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Bridging the Digital Divide: Romania's Academic Publishing at a Crossroads

Editorial

Prof. Phd. Angela Repanovici
Editor of RRBSI

In the shifting terrain of scholarly communication, Romania's academic publishing ecosystem stands at a critical juncture. This issue of the Romanian Journal of Library and Information Science offers a panoramic view of the challenges and aspirations shaping the digital society and scientific publishing in Eastern Europe. What emerges is a portrait of a system striving to modernize, yet constrained by structural inertia and uneven digital integration.

The editorial voices of Nelly Țurcan and Elena Tîrziman converge on a shared diagnosis: while Romanian and Moldovan institutions have made commendable strides in digitizing resources and formalizing editorial policies, the path to international visibility remains steep. The Republic of Moldova, for instance, boasts high indexing rates in national platforms like IBN, yet only a fraction of its journals appear in Scopus or Web of Science. Editors cite limited funding, outdated infrastructure, and a lack of strategic policy support as persistent barriers.

Romania's own digital society, as dissected by Tîrziman, reveals a layered complexity. The concept of "Society 5.0" — a techno-integrated vision of human life — remains aspirational. Despite the proliferation of e-Governance, e-Learning, and smart technologies, the human dimension of digital interaction is often underdeveloped. Ethical frameworks, digital rights, and equitable access lag behind the pace of technological adoption.

Perhaps most telling is Ștefan-Cristian Ciortan's granular analysis of the University of Bucharest's digital infrastructure. His audit of faculty websites exposes a fragmented landscape: inconsistent interfaces, outdated links, and uneven access to resources. Some faculties offer robust digital libraries and Moodle integration; others barely mention their library services. In a post-pandemic world where digital access is no longer optional, such disparities are more than cosmetic — they are symptomatic of deeper institutional neglect.

What Romania's academic community needs is not just more technology, but better governance. Editorial independence, transparent peer review, and responsible AI integration must be matched by coherent national strategies. Funding must be tied to performance, but also to inclusion. The digital society must be human-centered, not merely data-driven.

The editorial challenge is clear: to transform digital ambition into sustainable infrastructure, and to elevate local scholarship onto the global stage without sacrificing its cultural specificity. Romania has the intellectual capital. What it needs now is political will, institutional coordination, and a renewed commitment to editorial excellence.

Digital Society

Intergenerational conflict between myth and reality

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Abstract:
Intergenerational conflict is an inevitable phenomenon, present in all societies and times, based on differences in mentality, values and life experiences. Over time, this conflict has often been interpreted through myths and stereotypes that exaggerate the contrast between the young and the old. On the one hand, young people are often seen as rebellious, non-conformist, disrespectful of traditions and too concerned with new technologies. On the other hand, older generations are often characterized as rigid, difficult to persuade to change, and unable to adapt to new social and cultural realities. However, reality is much more complex than these generalizations. Intergenerational conflict is not only an opposition between old and new, but also an image of the way in which society evolves. Each generation has its own landmarks and challenges, shaped by the historical and technological context in which it lives. In many cases, generational differences are not necessarily an obstacle, but rather an opportunity for mutual learning and adaptation. This is why it is important to analyse both the myths that fuel these tensions and the realities that engender them, trying to identify solutions for generations to better understand each other and collaborate. This paper aims to explore, with the help of a survey, the manifestations of "intergenerational conflict", balancing both traditional perspectives and the changes that shape relations between young and elderly people in contemporary society, a society strongly influenced by digital communication.

Keywords*: digital communication, digital ageism, age-related stereotypes intergenerational dialogue*

Introduction: Perspectives on Generational Differences

Generational conflict is a complicated social phenomenon that reflects differences in thinking, principles and actions between different age groups. It can occur in multiple settings – family, professional, cultural or societal – and it is influenced by economic, technological, and historical factors.

In specialized research, generational conflict is defined in various ways. According to sociologist Karl Mannheim (1952, p. 291), it represents a natural tension between age groups, tension generated by different experiences and values accumulated throughout life. Mannheim emphasizes that each generation is shaped by the historical context in which it grows up, a context that leads to different views of social reality. Other experts associate intergenerational conflict with the phases of psychosocial development, and according to his theory, each person goes through several stages of development, and differences between generations arise, largely, from the needs to assert their identity and adapt to social changes. Moreover, generational conflict is also defined

from a cultural perspective. According to Margaret Mead (1970, p. 25), this gap results from the discrepancies between the generations that transmit culture (adults) and those that receive and modify it (young people). As society evolves quickly, new generations are prone to reject or change traditional values, which causes tensions with the older generation. Generational differences have been approached from multiple angles, each offering an explanation of how they arise and influence social relations – sociological, psychological, cultural.

From a sociological perspective, each generation is shaped by the historical, economic, and technological context in which it develops. Events such as wars, economic crises, or technological revolutions influence the values and behaviours of a generation, which can lead to discrepancies between it and previous generations. For example, generations that have lived in periods of economic instability tend to be more financially prudent, while those that grew up in a period of quick development are more prone to consumption and innovation.

From a psychological perspective, generational conflict is explained by differences in perception, motivation, and information processing. As individuals age, the experiences they accumulate lead them to be more cautious and more tied to traditions, while young people, in the midst of identity development, are more open to change and exploration. This dynamics can lead to misunderstandings and opposing views on how society should function.

From a cultural perspective, generational differences are accentuated by the way in which social values and norms are transmitted and reinterpreted. In the past, culture was mainly transmitted from the old ones to the young ones but, with technological development and easy access to information, young people have become increasingly independent in shaping their own cultural identity. This change has led to a generation gap, in which values and customs are changing more quickly than in the past.

Nowadays, a crucial factor in accentuating generational differences is technological progress. Young people, familiar with digital technology from an early age, easily adopt new forms of communication and interaction, while older generations may have difficulty adapting to this quick pace of change. This difference is manifested not only in communication preferences, but also in perceptions of work, education, and interpersonal relationships. In today's world, generations are often classified based on common traits determined by the historical, social, and technological context in which they have grown up. These divisions facilitate a better understanding of the differences in thinking and behaviour between different age groups. In specialized studies, one of the most widely used classifications is that proposed by sociologists and demographic researchers Strauss and Howe (1991): **Baby Boomers** (1946-1964), **Generation X** (1965-1980), **Generation Y** or **Millennials** (1981-1996), and **Generation Z** (1997-2012). Recently, a new generation has also been outlined, **Generation Alpha** (2013-present).

1. Virtual Environment: an Environment of Intergenerational Interactions

Online communication has become essential for human interactions, influenced by technological progress, globalization, and the evolution of digital platforms. This form of communication has specific features compared to the traditional one, presenting both advantages and limitations. Researchers McQuail (2010) and Castells (2009) have analysed the impact of the Internet on the way people send and receive information messages, highlighting the changes brought about by the digital environment.

One of the key features of online communication is **immediacy**. Information can be sent and received in real time, regardless of the distance between the participants. The speed of message exchange has revolutionized fields such as journalism, education, and interpersonal relationships, facilitating continuous and dynamic interaction. Moreover, the online environment favours the active participation of the users, transforming them from simple receivers of information into creators of content. Social platforms and blogs have led to the decentralisation of communication, allowing anyone to express their opinions and to influence public discourse. (Jenkins, 2006)

Another distinctive aspect of online communication is **anonymity**, which can significantly modify users' behaviour. Suler (2004) introduced the concept of "online disinhibition effect", according to which the lack of physical interaction makes people freer in their expression, but can also lead to negative behaviours, such as trolling and hate speech. The digital environment also allows the construction of a virtual identity that may not always correspond to the real identity of the individual, thus influencing perceptions and social relationships.

Online communication differs from traditional communication in that **it lacks nonverbal cues**, such as facial expressions, gestures, or tone of voice. Mehrabian (1971) emphasizes that much of the meaning of communication comes from these cues, and their absence in digital interactions can lead to misinterpretations or ambiguity of messages. Although emojis and digital reactions were introduced to compensate for this deficiency, they cannot accurately reproduce the complexity of face-to-face human interaction.

The **quick diffusion of information** is another defining feature of online communication. The phenomenon of virality allows certain messages to be distributed widely in a very short time. Berger and Milkman (2012) demonstrated that types of content that provoke intense emotions – such as surprise, anger, or amusement – are more likely to go viral. This process facilitates the quick access to useful information, but it also favours the spread of misinformation and of fake news, having a significant impact on public perception.

Another important feature of online communication is the **personalization of content**, influenced by digital algorithms. Pariser (2011) described the phenomenon of the "filter bubble", through which users receive information according to their preferences and previous behaviours. This segmentation of content can limit exposure to different perspectives and contribute to the polarisation of opinions, thus affecting the diversity of public debates.

Digital Generations: from Digital Migrants to Digital Natives and Digital-First Generation

The concept of digital generations emerged with the quick advancement of technology and affected the way people interact, learn, and process information. Marc Prensky (2001) introduced the terms "digital migrants" and "digital natives" to describe the differences between those who grew up in a digital environment and those who had to adapt to new technologies later in life.

Digital migrants are those who grew up in a world without ubiquitous digital technology and had to learn to use new technological tools as adults. According to Tapscott (2009), this category often has difficulty adopting new technologies and prefers traditional methods of communication, such as email or face-to-face meetings instead of instant messaging applications or social media platforms used by digital natives.

On the contrary, **digital natives** are people born after the 1980s, exposed from an early age to digital technologies, such as the Internet, smartphones, and social networks. They are naturally familiar with the digital environment and are used to processing information quickly, preferring visual interactive content. Prensky (2001) mentions that digital natives think differently than

previous generations, having a greater tendency towards multitasking and an increased capacity to adapt to technological changes.

The distinction between these two categories has major implications for education, work, and communication. For example, studies by Bennett, Maton and Kervin (2008) challenge the idea that digital natives are automatically more technologically savvy, arguing that frequent use of technology does not necessarily mean a deep understanding of it. In the professional setting, the generational gap has created challenges related to the integration of new technologies in companies, where digital migrants may be reluctant to change, and digital natives may have different expectations regarding flexibility and online collaboration.

A new generation, called by McCrindle and Wolfinger (2010) the "**digital-first generation**", includes young people who have grown up in a fully connected environment, where technology is no longer an additional tool, but an important part of everyday life. This category is characterized by an increased dependence on mobile devices, a preference for digital interactions, and a tendency to consume information quickly.

2. Age Stereotypes and Biases

Age stereotypes and biases are simplified and, often, erroneous generalisations about individuals, based solely on their belonging to a particular age group or generation. These fixed notions can influence the way individuals are perceived, treated, and valued in different social, cultural, and professional contexts or settings.

Stereotypes about older people tend to associate them with features such as rigidity, resistance to change, cognitive decline, or lack of digital skills (Posthuma & Campion, 2009). These views can lead to the unwanted exclusion of older people from decision-making processes or from opportunities for learning and career advancement. On the other hand, young people – especially Generation Y and Generation Z – are often viewed as immature, emotionally unstable, or unengaged in their work. (Ng, Schweitzer and Lyons, 2010)

Age-related biases contribute to the creation of psychological and institutional barriers between generations. For example, in a multi-generational workplace, employers may assume that older employees cannot adapt to modern technologies, while they may consider younger people not responsible enough for leadership roles. (Finkelstein et al., 2015)

These stereotypes not only affect group cohesion and intergenerational collaboration, they can also lead to self-stigma: individuals internalise negative social perceptions related to their own generation or age, which can affect their self-confidence and performance (Posthuma & Campion, 2009). Fighting age stereotypes requires a deep understanding of intergenerational diversity and fostering an organizational and social culture based on competence, not age. Initiatives such as intergenerational mentoring, awareness training, and diversity promotion can contribute to reducing these barriers.

3. Intergenerational Age Discrimination

Age discrimination, also known as *ageism*, is the unequal treatment of individuals based on their belonging to a particular age group or generation. The concept was introduced by

gerontologist Robert N. Butler in 1969, who defined it as "bias against a person or group based on their chronological age" (Butler, 1969). This form of discrimination manifests itself both explicitly, through direct exclusion or negative stereotypes, and subtly, through different social expectations, constraints imposed on professional opportunities, or cultural marginalization.

In the context of intergenerational relations, discrimination can occur in both directions: both towards older people (considered outdated or less productive) and towards young people considered inexperienced or unserious. According to Ayalon and Tesch-Römer (2018), ageism can manifest itself in multiple areas from employment and professional promotion, to access to health services, education, and social participation.

