we can stand that education matters when it comes to proficiency in the use of digital technology and evaluation regarding respondents' experience in the use of digital technology.

As we can see from the results in *Chart. 8*, regarding the relationship between the work experience and the use of digital technology, more work experienced group (More than 20 year) stated that they are less proficient in the use of digital technology (Score 6.0). This group scored less agreeing that the staff are proficient in the use of digital technology (Score 5.5), while also

⁷ Source: Survey Data

they have the same evaluation regarding their perception about their experience in digital technology and the use of digital technology for work-related purposes (Score 6.2).

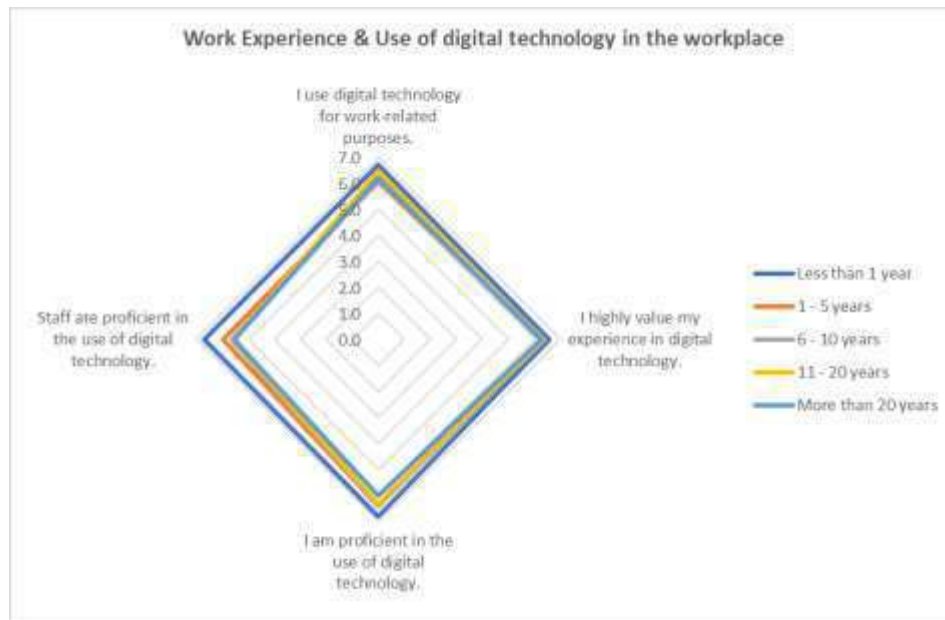


Chart 8. *Work Experience & Use of digital technology in the workplace*⁸

Based on these data, we can say that the respondents who correspond to the group with more work experience are those who might belong to the older age group. This supports the fact that regardless of significant work experience, age matters when it comes to staff self-assessment of their experience in digital technology, staff proficiency in the use of digital technology and the usage level of digital technology.

On the other hand, these results may indicate that this group is more likely to show resistance to changes in the workplace. Some previous studies, (Schuz, 2019) support the idea that older employees are more likely to be resistant to digital transformation compared to younger employees.

5. CONCLUSIONS

This research paper aims to measure the perception of public sector employees towards digital transformation by focusing on organizations that provide public services in Albania and to identify the factors that can contribute or hinder the adaptation of digital technology by public administration employees.

⁸ Source: Survey Data

The study showed that only 15.9% of respondents experience difficulties in using digital technology in the workplace. These difficulties are related to the use of digital technology itself, limited knowledge and skills in its use, as well as the costs of learning and using digital technology.

Also, it's been found that personal factors related to age, education as well as work experience can influence the use of digital technology.

Public sector employees perceive more contributing factors in the digitalization process than barriers, given the fact that they see digitalization as a problems solution.

Findings among others show that staff perceive themselves as adequate in using digital technology as well as in providing public services required by the community. These results show that public sector employees in Albania have supported the digitalization process in the workplace and they have a positive attitude towards the digitalization process as this will contribute to the increase in the efficiency of public services.

In accordance with the findings, however the authors recommend an increase in the level of training and courses for public administration employees in order to overcome every possible barrier of the digitalization process of offering public services to citizens.

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