In the organizational setting, age discrimination is often disguised as preferences for "cultural compatibility" or "adaptability to technology", which favours certain generations over others. Thus, divergences between generations can become sources of tension in work teams, perpetuating negative perceptions and affecting social cohesion (North & Fiske, 2015).

Against the backdrop of quick demographic changes and the extension of working lives, it is increasingly important to promote intergenerational equity through policies and practices that value age diversity as an advantage, and not as an impediment.

4. Manifestation of Digital Ageism in the Virtual Environment

Generational discrimination, also called *digital ageism*, is becoming more common in the online environment, being accentuated by differences in technological skills, communication modes, and age-related biases. Butler (1969) defines ageism as the stereotyping and discrimination of a person or group of people based on age; in the virtual environment, this phenomenon takes different forms, affecting both generations, both the oldest and the youngest.

A major manifestation of generational discrimination in the digital environment is technological exclusion. Older people are often seen as less skilled in using technology, which leads to their marginalization on online platforms and in the digitalized professional setting. Helsper and Eynon (2010) argue that there is a digital divide between generations, where young people are considered "digital natives" and are favoured in terms of access to online resources and integration into virtual communities, while older people are seen as "digital migrants", facing difficulties in adapting to new technologies.

Another form of generational discrimination is derogatory discourse and stereotypes expressed online. Terms such as "boomer" have been popularized on social media to denigrate opinions or behaviours considered outdated or outdated. Fraser et al. (2020) point out that such labels, although initially joking, can accentuate generational polarization and the exclusion of older people from the digital environment. Young people are also often criticized by older generations for their addiction to technology, being labelled as lazy, uncommitted, or unable to maintain real interpersonal relationships. (Twenge, 2020)

Generational discrimination in the virtual environment is also shown by unequal access to digital opportunities, especially in employment and education. Studies by Van Dijk (2020) show that older people are often excluded from technology-intensive jobs, even if they have the appropriate expertise and skills. At the same time, young people face another form of discrimination, being considered "too inexperienced" for certain positions, which leads to difficulties in entering the labour market.

Another important aspect is online harassment and aggression based on age. According to the report by Pew Research Centre (2021), Baby Boomers and Generation X are more prone to verbal attacks and exclusion from online conversations, while Generation Z and Generation Y are more exposed to social pressure from social networks and to "cancel culture" when expressing opinions considered unpopular.

5. Research Methodology

Considering the assessments resulting from the review of literature on trans-generational features and inter-generational conflict enhanced by the digital environment and technology, we wanted to find out how this theme is reflected in the Romanian space and if there are differences, from the perspective of differences in perception, attitude, and behaviour between generations, emphasizing the differences between myth and reality.

The primary objective of this investigation is to find out and understand to what extent the conflict between generations is a reality experienced by individuals or a social construct fuelled by myths, stereotypes, and generalizations. It also aims to highlight the differences in perception between generations and identify possible solutions to reduce intergenerational tensions. The goal is to provide an objective and reasoned approach, which will contribute to a better understanding of this phenomenon.

To investigate this complex theme, we chose a quantitative method, with a descriptive and exploratory nature, namely the opinion survey, with the questionnaire as a data collection instrument. This method allows the analysis of data obtained directly from the subjects and offers the possibility of identifying patterns and trends regarding the conflict between generations. Our investigation aims to describe existing realities and perceptions, without intervening or changing the behaviours studied. It is a cross-sectional research, the data are collected at a single time, without following the evolution of the phenomenon over time.

The questionnaire applied for data collection was self-administered, structured in both closed questions (with multiple choice or Likert scale) and open questions intended to provide added depth in the analysis of the phenomenon. It was carried out through Google Forms and distributed in digital format, through social networks (Facebook, WhatsApp) and by e-mail, thus ensuring quick and anonymous access to a varied sample of respondents. In total, 136 people took part in the research, coming from different social backgrounds and age groups. The selection of respondents was carried out through conventional non-probabilistic sampling, based on availability and interest in participation. The study subjects were previously informed about the purpose of the investigation, the anonymous nature of the responses, and their use for academic purposes. Participation was voluntary, without any kind of coercion, respecting the fundamental ethical principles of scientific research. The response collection period was March-May 2025.

6. Results and Discussions

Although the quantitative methodology provides an adequate framework for the analysis of intergenerational perceptions, the investigation presents certain limitations such as the absence of a probabilistic sample, the uneven distribution of respondents by age groups, or the possible degree of

subjectivity in the interpretation of open questions. These aspects are assumed and will be discussed in the final analysis of the results.

Respondents come from both urban (58.8%) and rural (41.2%) areas. This relatively balanced distribution provides a diverse perspective on the topics analysed in the survey. At the same time, it is important to note that differences between residential settings can influence access to information, employment opportunities, or interaction with various forms of discrimination, aspects that will be relevant in the analysis of the following questions.

The participants had the opportunity to self-identify within an age/generation category.

Baby Boomers, Generation X, Generation Z, Generation Y or Millennials

Figure 1. Age/generation categories

Generation X (41.2%) was best represented in the survey. This generation, born approximately between 1965 and 1980, is considered to have a mature perspective on social changes and to be often actively involved in professional and family life.

Generation Z (27.9%), made up of people born after 1996, is the second most represented. They are often more connected to current trends, sensitive to topics such as equity, inclusion and individual rights. Their significant presence adds a modern and critical perspective to the aspects analysed.

Generation Y / Millennials (19.9%), born between approximately 1981 and 1996, comes with a combination of traditional and modern views. They are generally very active in digital and professional life and bring a balance between the idealism of Generation Z and the pragmatism of Generation X.

Baby Boomers (11%), born between 1946 and 1964, are the least represented. However, this category offers a valuable point of view, having extensive life experience and a vision formed in a different social context than younger generations.

To assess the **level of ageism awareness**, the following question was addressed to the participants: “Do you think that, in today’s society, people are discriminated against on the basis of age?” The answers were as follows:

Yes, No, Don’t know

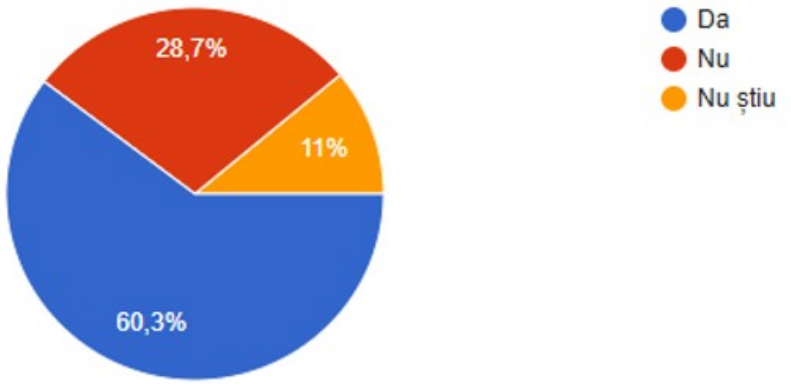


Figure 2.Awareness of age discrimination

Most respondents perceive age discrimination as a reality – over 60% of the participants consider age to be a frequent criterion of discrimination in today's society. This may reflect a growing awareness of the issue of ageism, whether in a professional, social, or cultural setting. A significant minority (almost 29%) do not perceive age discrimination. This difference in perception could indicate variations in personal experiences or in the level of sensitivity towards the subject. A small percentage is undecided – the 11% who answered "I don't know" could suggest either a lack of information, or an ambiguity in the perception of the phenomenon in everyday life.

In order to assess **perceptions related to ageism**, the questionnaire included a question regarding the age group perceived as being the most affected. Participants were asked to indicate which age category they consider to be the most frequently discriminated against in today's society. The results are illustrated in the following graph:

Which, in your opinion, of the following age groups is the most discriminated?
Young people (below 30 years), Adults (31-50 years), Old people (65+ years), None

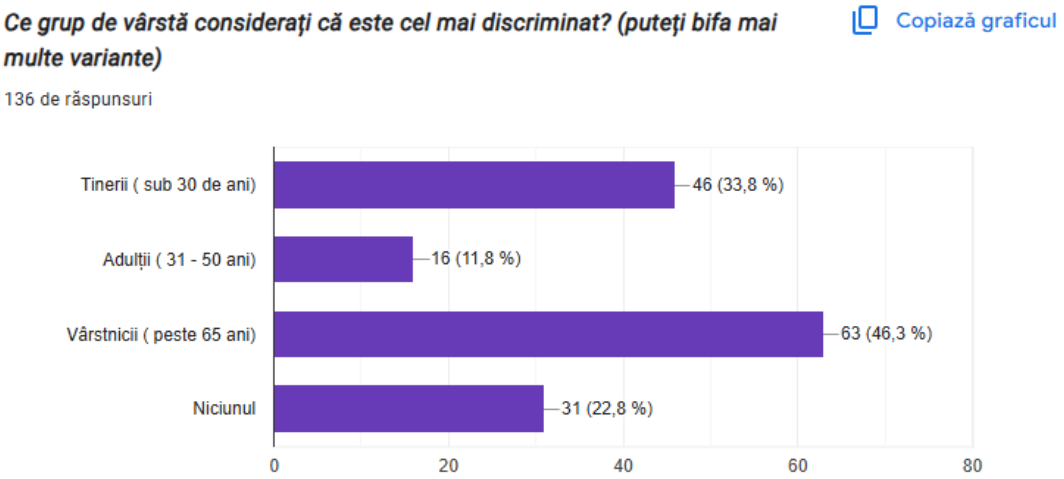


Figure *3.Perceptions related to age discrimination*

According to the data collected, most respondents (46.3%) consider that elderly people, over 65 years of age, are the most affected by discrimination. Second come young people under 30,

mentioned by 33.8% of participants. Only 11.8% of respondents indicated that adults between the ages of 31 and 50 are age discriminated, and 22.8% of participants believe that no age group is particularly age discriminated.

In this study, we were interested in finding out which **media sources** and **social media platforms** are most frequently used for information and communication. The question asked was: *What media channels and social networks do you use to get information and communicate?*

Radio, TV. Facebook, Instagram, Tik-Tok, YouTube, ChatGPT, WhatsApp, LinkedIn, networks…, Euronews.ro, Reddit, Media channels, Newspapers, Books, Google, International sites, Books, Independent media sources, Linkedin, Written press

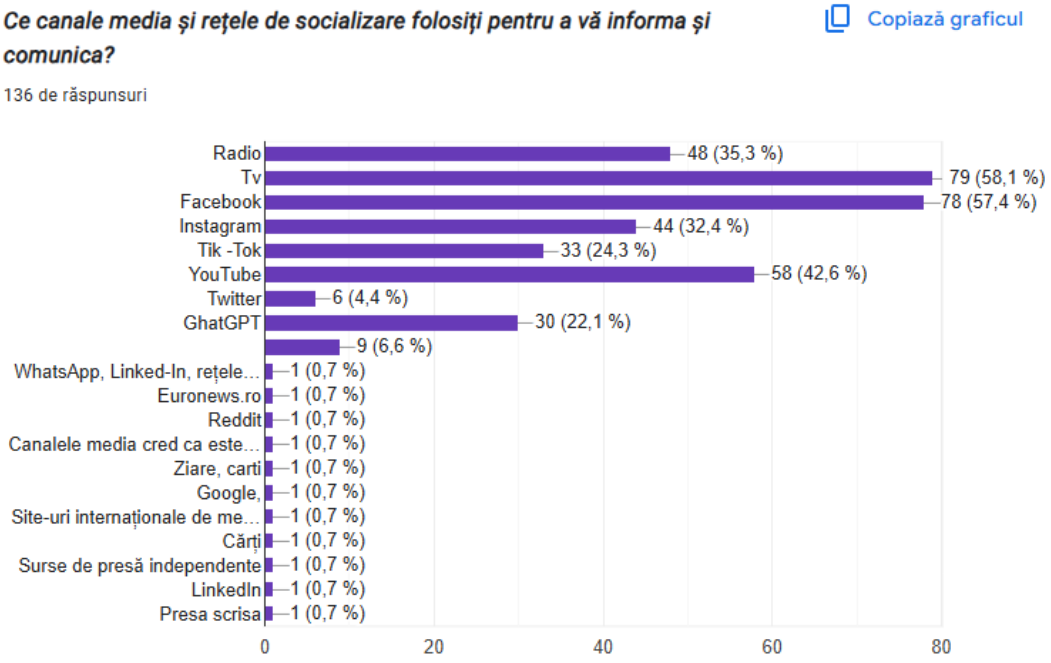


Figure *4.Media sources and social media platforms are used.*

The results show that the most used sources of information and communication are:

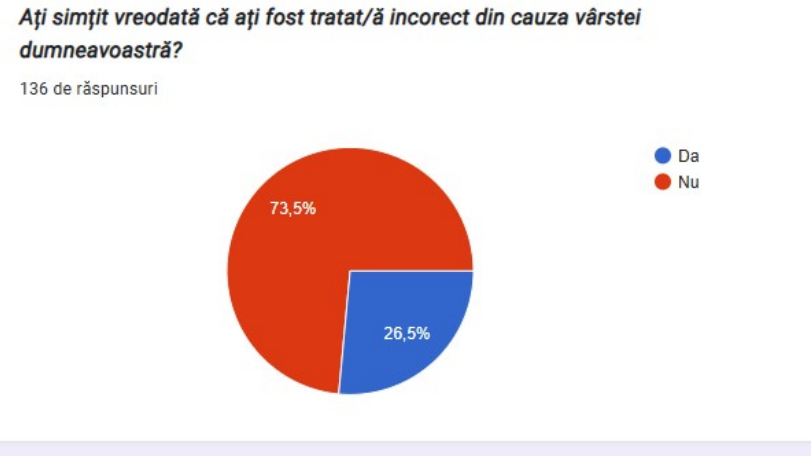
- Television – 58.1%;
- Facebook – 57.4%;
- YouTube – 42.6%;
- Radio – 35.3%;
- Instagram – 32.4%;
- TikTok – 24.3%;
- ChatGPT – 22.1%.

It is obvious that television and social networks rank first, indicating a clear preference for audio-visual and interactive formats. Facebook and YouTube are the dominant online platforms, followed by Instagram and TikTok, suggesting a significant presence of visual and video content in media consumption habits. Interestingly, ChatGPT is mentioned by 22.1% of respondents, indicating a growing openness towards digital sources based on AI. On the other hand, Twitter is used by only 4.4%, and other sources such as WhatsApp, LinkedIn, written press, books, and

Google were mentioned in a tiny proportion (below 1%). This points to either a low level of actual use or a poor perception of these sources as relevant information and communication media.

In order to capture the *qualitative aspects* of age-related perception, an open-ended question was introduced in the questionnaire: "Have you ever felt discriminated based on your age?". This question was intended to allow participants to freely report any situations of marginalization, bias, or incorrect judgment based on age. The analysis of the responses provides a valuable interpretative framework, complementing the statistical data obtained through the closed items.

Have you ever felt discriminated based on your age?
Yes, No



Figur*e 5.Figure 3.Perceptions related to age discrimination*

The purpose of this question was to highlight any subjective experiences related to discrimination or underestimation based on age, especially in professional contexts.

Of the total number of respondents, 73.5% responded negatively, stating that they had not encountered such situations, while 26.5% responded affirmatively, mentioning concrete experiences in which age negatively influenced the way they were perceived or treated.

The affirmative responses mainly highlighted situations in which young people, around the age of 25, were treated superficially or were underestimated at work. For example, some respondents mentioned that they could not apply to certain professional projects because they were too young or, on the contrary, too old, while others reported that, in their first years of activity, especially in institutional settings such as schools, they were treated like "children" by their colleagues, in terms of their qualifications.

7. Conclusions

Intergenerational conflict is a complex phenomenon with deep roots in the cultural, social, and psychological structure of humanity. The present study has shown how tensions between generations are reflected both in myths and symbolic representations, as well as in the realities of today's society.

First of all, the analysis of the mythological dimension of the intergenerational dispute has shown that the opposition between young and old is not a modern construct, but a repetitive element

in the collective imaginary. Fundamental myths, like those of Oedipus or Prometheus, symbolically capture the rupture and tension between the old structures of authority and the emerging forces of change and autonomy. These myths not only explain archetypal psychological mechanisms, but also symbolically legitimize the need of younger generations to free themselves from the constraints imposed by tradition and authority.

In the sphere of current reality, the conflict between generations acquires new valences, intensified by the quick pace of technological, social, and cultural change. The differences between generations are no longer limited to visions of values, but extend to lifestyle, communication tools, and the way of relating to authority, work, and individual identity. These discrepancies often generate misunderstandings, tensions and subtle or overt forms of mutual rejection. Also, the conflict between generations should not be seen only in negative terms. It can act as a stimulus for social change and progress to the extent that it is managed through dialogue, empathy, and mutual goodwill. In this context, a deep understanding of the values and needs of the other(s) can lead to the reconstruction of a common area of cooperation and respect.

The analysis of the questionnaire allowed for a complex understanding of how age influences perceptions, experiences and interpersonal relationships in different contexts. The quantitative data provided a general and measurable picture of the trends of opinion among the respondents, while the qualitative responses brought added depth, illustrating more subtle aspects, personal experiences, and nuances that could not have been, otherwise, captured by standardized items. Together, these two components highlight the fact that age can be both a factor of prestige and recognition, and, in certain situations, a source of marginalization or misinterpretation.

In conclusion, the dispute between myth and reality regarding intergenerational conflict highlights an eternal dynamics of humanity: the tension between continuity and transformation. Far from being a simple impediment, this conflict can become an important resource in the process of adaptation and social evolution as long as it is seen as an opportunity for intergenerational dialogue and reconciliation between tradition and innovation.

References

Ayalon, L., & Tesch-Römer, C. (2018). Taking a closer look at ageism: Self- and other-directed ageist attitudes and discrimination. European Journal of Ageing, 15(4), pp. 1-7. https://doi.org/10.1007/s10433-018-0488-0

Bennett, S., Maton, K., & Kervin, L. (2008). The ‘digital natives’ debate: A critical review of the evidence. British Journal of Educational Technology, 39(5), pp. 775-786. https://doi.org/10.1111/j.1467-8535.2007.00793.x

Berger, J., & Milkman, K. L. (2012). What makes online content viral? Journal of Marketing Research, 49(2), 192–205. https://journals.sagepub.com/doi/10.1509/jmr.10.0353

Butler, R. N. (1969). Age-ism: Another form of bigotry. The Gerontologist, 9(4 Part 1), pp. 243-246.

Butler, R. N. (1969). Age-ism: Another form of bigotry. The Gerontologist, 9(4 Part 1), pp. 243-246. https://doi.org/10.1093/geront/9.4_Part_1.243

Castells, M. (2009). Communication power. Oxford University Press.

Finkelstein, L. M., Ryan, K. M., & King, E. B. (2015). What do the young (old) people think of me? Content and accuracy of age-based metastereotypes. Journal of Organizational Behavior, 36(1), pp. 46-59.

Fraser, S., Lagacé, M., Bongué, B., Ndeye, N., Guyot, J., Bechard, L., Garcia, L., Taler, V., CCNA Social Inclusion and Stigma Working Group, Adam, S., & Aubertin-Leheudre, M. (2020).

Ageism and COVID-19: What does our society's response say about us? Age and Ageing, 49(5), pp. 692-695. https://doi.org/10.1093/ageing/afaa097
Helsper, E. J., & Eynon, R. (2010). Digital natives: Where is the evidence? British Educational Research Journal, 36(3), pp. 503-520. https://doi.org/10.1080/01411920902989227
Jenkins, H. (2006). Convergence culture: Where old and new media collide. NYU Press.
Mannheim, K. (1952). The problem of generations. In P. Kecskemeti (Ed.), Essays on the Sociology of Knowledge, pp. 276–322. Routledge.
McCrindle, M., & Fell, A. (2021). Generation Alpha: Understanding our children and helping them thrive. Hachette Australia.
McQuail, D. (2010). McQuail's mass communication theory (6th ed.). Sage Publications.
Mead, M. (1970). Culture and commitment: A study of the generation gap. Natural History Press.
Mehrabian, A. (1971). Silent messages. Belmont, CA: Wadsworth.
Ng, E. S., Schweitzer, L., & Lyons, S. T. (2010). New generation, great expectations: A field study of the Millennial generation. Journal of Business and Psychology, 25, pp. 281-292.
North, M. S., & Fiske, S. T. (2015). Intergenerational resource tensions: A review and future directions. Psychological Bulletin, 141(3), pp. 525-554.
Pariser, E. (2011). The filter bubble: What the Internet is hiding from you. Penguin Press.
Pew Research Center. (2014). Millennials in adulthood: Detached from institutions, networked with friends. https://www.pewresearch.org/social-trends/2014/03/07/millennials-in-adulthood/
Pew Research Center. (2021). The State of Online Harassment. https://www.pewresearch.org/internet/2021/01/13/the-state-of-online-harassment/
Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. Journal of Management, 35(1), pp. 158-188.
Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), pp. 1-6.
Seemiller, C., & Grace, M. (2016). Generation Z goes to college. Jossey-Bass.Strauss, W., & Howe, N. (1991). Generations: The history of America's future, 1584 to 2069. Harper Perennial.
Suler, J. (2004). The online disinhibition effect. CyberPsychology & Behavior, 7(3), pp. 321-326.
Tapscott, D. (2009). Grown up digital: How the net generation is changing your world. New York: McGraw-Hill.
Taylor, P., & Keeter, S. (Eds.). (2010). Millennials: Confident. Connected. Open to change. Pew Research Center. https://www.pewresearch.org/social-trends/2010/02/24/millennials-confident-connected-open-to-change/
Twenge, J. M. (2020). Generația internetului. București: Baroque Books &Arts.
Van Dijk, J. (2020). The Digital Divide. Polity Press. https://www.researchgate.net/publication/336775102_The_Digital_Divide

Digital Society

Specific Concepts and Features

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Abstract:
Digital Society (DS) has become a concept that tends to replace the concept of Information Society because it expresses much better the reality in which we live. Digital Society is a society in which technologies are widely used to respond to various requests, needs, or challenges at individual, community, and social level. The concepts that define Digital Society can be grouped into three categories according to their field of reference: A first category of concepts includes technical, infrastructure aspects that contribute to the concrete realization of DS. The second category of concepts expresses a second level of manifestation of DS in terms of representation in the digital space of the activities and domains of societies in the form of specific applications for interaction, communication, and work. The third category of concepts expresses a third level of digital interaction and considers man and the implications of his presence in the digital environment (psycho-cognitive aspects and behaviours, as well as ethical, moral, legal, deontological aspects, etc.).

Keyword*: Digital Society, concepts, technical characteristics, digital environment, man in digital space.*

Introduction

Digital Society (DS) is a phrase commonly used nowadays in different contexts. Defining, however, the digital society becomes a rather difficult task because it has a social complexity that characterizes the reality of its numerous facets, because of the various factors involved and of the related technologies, of the economic, social, cultural, psychological, etc. implications. Therefore, a definition or a characterization of the *Digital Society* can only be done by describing the concepts of its basic characteristics.

Digital Society has become a concept that tends to replace the concept of the *Information Society* on the grounds that it expresses much better the reality in which we live. As in the 1990s, at the end of the last century, *Information Society* replaced other phrases such as *Industrial Society* or *Technological Revolution* (which defined a social reality that gave major importance to industrialization and shifted attention at social level to data and information as the main generating elements of economic growth and well-being), the phrase *Digital Society* now tends to be imposed, which describes and defines a social reality in which information and ICT assimilated into all social activities and sectors have become paramount.

An all-encompassing definition of *Digital Society* is rather difficult to produce. There are several theoretical approaches regarding this concept, trying to define it by explaining its basic features.

Each definition emphasizes an aspect or a feature considered dominant, but, in essence, *Digital Society* is considered a society in which everything works on the basis of digital

technologies, without the need for classic technologies on analogous support or traditional paper. (Jamil and Almunawar 2021) From another perspective, *Digital Society* is privileged as being the higher stage, natural in the evolution of *Information Society* being, in fact, an evolutionary process of digital technologies centred on Internet which is privileged as a collaborative platform of planetary dimensions in which all aspects of social life embodied in economic, educational, scientific, cultural, recreational activities, etc. are naturally found.(Budea and Budea 1 AD) *Digital Society* is considered a modern society formed as a result of the adoption, assimilation, and integration of ICT and of specific applications, at all levels of social life both in the private life of each individual (through the use of ICT at home and in any other space and context), as well as at work, in educational, cultural and recreational activities.(Lokshina *et al.* 1 AD) If they talk about a digital era in the evolution of humanity, then *Digital Society* is the society that corresponds to this historical stage or era. It is a society dependent on digital technologies (mainly wireless ones) and in which all economic, political, and cultural processes depend on the creation, distribution and communication, use, manipulation of information in digital format.(Muchnik-Rozanov and Tsybulsky 2020) *Digital Society* is the society in which technologies are widely used to respond to various requests, needs, or challenges at individual, community and social levels.*(Bobrowicz-Campos and Matos 2020)* In literature, there is also the concept of *Society 5.0*[1] defining a society dominated by technologies. The concept of *Society 5.0* appeared in 2015, in Japan, in a national public policy initiative (Sá *et al.* 2021) referring to the integration of human activities in a social environment dominated
by technologies. *Society 5.0* is defined as a socio-economic and cultural system that, based on the processing of digital data results, develops in a sustainable way in the direction where physical and cyberspace become a whole, a system more integrated at many levels used to solve social problems, providing security and ecology of innovations and sustainable economic growth. *Society 5.0* is a super-intelligent society embodied in a cyber-physical-social relationship that aims, above all, to improve the quality of life.(Sá *et al.* 2021) The ultimate goal of *Society 5.0* is to incorporate real-world models into cyberspace so that they can provide highly nuanced solutions to real-life problems.(Sá *et al.* 2021)

The terminology used to define and describe what is happening in the digital environment is quite dynamic, i.e., new notions frequently appear and, then, either impose themselves and are reformulated to more concretely describe a real situation or product, or disappear and are replaced by other notions or terms considered more appropriate. A term or concept can be considered common and entered into the specialized vocabulary when it has a wide usage in professional, academic, and political language, but also in common everyday language.

In ordinary language, two terms are used, *digital* and *digitized*, with all their variants, which appear to be synonymous. In fact, each term has a precise use. *Digital* denotes the transposition from traditional format to digital format of an object, document, item of any kind (or a digitally-born document, i.e., created directly in digital format), while *digitized* expresses a process, an application that involves digital content and digital technologies.

Katzenbach & Bächle consider terms such as *Algorithmic Governance*, *Autonomous Systems*, *Transparency*, and *Intelligent Technologies* to be edifying in this regard. They have become basic concepts in describing current social and technological dynamics. More recently, *Platformisation* and *Datafication* have become common terms, although they refer to much more complex, multifaceted phenomena, which could also be described differently (in terms of technology, specific application implications, digital content, social implications, etc.).(Katzenbach (Christian) and Christian) 2019) There is no fixed or limited number of concepts that can define *Digital Society.* Depending on the aspect addressed, certain concepts are used to define DS

[1]If we were to follow the typology of society in such a timeline, in our opinion, Society 1.0 would be the agrarian society, Society 2.0 would be the pre-industrial society, Society 3.0 would be the industrial society, Society 4.0 would be the information society and Society 5.0 would be the digital society.

from the ICT point of view, others to define it from the point of view of social, economic, cultural activities, etc. and of specific applications, others to define it from the point of view of people's interaction with the digital environment, etc.

The concepts that define *Digital Society* can be grouped into three categories according to their fields of reference.

- **A.** A first category of concepts refers to the technical and infrastructural aspects that contribute to the concrete realization of what DS represents.
- **B.** The second category of concepts expresses a second level of manifestation of DS in terms of the representation in the digital space of the activities and fields of society in the form of specific applications for interaction, communication, and work.
- **C.** The third category of concepts expresses a third level of digital interaction and considers man and the implications of his presence in the digital environment (psycho-cognitive aspects and behaviours, ethical, moral, legal, deontological aspects, etc.)

1. Technical Features, ICT Infrastructure, Digital Security

Algorithmic Governance is a key (and quite controversial) concept of DS expressing the idea that digital technologies can structure, organize society in a specific (predefined) manner with influences or repercussions on real society.(Katzenbach (Christian) and Ulbricht (Lena) 2019) The fact that social platforms and different applications are designed and made based on predetermined requirements means that the manner of interaction in the digital environment and, implicitly, in the social environment, can be modelled, influenced towards a predefined typology. It is obvious that a technical characteristic, absolutely necessary in the design and realization of a specific infrastructure, shapes individual and community behaviour.

Algorithmic Governance is an approach in which technologies with all systems, platforms, and specific applications are put at the centre rather than social structures and relations. Even if the design and programming follow certain clear social requirements, the resulting digital infrastructure is based on the optimization of algorithmic systems to solve some specific social problems. Psychosocial, individual psychological, emotional aspects, individual preferences and any other characteristic manifested individually or in a small number of people, usually escape programming algorithms. In other words, the manifestation of individuals in the *Digital Society* is much more predictable, more uniform since it is subordinated and conditioned by the limits of the ICT infrastructures used.

Platformisation. In the Internet space, platforms have become a regular presence. We find platforms of different types, complexities and sizes in all economic sectors, in the administrative, social, cultural sectors or, in other words, all levels of society and all economic-social and cultural activities, sports, etc., as well as public and private domains benefit from platforms with specific applications. In one form or another, the real society in almost all its aspects has an equivalent in the digital space, becoming, as they say, the *Digital Society*. Platformisation can be defined as the integration and use of digital platforms in all sectors of society and in almost all types of activities. Administration, commerce, transportation, education, science, entertainment, journalism, etc. are areas where the presence of specific platforms is already considered necessary and normal. Digital platforms have become part of our public and private lives.

In literature, platformisation is defined taking into account four fields of research (ICT, business environment, political economy, and cultural studies), each offering its own perspective on the concept. From an ICT perspective, platformisation is defined as data infrastructures; from the perspective of the business environment, platformisation means the market in digital form; from a political economy perspective, platformisation means ways of administration and governance; and, from a cultural perspective, platformisation expresses cultural and social behaviours and practices.

Therefore, a definition of platformisation should integrate all these perspectives.(Poell (Thomas) *et al.* 2019) Internet platforms (platformisation) express the digital space in which a variety of actors interact in different ways, but predefined by programming algorithms.

Platformisation can be approached from three different, but complementary directions. A first approach considers data infrastructures or platform infrastructures that can be integrated into a very large number of devices – from smartphones and smart watches to home appliances and autonomous cars in various fields of activity. These platform extensions allow users to perform human interaction such as data collection, evaluation, oral and written communication, driving and operating machines and mechanisms, applications of multiple types – and, thus, collect data that is further processed by specific algorithms.(Bucher 2018)

A second direction of approach refers to the reorganization of market economic relations. Established models adapt to the digital context. If traditional market models are based on the one-sided relationship between seller and buyer, digital market models add to this one-sided relationship and aggregator and intermediary models that allow end users to interact with a wide variety of third parties. From our personal experience, we have noticed that there are many situations in which a platform only facilitates, mediates interaction between the actors of the markets and commercial relations without necessarily being the owners or holders of the digital objects traded.

From a third direction of approach, platforms facilitate not only economic transactions but also user interactions: so, in essence, they facilitate human interactions. Due to this aspect, the e-government dimension of the platforms has been approached, theoretically and practically as a research field mainly of political sciences.(Gillespie 2021) citing (Gorwa 2019)

Smart Technologies or Intelligent Technologies. The emergence and development of computer science has brought into discussion the phrase *Artificial Intelligence* as the component allowing the development and use of intelligent technologies. A simple definition of *Artificial Intelligence* would be the minimal form of manifestation of human intelligence in machines and technologies; or, in other words, the transfer to machines and technologies of some cognitive properties allowing them to evaluate concrete situations and to make a decision followed by a concrete action as a result of that decision.

Artificial Intelligence is a redefinition of the human-machine or human-technology relationship. A wide range of products and services are defined as "intelligent" because they are designed and made with a certain computer and/or robotic component allowing them to perform a series of repetitive, semi-automatic activities in response to a series of stimuli or commands or allowing them to carry out collaborative activities. Thus, there are, in the category of intelligent technologies, semi-automatic vehicles; infrastructures with sensors allowing the adjustment of temperature, light, remote control of some household appliances; collaboration platforms enabling remote interaction (e-learning, smart office, etc.), remote healthcare, online economy and commerce, numerous online technologies and architectures used in various fields of activity. (Hildebrandt (Mireille) 2020)

Smart technologies do not have the same levels of performance and interaction. They are differentiated by the competencies they have included and by the level of manifestation of these competencies and capabilities. Thus, intelligent technologies should exhibit at least one of the following characteristics (Floridi and Sanders 2004):

- Act autonomously;
- Perceive changes in the environment and determine an appropriate response to them (e.g., the thermostat);
- Endure or have a stable behaviour for a prolonged period of time;
- Adapt their behaviours to cope with new circumstances.

Three levels of manifestation of intelligent technologies can be identified:

- The first level is that of systems based on logic, of technologies or systems with a predictable and explainable behaviour, determined by stimuli, logical algorithms such as a specific cause determines only a specific effect (e.g., the thermostat);
- The second level is that of systems based on machine learning, systems that have the ability to perceive their environment of existence, to take data from it and, in accordance with the changes in the environment, also model their behaviour. Such systems recognize certain behavioural patterns and react accordingly to their request or stimuli (e.g., e-learning, facial recognition technology, machine translation, as well as personal digital assistants such as Siri or Alexa, etc.);
- The third level is that of multiagent systems in which several agents interact on a common platform, each pursuing its own goals and interests but the interaction is based on the possibilities offered by the common interaction space with all its associated applications. Multiple intelligent agents or technologies can meet in a common system or platform. Such a multi-agent system can be closed (i.e., it does not interact with the environment or other systems) or open (i.e., it interacts with the environment or other systems) (Hildebrandt (Mireille) 2020) (e.g., *Ambient Intelligence*, *Internet of Things*, cloud robotics, smart cities, connected cars or networks of smart energy).

Digital Security, Cyber Security or Cybersecurity refers to a wide range of technical, administrative, and social issues that should be considered to ensure the protection of networked information systems and platforms. Cybersecurity is much more than encryption, firewalls, antivirus software, and similar technical security tools. Cybersecurity is a collection of tools, policies, security concepts, safeguards, guidelines, risk management approaches, actions, training, best practices, assurances, and technologies that can be used to protect institutions' cyber environment and assets, organizations, and users. These goods would include connected computing devices, i.e., ICT infrastructure with all applications, services, and all data and information transmitted and/or stored in the cyber environment.('X.1205 : Overview of cybersecurity' 2025)

The importance of cyber security has increased as so many government, business and everyday activities around the world have moved online. The publication of a digital content in the web space, either in open and free access, or in restricted access according to different criteria, has a series of effects on all actors and factors involved. As we have shown before, there are implications on the published documentary and informational resources, on the personal data of the authors, creators and users, on the data of the responsible institutional structures, on the providers of Internet products and services, and on the IT systems and applications.

When talking about the security of information systems, one has in mind a complex of concrete principles and activities that consider systems as a whole including all their component elements and all types of managed digital content. Thus, an IT system should be protected from illicit access, ensure controlled user access or, in other words, one should know at any time who has access to the resources managed by it (digital resources and applications), any possible changes should be authorized, and unauthorized persons should not be allowed access. Securing IT systems expresses the technical aspect of defining accessibility.

The consequences of a vulnerable computer system would be the blocking of access or its temporary impossibility, unauthorized modification of digital content, data loss, decreased performance in use, computer fraud. Nowadays, institutions and organizations, whether public or private, attach great importance to securing their presence in the digital space and, therefore, spend considerable amounts of money. As a large part of the world economy has moved to the digital environment, it is understandable to worry about ensuring the security of this environment that has also become an economic and communication environment.(Carin 2017)

2. Activities in Society Integrated Through Specific Applications or The Concrete Form of Manifestation of *Digital Society*[2]

Concepts such as e-Governance, e-Administration, e-Learning, e-Science, e-Health, e-Politics, e-Inclusion, e-Business, e-Health, e-Culture, etc. have entered the common language of each of us (they even managed to impose themselves at the level of the Romanian language in their original form). Practically, there is no field of social or economic life that is not transposed, to a greater or lesser extent, into digital format and renamed accordingly by adding e- or E- in front of the name of these fields or social activities to show their existence and electronic or digital format.

E-Government is the term used to define the Internet digital context through which government information and services are provided to citizens. e-Governance considers the technological, administrative, or relational aspects with citizens through specific applications -World Bank definition; United Nations definition; Global Business Dialogue on Electronic Commerce, (AOEMA report); Working Group on e-government in the Developing World cited in (Palvia 2007). A distinction should be made between electronic administration (e-Administration) and electronic Government itself. Electronic administration is the use by state agencies and structures, whether parliamentary, executive, or judicial, of ICT to communicate with individuals and legal entities to fulfil their specific duties. In other words, electronic administration (e-Administration) highlights the interaction, through computer technologies, of the state authorities with all interested factors. Electronic governance (e-Governance) defines a much wider context in which institutions, citizens, groups and collectives, social economic processes that interact in the direction of democratizing social decisions and supporting society as a whole are involved. If e-administration considers the public sector,

e-governance considers both the public and private sectors, as well as civil society, aiming at citizen participation in political debate and decision-making as a major objective.

E-Administration is a component of electronic governance alongside other categories of activities transposed into the electronic environment (e-Business, e-Health, e-Culture, e-Learning, etc.) to which is added the participatory component represented by e-Democracy.

There are multiple forms of manifestation of *Digital Society* and the interdependencies between different administrative, political, social, and economic activities or fields in the digital environment: governance and administration in the digital environment (E-Government, E-Administration, E-Inclusion, E-Health, E-Justice); the economy in the digital environment (E-Business, E-commerce, E-Marketing, E-Banking, E-Transport); education and science in the digital environment (E-Learning; E-Science, E-Infdoc); culture, media, entertainment in the digital environment (E-Culture; E-Media; E-Entertainment).

Because *Digital Society* integrates, in digital format, all aspects and fields of social and economic life and allows communication and interaction in the digital space, it assimilates, integrates, and allows the manipulation of huge amounts of data and information. Therefore, it is essential to give importance to digital information management including the digital preservation, conservation and archiving component.

The digital society is also defined by all these new concepts used to describe new models of organization, communication and social interaction that are based on digital technologies.

[2]Chapter 4 of TÎRZIMAN, Elena. Societatea digitală. București; Editura ProUniversitaria, 2023 extends the perspectives exposed here.

3. Man in the *Digital Society*

ICT challenges are also found in all aspects of the daily life of each of us. The increasing use of ICT in a multitude of forms and fields of activity has consequences for the rights of individuals. It is necessary that human rights with all related principles and regulations be recognized in the digital environment and be promoted and protected in the digital environment to the same extent as in real life. The challenges of the digital environment regarding the respect of the rights and freedoms of individuals are varied regarding the confidentiality of personal data and their potential misuse, the right to privacy, freedom of expression and association, etc. In the EU *Online Bill of Rights*, the European Commission states that "All EU citizens should be able to access and share any information and should be able to use, through electronic communications networks, any applications and services they want. In this context, the fundamental rights and freedoms of natural persons, guaranteed by *the Charter of Fundamental Rights of the European Union and the European Convention for the Protection of Human Rights and Fundamental Freedoms*, as well as the general principles of EU legislation, should be respected."(European Commission 2012)

Rules and norms of the digital society that relate to the individual, to any person who accesses the networks and interacts in different forms and with different motivations, have provisions related to digital rights, copyright in the digital environment, consumer rights, transparency, protection of personal data, freedom of expression, free access to information, the delimitation of the public-private relationship in the digital environment and any other aspect that concerns man and his life which, in the current context, also has a large digital component.

The principles promoted by the EU regarding the *Digital Society* are:(European Commission 2012)

- A secure and reliable online space;
- Digital skills and education for all;
- Protection and sustainability – access to digital systems and technologies that respect the individual rights of citizens and that are in agreement with the environment;
- Access to citizen-centred public and administrative services;
- Ethical principles for the collection and processing of citizens' personal data;
- Protecting and establishing the rights and competences of children in the digital space;
- Access to digital health services.

The main rights in the digital environment are (European Commission 2012)

- Freedom of expression (freedom of information and freedom of expression including free, transparent access to diverse, authentic, and reliable information);
- Freedom to carry out online activities (business, cultural, educational, recreational, social, and political activities);
- Consumer rights;
- Protection of personal and private data;
- Protection of intellectual property of people in the online space;
- Protection of human reputation in the digital environment.

The concepts and characteristics of the *Digital Society* presented above represent only those concepts and characteristics that we consider to be basic in defining and describing this new phrase, this new type of social manifestation. Many other concepts can derive from these main concepts and describe particular or specific aspects of some activities or forms and ways of communication and interaction in the digital space.

Notes

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References

Bobrowicz-Campos, E. and Matos, A.P.M. (2020) 'Ageing and Health in the Digital Society: Challenges and Opportunities', in *Exploring the Role of ICTs in Healthy Aging*, IGI Global Scientific Publishing, 34–55, available: https://doi.org/10.4018/978-1-7998-1937-0.ch003, [accessed: 4.10.2022].

Bucher, T. (2018) *If...Then* [online], Oxford University Press, available: https://doi.org/10.1093/oso/9780190493028.001.0001.

Budea, A.M.S. and Budea, A.M.S. (1 AD) An Approximation in the Study of Communication Research: Digital Evolution and the Study of This Subject in Spanish Academic Journals [online], *https://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-7998-4930-8.ch016*, available: https://doi.org/10.4018/978-1-7998-4930-8.ch016 [online], [accessed: 4.10.2022].

Carin, B. (2017) 'G20 safeguards digital economy vulnerabilities with financial sector focus', *Economics Discussion Papers*, Economics Discussion Papers, available: https://ideas.repec.org//p/zbw/ifwedp/201727.html [accessed 30 July 2025].

European Commission (2012) *UE al drepturilor în mediul online* [online], Publications Office of the European Union, available: https://data.europa.eu/doi/10.2759/93566 [accessed 3 Aug 2025].

Floridi, L. and Sanders, J.W. (2004) 'On the Morality of Artificial Agents', *Minds and Machines*, 14(3), 349–379, available: https://doi.org/10.1023/B:MIND.0000035461.63578.9d.

Gillespie, T. (2021) 'Custodians of the Internet', *Yale University Press*, available: https://yalebooks.yale.edu/book/9780300261431/custodians-of-the-internet/ [accessed 3 Aug 2025].

Gorwa, R. (2019) 'What is platform governance?', *Information, Communication & Society*, 22(6), 854–871, available: https://doi.org/10.1080/1369118X.2019.1573914.

Hildebrandt (Mireille) (2020) Smart Technologies [online], available: https://doi.org/10.14763/2020.4.1531.

Jamil, M.I.M. and Almunawar, M.N. (2021) 'Importance of Digital Literacy and Hindrance Brought About by Digital Divide', in *Encyclopedia of Information Science and Technology, Fifth Edition*, IGI Global Scientific Publishing, 1683–1698, available: https://doi.org/10.4018/978-1-7998-3479-3.ch116.

Katzenbach (Christian) and Christian, B. (Thomas (2019) Defining Concepts of the Digital Society [online], available: https://doi.org/10.14763/2019.4.1430, [accessed: 4.10.2022].

Katzenbach (Christian) and Ulbricht (Lena) (2019) Algorithmic Governance [online], available: https://doi.org/10.14763/2019.4.1424, [accessed: 4.10.2022].

Lokshina, I.V., Lanting, C.J.M., Durkin, B., Lokshina, I.V., Lanting, C.J.M., and Durkin, B. (1 AD) Evaluation of Strategic Opportunities and Resulting Business Models for SMEs: Employing IoT in Their Data-Driven Ecosystems [online], *https://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-7998-2355-1.ch007*, available: https://doi.org/10.4018/978-1-7998-2355-1.ch007, [accessed: 4.10.2022].

Muchnik-Rozanov, Y. and Tsybulsky, D. (2020) 'Linguistic Analysis of Science Teachers' Narratives Using AntConc Software', in *Advancing Educational Research With Emerging Technology*, IGI Global Scientific Publishing, 211–230, available: https://doi.org/10.4018/978-1-7998-1173-2.ch010, [accessed: 4.10.2022].

Palvia, S. (2007) 'E-Government and E-Governance: Definitions/Domain Framework and Status around the World', *Foundation of e-government*, available: https://www.academia.edu/103494230/E_Government_and_E_Governance_Definitions_Domain_Framework_and_Status_around_the_World [accessed 3 Aug 2025].

Poell (Thomas), Nieborg (David), and Dijck (José), van (2019) Platformisation [online], available: https://doi.org/10.14763/2019.4.1425, [accessed: 4.10.2022].

Sá, M.J., Santos, A.I., Serpa, S., and Ferreira, C.M. (2021) 'Digital Literacy in Digital Society 5.0: Some Challenges', *Academic Journal of Interdisciplinary Studies*, 10(2), 1, available: https://doi.org/10.36941/ajis-2021-0033, [accessed: 4.10.2022].

X.1205 : Overview of Cybersecurity [online] (2025) available: https://www.itu.int/rec/T-REC-X.1205-200804-I [accessed 30 July 2025].

Journal Editors views on Scientific Publishing in the Republic of Moldova

Results of a National Survey

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Abstract:
This study investigates the perceptions of scientific journal editors in the Republic of Moldova regarding challenges and reforms in the national publishing system amidst global transformations in scholarly communication. Drawing on a national survey involving 57 editorial actors, including editors-in-chief and board members, the research explores the alignment of Moldovan journals with international standards, the formalization of editorial policies, and obstacles to indexing and internationalization.
The findings reveal a publishing ecosystem in transition: editors report substantial improvements in article structure, peer review practices, and citation standardization, largely driven by national regulations. However, despite high rates of indexing in the national bibliometric platform and adoption of open access, international visibility remains limited – only 12.28% of journals are indexed in Scopus and 3.51% in Web of Science. Structural barriers such as limited funding, insufficient digital infrastructure, and a lack of skilled personnel hinder compliance with international indexing criteria. Editors also highlight the absence of coherent national policies and support mechanisms.
Despite these constraints, the editorial community demonstrates strong engagement and strategic orientation. Most journals implement DOIs, ORCID identifiers, and English abstracts, reflecting efforts toward internationalization. Respondents propose policy revisions including funding schemes, infrastructure modernization, and professionalization of editorial work. The study concludes that meaningful integration into the global scientific landscape requires not only regulatory compliance but also systemic support tailored to local needs.

Keywords*: scientific journals, editorial policies, scholarly communication, regulatory framework, Republic of Moldova*

Introduction

Over the past two decades, the field of scientific publishing has experienced significant transformations, driven by technological advancements, the democratization of access to knowledge through open access models, and the establishment of international publishing standards. In this context, the role of academic journals has considerably evolved from mere channels for disseminating research findings to essential tools for academic validation, performance evaluation,

and the strengthening of institutional reputation. Profound changes in the production and certification of knowledge require continuous adaptation of editorial practices, and the ability of journals to respond to these challenges is crucial for their integration into the international scientific community.

In the case of the Republic of Moldova, this process has been particularly complex due to limited resources, an underdeveloped digital infrastructure, and an evolving regulatory framework. Although significant progress has been made in the regulation, evaluation, and classification of publications, structural obstacles persist. Challenges such as limited access to international databases, difficulties in maintaining stable editorial teams, and insufficient funding for journal publishing diminish the prospects for international recognition.

The significance of this topic is emphasized by the ongoing reforms in research and innovation, as well as the increasing pressures associated with internationalization, editorial transparency, and academic ethics. Within this context, editors serve a crucial bridging role between the stringent demands of scholarly review and the cultural and institutional specificities of the local environment. Gaining insight into their perspectives on the challenges and opportunities within the field can offer valuable diagnoses and support for effective public policy-making.

While several studies have examined the scholarly publishing system in the Republic of Moldova, the perspective of publishers remains underexplored. Analyses that reflect their views on quality standards, the review process, indexing criteria, and the influence of regulations on journal development are scarce.

In this context, the present study aims to explore the perceptions of scientific journal editors in the Republic of Moldova regarding their alignment with international standards, the editorial policies they implement, the obstacles they encounter in the indexing process, and the impact of regulations on the quality and visibility of publications. Through a national survey of editors-in-chief, editorial board members, and other stakeholders, this research seeks to provide a comprehensive overview of the Moldovan publishing environment and to lay the groundwork for strategic measures that support the internationalization and professionalization of scientific journals.

1. Editorial Trends and Challenges in International Scientific Publishing

The literature highlights a growing concern regarding the structural, technological, and ethical changes that are transforming editorial processes in scholarly publishing. Editors are no longer solely responsible for ensuring quality; they have also become actively involved in content management, technological adoption, ethical oversight, and enhancing international visibility. These changes are driven by a complex interplay of economic pressures, rapid technological advancements, and emerging paradigms of scholarly communication.

One of the most significant trends in academic publishing is the shift towards open access. While this model is viewed as an opportunity to democratize knowledge, it presents substantial challenges, particularly for publishers operating in less well-funded environments. The gold and hybrid open access models involve high article processing charges (APCs), which contribute to disparities in access (Pölönen & Late, 2022; Fu et al., 2023). Publishers of English-language journals are primarily driven by market and funding pressures in adopting open access, whereas editors from non-English-speaking regions point to the lack of systemic reforms as a major obstacle (Fu et al., 2023). These disparities are not merely cultural; they reflect structural imbalances within the publishing infrastructure, exacerbated by the imposition of open access as a funding standard and the predominance of English in global scholarly communication (Nielsen-Muñoz et al., 2023; Beigel, 2014; Gomez, 2023).

As the number and diversity of publications continue to grow, maintaining high standards becomes increasingly challenging. Chowdhary (2013) highlights the prevalence of plagiarism,

duplicate publication, and methodological inconsistencies, while Martens (2008) cautions that the pressure for rapid publication can compromise the rigor of the peer review process. Although publishers are increasingly employing automated tools to detect plagiarism, the effectiveness of these tools varies significantly, particularly when confronted with sophisticated paraphrasing. Additionally, peer review processes are susceptible to inconsistent criteria and variations in reviewers' expertise, resulting in uneven editorial decisions.

Digitization has had a significant effect on editorial operations. Zhao (2016, 2017), and Fernandes and Falcão (2021) demonstrate that the integration of modern technologies has enhanced communication with authors, reduced administrative errors, and increased the transparency of the editorial process. Today, artificial intelligence (AI) plays an increasingly prominent role in automating compliance checks, facilitating editing, and customizing content presentation (Papadopoulou & Lytras, 2024; Tabatadze, 2024). Cooperman and Brandão (2023), along with Shah and Acharya (2024), highlight the contributions of AI in standardizing language use and article formatting conventions, as well as in adjusting the style of articles to enhance readability. These advancements enhance the accessibility of publishing for authors who lack specialized language support.

However, the use of AI presents significant risks. Garrido (2023) highlights the disparities in access to technology, while Shah and Acharya (2024) emphasize the necessity of ongoing human oversight to mitigate algorithmic errors and enhance transparency in decision-making. In this context, it is essential to establish clear policies regarding the responsible use of AI in scientific writing (Zhang & Charbonneau, 2024).

Amid these developments, traditional metrics are gradually being replaced or supplemented by alternative indicators, such as social mentions, online visibility, and the number of downloads (Fresco-Santalla, 2013). This shift necessitates that publishers continuously adapt, balancing open access with the maintenance of scientific rigor.

Indexing in international databases remains a strategic goal for most journals, as it is closely associated with academic recognition and prestige. Rozemblum et al. (2015), Bringula et al. (2023), and Kratochvíl et al. (2019) emphasize the importance of adhering to formal guidelines, ensuring the quality of peer review, and maintaining editorial transparency as essential factors for acceptance into these databases. Journals that fail to comply with these ethical standards risk being classified as predatory, which significantly restricts their international visibility.

A clear consensus in the literature supports the necessity for transparent and comprehensive editorial policies. Authors such as Petrushka (2022) and McDonald et al. (2007) emphasize the importance of including provisions related to plagiarism, authorship, and data manipulation. Armstrong (1982), Young (2009), Toth et al. (2009), and Zhenchenko et al. (2024) advocate for the standardization of peer review, clarification of conflicts of interest, and the detailed publication of journal policies.

Another frequently cited aspect is editorial independence. Smith (2000) considers it an essential condition for ensuring impartiality in editorial decision-making, emphasizing the importance of shielding the journal from commercial or institutional pressures. In this context, editorial policies transform from mere administrative frameworks into expressions of the values and ethics that govern a publication.

At the same time, the literature highlights the tensions between ethical principles and economic sustainability. Hanna (2019) and Armato (2016) analyze this dilemma, while Zarif (2023) emphasizes the risks associated with editorial concentration among a few dominant groups. Molinié and Bodenhausen (2013) observe that editorial decisions can be swayed by commercial interests, whereas Pölönen and Late (2022) argue that many journals in the open science domain often emphasize individual article publication while failing to fully exploit open data and collaborative evaluation mechanisms. the potential of open data or collaborative evaluation.

The literature provides a comprehensive and nuanced overview of the transformations occurring in scholarly publishing. Publishers must balance the pressures of digitization, adherence to ethical standards, international expectations, and local constraints. In this context, analyzing the perceptions of publishers in the Republic of Moldova is essential for understanding how these global trends are being received, reinterpreted, and implemented within a developing scholarly ecosystem.

2. Methodology

The present study is based on an opinion survey conducted among stakeholders involved in the editorial process of scientific journals in the Republic of Moldova. The primary objective of this research was to capture their perceptions regarding the main challenges and developmental trends within the national system of scientific publishing.

2.1. Objective of the Survey

By administering the questionnaire, the research aimed to gather pertinent data on:

- The degree of compliance of journals with international standards.
- The editorial policies currently in effect.
- The difficulties encountered in the indexing and internationalization process.
- The impact of the regulatory framework on the quality of publications.
- The existing initiatives and prospects for the development of the publishing sector.

2.2. Development and Application of the Tool

The primary tool utilized was a structured questionnaire, developed by the project team and validated during a pilot phase to assess item clarity and overall consistency. The final version was which enhanced accessibility and ensured accurate data collection by enabling online distribution via the SurveyMonkey platform.

2.3. Distribution of the Questionnaire

The questionnaire was distributed via an official letter from the National Agency for Quality Assurance in Education and Research (ANACEC) to 75 scientific and practical journals listed in the National Register of Scientific Journals. The accompanying message highlighted the critical role of editors in improving to enhancing the evaluation and classification procedures for academic publications in the Republic of Moldova.

The data collection period spanned from January 29 to March 12, 2025. A total of 75 messages were sent out requesting participation in the survey. The online questionnaire was accessed by 65 individuals, and 57 respondents completed it. The response rate achieved in the survey – 76% –is considered a robust response rate for survey research within small academic or publishing communities. This rate indicates a strong willingness among publishers to reflect on their publishing practices and the context in which they operate. An 87.69% completion rate among respondents underscores the significance of the topic and the interest it generated.

2.4. Respondent Profile

Data on the participants' roles indicate that editors-in-chief represent the largest category, comprising 44.27 percent (n = 27) of all respondents. This substantial presence suggests that the

majority of opinions reflect the perspectives of editorial decision-makers – those who establish the journal's policies, coordinate the editorial team, and manage relationships with authors. Their involvement enhances the significance of the survey results by providing insight into how editorial processes are approached at a strategic level. The remaining reported positions, including members of editorial boards (19.3%; n = 11), deputy editors (10.53%; n = 6), and editorial secretaries, among others, reflecting diverse organizational structures and editorial responsibilities.

2.5. Ethical Considerations

Participation was voluntary, adhering to the fundamental ethical principles of confidentiality and anonymity. Informed consent was incorporated into the preamble of the questionnaire, and completion of the questionnaire required respondents' informed consent.

2.6. Data Processing and Analysis

Data were extracted from the SurveyMonkey platform in tabular format (.CSV) and analyzed using descriptive quantitative methods. Frequencies, percentages, and distributions were employed to highlight prevailing trends.

For the closed-ended questions, statistical tables and graphs were created. Responses to the open-ended questions were analyzed using inductive thematic coding, which facilitated the identification of the most recurrent themes, including a lack of resources, challenges in peer review, and the necessity to enhance internationalization.

3. Results and Discussion

3.1. Profile of Journals Represented by Respondents

The data obtained from the question regarding the type of journal at the time of completing the questionnaire provide clear insights into the editorial profile of scientific publications in the Republic of Moldova (Figure 1). Among the 57 respondents, the majority (n = 35; 61.40%) indicated that they publish journals categorized in Category B, indicating that most publishing activity occurs in the middle tier of the national accreditation system.

Category A+, reserved for journals of excellence, was reported by only one respondent (1.75%), while six publishers (10.53%) mentioned Category A. Together with Category B+ (n = 3; 5.26%), these journals form the top segment of the publishing hierarchy and are typically characterized by international visibility and being indexed in databases such as Web of Science (WoS), Scopus, or Directory of Open Access Journals (DOAJ). Consequently, a total of 10 respondents (17.5%) are engaged with journals that have international recognition or the potential for such recognition.

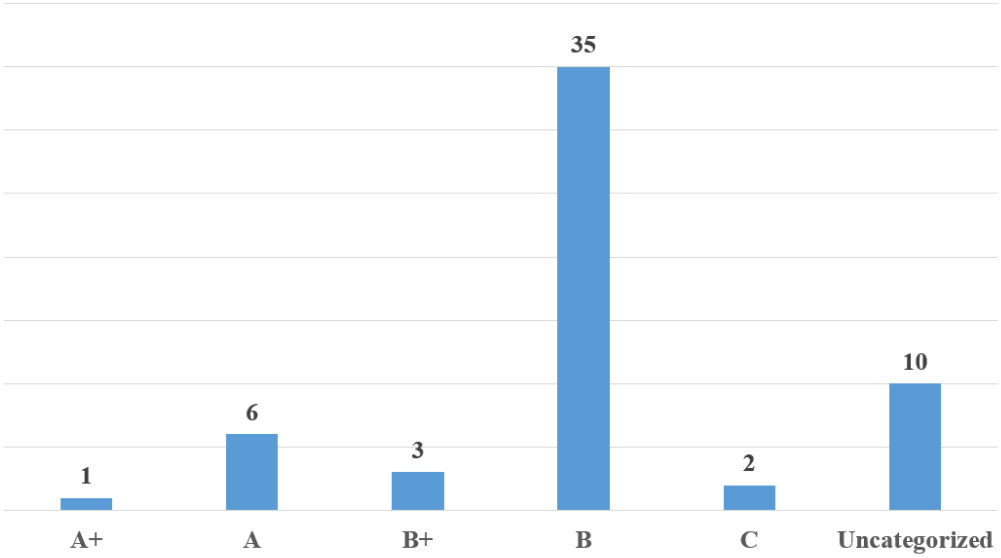

Figure 6: Distribution of respondents by type of edited journal (n = 57)

Another group of 10 respondents (17.54%) indicated that they represent unaccredited journals. This notable proportion highlights the presence of a subset of journals operating outside the formal accreditation system, which may be in transition, emerging, or oriented towards unclassified thematic niches.

The remaining 66% of respondents (n = 37) are primarily affiliated with journals in categories B and C, which confirms the predominance of accredited, nationally recognized, or consolidating publications. As a general rule, these journals are indexed in institutional repositories and in the national database (the National Bibliometric Instrument – IBN), and occasionally in one or two international databases.

Questions regarding the scientific fields represented by the journals of the respondents offer valuable insights into thematic specialization, indicating the extent of fragmentation or convergence of disciplines within the local publishing landscape. The 57 respondents were given the opportunity to select multiple options, thereby reflecting the multidisciplinary orientation of numerous journals.

The data obtained indicate a clear dominance of fields within the socio-humanistic sphere, with educational sciences and legal sciences each receiving 14 mentions (24.56%). This is followed by sociology, history, and archaeology, which were mentioned 11 times (19.30%). Other frequently cited areas include philology, economics, arts, and culturology, each with 10 mentions (17.54%), as well as philosophy and medical sciences, which received 9 mentions (15.79%).

In contrast, the exact and applied sciences – such as chemistry and biology (n = 5; 8.77%), engineering sciences (n = 4; 7.02%), and physics and mathematics (n = 3; less than 6%) – are significantly less represented. Fields such as genomic sciences, military sciences, religion and theology, and information sciences were mentioned only marginally by one or two respondents.

An important aspect of this thematic distribution is the notable tendency toward inter- and multidisciplinarity. Only 15 respondents (26.3%) associated the journal they edited with a single scientific field, while the majority (n = 42; 73.7%) selected two or more areas. This orientation reflects a growing trend in scientific research that involves integrating knowledge and methods from multiple fields to address complex issues. This tendency is supported by recent literature that also addresses the challenges of evaluating and categorizing multidisciplinary journals (Zhang, *et al.,* 2024; Redondo-Gómez, *et al.,* 2024).

3.2. Compliance of Journals with International Publishing Standards and Existing Editorial Policies

Editors' perceptions regarding compliance with international citation rules and styles reflect a mixed, yet generally positive, outlook. According to the survey, 51.79% of respondents (n = 29) believe that these standards are partially met in their published articles, while 39.29% (n = 22) report full compliance. Only 5.36% (n = 3) indicate non-compliance, although they mention steps being taken to improve citation practices, and 3.57% (n = 2) did not express a clear position on the matter (Figure 2).

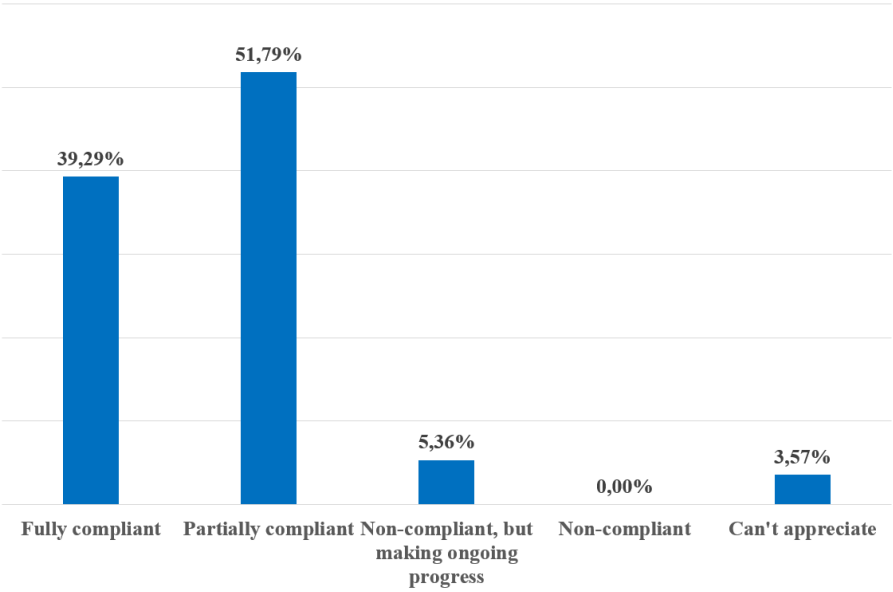

Figure 7: Respondents' perspectives on adherence to international citation standards in journals

The editors' suggestions emphasize the necessity for a unified and professional approach. Common recommendations include: (1) developing a national citation guide that aligns with international standards (e.g., SM ISO 690:2022); (2) organizing training sessions for authors and editors; and (3) involving regulatory bodies, such as ANACEC, in establishing consistent guidelines. Additionally, it is proposed to implement a systematic mechanism for verifying references during the peer review process. Other suggestions include eliminating arbitrary editorial practices, promoting journals in international databases, and assisting authors in enhancing their academic writing and citation skills.

The results indicate a significant degree of heterogeneity in the application of citation styles, likely influenced by the specific characteristics of various scientific fields, the editorial experience accumulated over time, and the extent to which journals are integrated into international indexing systems. Publications seeking inclusion in major international databases, such as Scopus, WoS, and the DOAJ, appear to demonstrate greater adherence to international standards compared to those that are unaccredited or have low visibility.

Scholarly literature strongly supports the idea that adherence to international citation standards is essential for the professionalization of editorial practices. The rigorous application of these standards fosters trust in published content, facilitates the verifiability of sources, and enhances the impact and visibility of journals (Schniedermann, 2021; Khatoon, *et al.* 2024).

Inconsistent application of these standards, often scrutinized during indexing evaluations, undermines efforts to promote national journals internationally. While the indexing rate on the national IBN platform is notably high – 87.72% of respondents (n = 50) reported using this platform – the visibility at the international level is significantly lower (Figure 3). This distribution highlights the IBN's pivotal role as a national platform for archiving, performance evaluation, and access to scientific publications, in alignment with the national research framework.

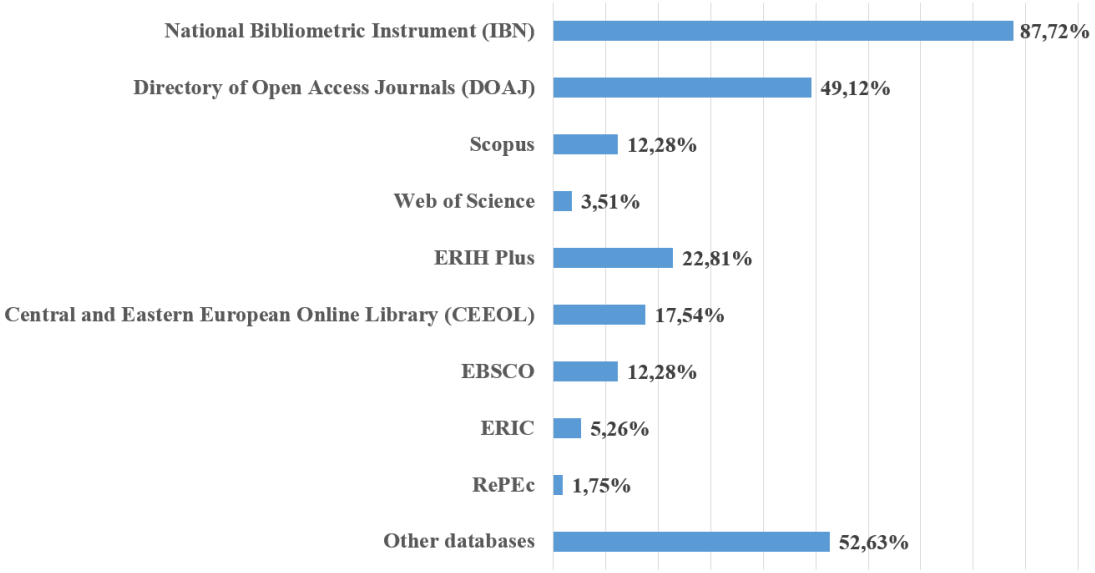

Figure 8: Databases for respondents' edited journals (n = 57)

Of the international platforms, the DOAJ is cited by 49.12% of respondents (n = 28), indicating a significant interest in open access publishing and alignment with international standards of editorial transparency (Pölönen & Late, 2022; Fu *et al.*, 2023). Other frequently reported databases include ERIH PLUS (n = 13; 22.81%), CEEOL (n = 10; 17.54%), and EBSCO (n = 7; 12.28%). Scopus is mentioned by the same number of respondents (n = 7; 12.28%), while Web of Science is referenced only marginally (n = 2; 3.51%), signalling limited integration into the most selective platforms.

This distribution may reflect the challenges faced by Moldovan journals in meeting the stringent criteria for editorial quality, scientific impact, and internationalization – issues that have also been emphasized in the literature (Chavarro *et al.,* 2018).

However, a significant proportion of respondents (52.63%; n = 30) selected the option, indicating a variety of indexing strategies oriented towards thematic, regional, or aggregator databases. These included platforms such as Google Scholar, eLIBRARY.ru, Index Copernicus, AGRIS, BASE, WorldCat, CORE, and other open scholarly dissemination services. These alternative forms of indexing can enhance visibility within specialized scholarly communities or in linguistically and geographically diverse contexts, even if they do not always provide formal international recognition.

3.3. Editorial Policies of Journals: Levels of Formalization and Best Practices

According to national and international regulatory frameworks, the operation of a modern scientific journal necessitates transparent and well-documented editorial policies that govern various aspects, including the selection of content, the evaluation of scientific quality, the protection of authors' rights, and publication ethics. The results of a survey conducted among publishers in the

Republic of Moldova generally indicate alignment with these standards (Figure 4). Specifically, 98.21% of respondents (n = 55) confirmed the existence of policies that encompass journal objectives, author guidelines, ethical standards, and anti-plagiarism regulations.

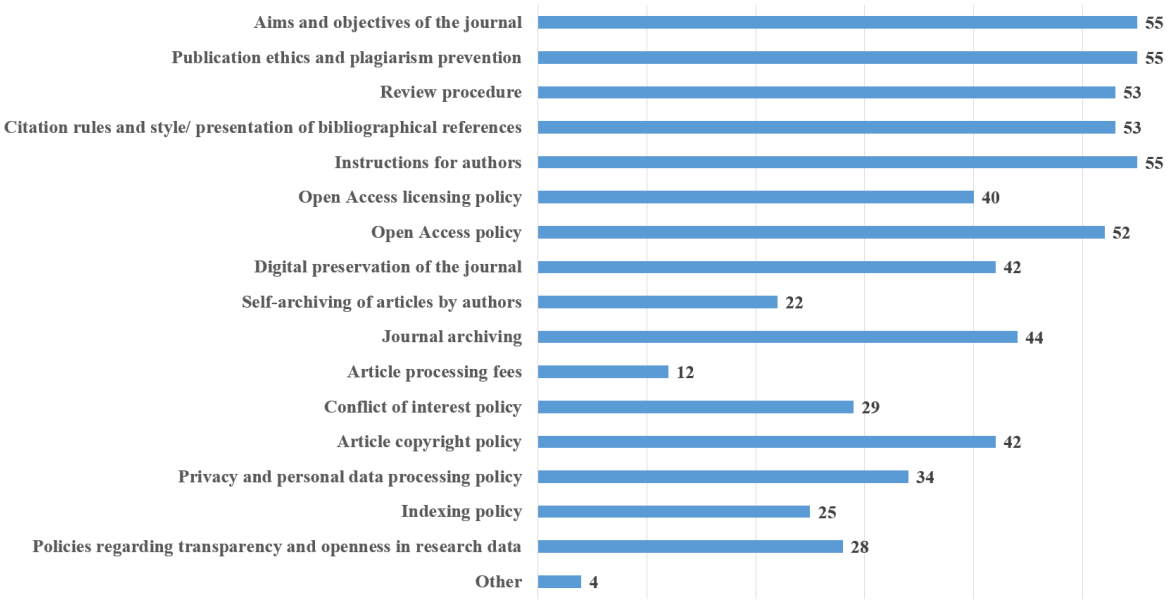

Figure 9: Editorial policies regulated by journals (n = 56)

Also, 94.64% (n = 53) of respondents mentioned the peer review process and citation guidelines. Open Access policies are increasingly adopted, with 92.86% (n = 52) of participants reporting their implementation, while Open Access licensing is noted by 71.43% (n = 40). However, only 21.43% (n = 12) explicitly mention article processing fees in their editorial policies, while 39.29% (n = 22) report the existence of a self-archiving policy.

Key issues such as indexing (44.64%; n = 25), data transparency (50%; n = 28), and managing conflicts of interest (51.79%; n = 29) continue to be insufficiently integrated into formal editorial policies, limiting transparency and compliance with international standards. These findings highlight a publishing structure in transition, marked by significant advancements as well as gaps in policy implementation and technological capacity.

3.4. The Impact of Regulations on the Quality of Scientific Publications in the Republic of Moldova

The analyzed data indicate that national regulations have had a positive effect on the quality of scientific journals in the Republic of Moldova. A significant proportion of the surveyed publishers – 67.85% (n = 38) – perceived a high or very high influence of these regulations on the visibility of journals, while 21.43% (n = 12) considered that the regulatory framework contributed moderately to strengthening the presence of publications in the academic space (Figure 5).

This perception is further supported by the literature, which emphasizes that formalizing editorial requirements – including those related to ethics, structure, and the peer review process – can enhance the quality of published content and increase international visibility (Petrushka, 2022; McDonald *et al.,* 2007).

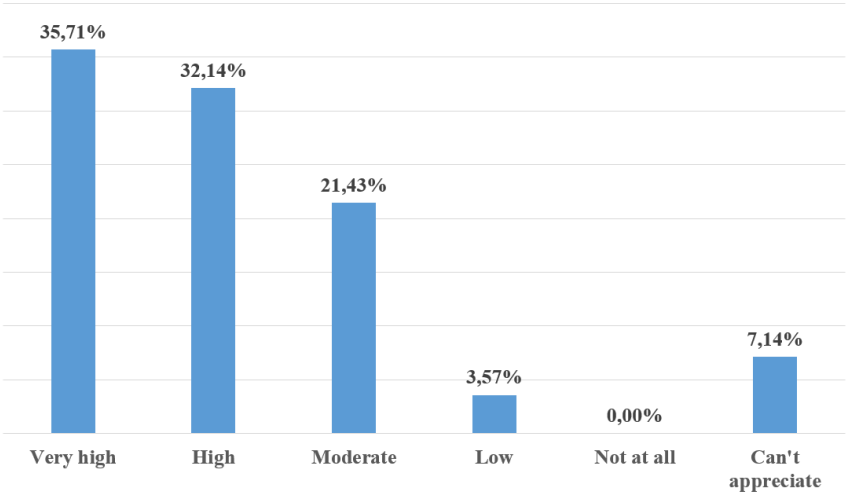

Figure 10: Assessment of the impact of regulatory requirements on journal development (n = 56)

The data presented in Figure 6 indicate a predominantly favorable opinion among Moldovan publishers regarding the influence of formal requirements on the quality of scientific articles. Over 82% of the respondents (n = 27 for 'very high'; n = 19 for 'high') believe that the mandatory inclusion of standard components – such as the abstract, keywords, introduction, methodology, results, conclusions, and references section – has resulted in a significant improvement in the quality of published papers.

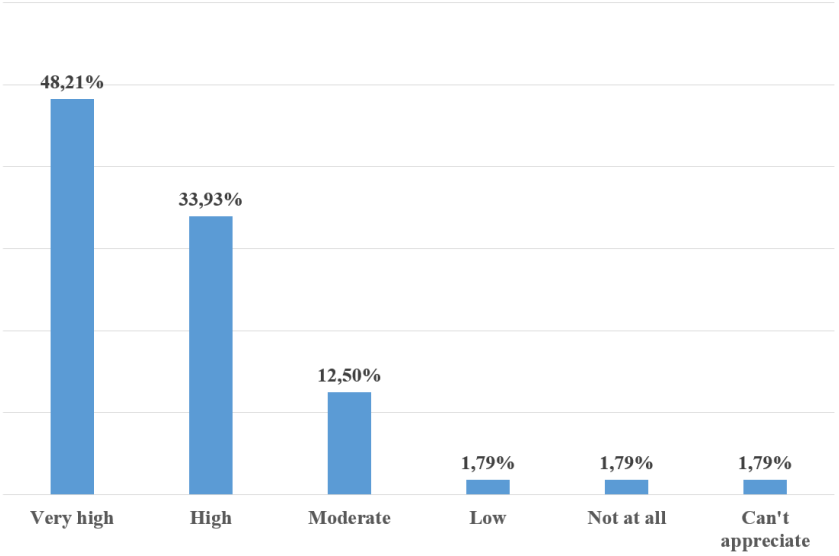

Figure 11: Perceived impact of article structure requirements on publication quality (n = 56)

Only a small number of participants (n = 3 for each of the categories 'low', 'not at all', or 'can't appreciate') perceive a limited or negligible impact.

These results align with the existing literature, which emphasizes the crucial role of editorial policies and formal standards in enhancing the quality, visibility, and credibility of scholarly publications (Rozemblum *et al.,* 2015; Bringula *et al.,* 2023). In particular, in contexts where the publishing ecosystem is fragile or underfunded, such standards serve not only as obligations but

also as benchmarks for professionalizing the publishing process (Petrushka, 2022; McDonald *et al.,* 2007). Consistency in structure contributes to methodological transparency and enhances international visibility, a vital aspect for journals in non-English-speaking regions seeking recognition in a publishing landscape dominated by global entities (Nielsen-Muñoz *et al.,* 2023).

Thus, the requirements for article structure – embedded in both national regulations and editorial policies – function as key mechanisms for the institutionalization of editorial practices. These requirements align publications with international standards and enhance the standing of Moldovan journals within global scientific networks.

The survey results indicate that the implementation of a review procedure involving at least two reviewers is perceived to have a significant impact on the quality and credibility of scientific journals in the Republic of Moldova (Figure 7). Specifically, 91.07% of respondents (n = 51) believe that this practice contributes 'much' or 'very much' to improving the quality of articles, while 87.5% (n = 41) highlight the role of peer review in enhancing the credibility of publications.

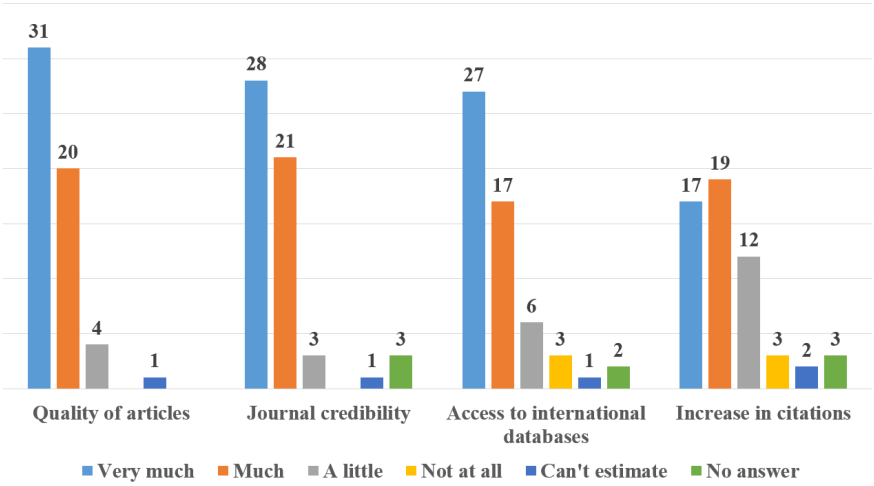

Figure 12: Perception of the contribution of regulating and implementing peer review procedures

The qualitative comments reinforce these perceptions, highlighting the importance of the feedback provided by reviewers in clarifying arguments and strengthening methodologies. Peer review is universally acknowledged as a cornerstone of editorial quality, particularly in an environment where publications face the pressures of volume and rapid publication (Seeber 2024).

In addition, 78.57% of editors (n = 44) believe that the rigor of the review process has contributed to the accessibility of journals in international databases, thereby increasing their visibility and prestige. In contrast, the impact on the number of citations is considered more moderate (64.29%; n = 36), influenced by additional factors such as publication in English, the attraction of international reviewers, and the costs associated with indexing.

The survey also revealed several challenges. Some editors expressed concerns about the formalism of certain reviews, the lack of engagement from some reviewers, and the difficulty in identifying local experts. This often results in a reliance on foreign specialists. These issues underscore the necessity for honest and constructive reviewing that prioritizes content improvement rather than merely fulfilling procedural requirements.

Survey data indicate that editorial regulations are perceived to play a crucial role in enhancing the visibility of scientific journals in the Republic of Moldova (Figure 8). The study's results reveal that a significant proportion of respondents (71.43%, n = 40) believe these requirements have positively impacted the development of publications. Twenty-three respondents rated the influence as 'high' and seventeen as 'very high'.

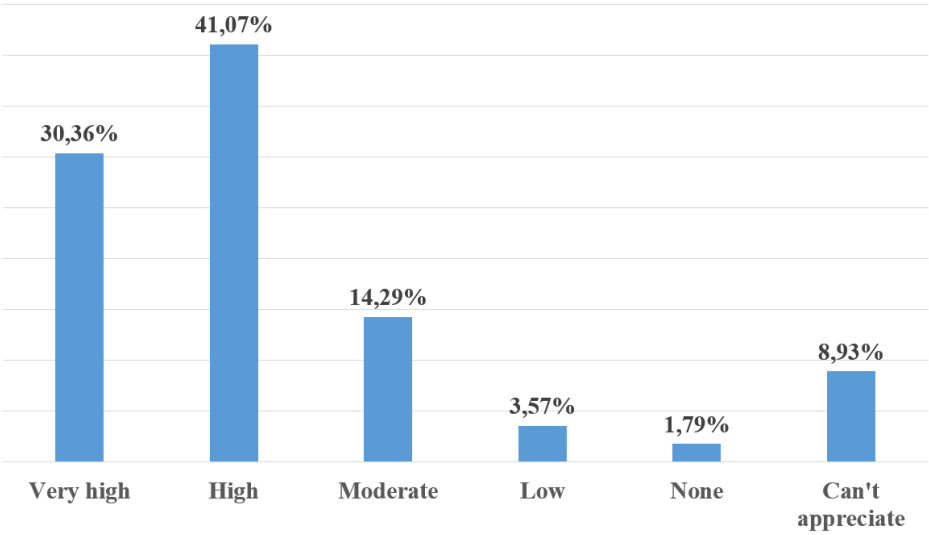

Figure 13: Perception of the impact of regulations on journal visibility (n = 56)

The findings emphasize the pivotal role of standardizing article structure, adhering to international citation guidelines, and formalizing the review process in enhancing the reputation of journals within the regional scientific community. The existing literature supports this conclusion, highlighting that clear and transparent regulations contribute to the professionalization of editorial practices and facilitate integration into the global scholarly publishing landscape (Petrushka, 2022; Seeber, 2024).

3.5. Challenges and Strategies in the Indexing and Internationalization Process

The survey results indicate a nuanced but generally favorable assessment of international indexing requirements related to the indexing of scientific journals. Mean scores (on a scale of 1 to 4) highlight editorial priorities concerning global quality standards (Table 1).

The most appreciated aspects include the use of ORCID identifiers for authors (3.77), publication in internationally recognized languages with English abstracts and keywords (3.87), and DOI assignment for articles (3.64). These results indicate a strong awareness of the importance of persistent author identification and long-term discoverability of articles.

Criteria such as editorial policies aligned with international standards (3.59), the presence of an up-to-date website (3.59), compliance with regular publication schedules (3.47), and digital preservation (3.45) are also highly rated. This reflects ongoing efforts to modernize digital infrastructure and standardize editorial processes.

In contrast, criteria related to the internationalization of authors (3.04), the editorial board (3.18), and the use of OJS platforms (3.13) receive lower scores. This suggests significant challenges in attracting contributors from outside the country and in adopting advanced technologies – challenges frequently cited in editors' open-ended responses.

Survey data indicate that editors in the Republic of Moldova are implementing a range of measures to enhance the international visibility of their journals.

Table 1: Publishers' perception of compliance with international indexing requirements

Requirements for compliance with international standards	Mean score
Content relevant to the subject area	3.44
Peer review	3.28
Ethical evaluation and anti-plagiarism	3.38
A clear editorial policy that adheres to international standards	3.59
International diversity of authors	3.04
International diversity of the editorial board	3.18
DOI identifier for the journal	3.36
DOI identifier for each article	3.64
ORCID identifier for each author	3.77
Strict adherence to the declared periodicity	3.47
Development of the journal website/webpage	3.59
Development of the English version of the journal website	3.27
Placement on the Open Journal Systems platform	3.13
Complete and accurate bibliographic content	3.43
Digital archiving and preservation	3.45
Licensing and copyright	3.23
Each article should clearly indicate its specific type of Creative Commons license	3.04
Publishing abstracts and keywords in English	3.87

Notes: (n = 56); 4-point scale (1 = not relevant, 2 = major challenge for the journal, 3 = difficult to implement but necessary, 4 = easy to follow and beneficial).

Among the most commonly employed strategies are the inclusion of abstracts in English and indexing in IBN, both cited by 91.07% of respondents (n = 51). This reflects a commitment to linguistic accessibility and national digital archiving. Additionally, a significant percentage of publishers support the adoption of ORCID identifiers and open access publishing (87.5%; n = 49), while 83.93% (n = 47) implement DOI identifiers for articles. These measures are essential for ensuring persistent linking, accurate citation tracking, and adherence to digital publishing protocols.

Other common practices include publishing in widely used international languages (82.14%; n = 46), adhering to international citation standards (80.36%; n = 45), creating digital archives (83.93%; n = 47), and enhancing the quality of reviews (78.57%; n = 44).

However, measures with significant potential, such as developing international partnerships (39.29%; n = 22) and promoting articles through professional translations (48.21%; n = 27), remain underutilized. This suggests the presence of limited institutional capacity and the absence of coordinated internationalization policies. The qualitative responses corroborate these findings, emphasizing the need for a more flexible and tailored approach for journals. This approach should not only prioritize indexing in established databases such as Scopus or WoS but also consider thematic and accessible platforms that are relevant to the respective fields.

3.6. Challenges and Strategies in the Indexing and Internationalization Process

The results of the survey highlight a range of systemic and operational obstacles that hinder compliance of scientific journals in the Republic of Moldova with current regulatory requirements (Table 2). The most frequently reported challenge is indexing in international databases such as WoS, Scopus, or DOAJ, mentioned by 55.36% of respondents. The challenges of indexing in international databases present a substantial barrier to the process of internationalization. This issue is supported by findings in the literature, which highlight the stringent requirements imposed by these platforms, as well as the additional pressures experienced by journals from peripheral scientific regions (Beigel, 2014; Seeber, 2024).

Another significant obstacle is the lack of a coherent national policy to support scholarly publishing, as indicated by 51.79% of participants. This leads to fragmentation in editorial efforts and hinders strategic coordination. Challenges associated with the costs of translating articles (50.00%) and attracting international authors (48.21%) further reduce the competitiveness of journals within the international scholarly community.

At the technical level, publishers report insufficient resources for adopting modern editorial management systems (44.64%) and adequate digital infrastructure (41.07%), as well as challenges in effectively organizing the peer-review process (41.07%). These findings align with existing literature, which underscores the difficulties faced during the digitization and professionalization of publishing (Smart, 2014; Zhao, 2017). Furthermore, the shortage of qualified staff, reported by 39.29% of respondents, underscores the urgent necessity for strategic investments in staff training.

Table 2: Perspectives on the challenges of complying with the requirements of the regulation

Obstacles to compliance with regulatory requirements	Responses	
	n	%
Insufficient financial resources to implement DOI identifiers for each article	16	28.57%
Insufficient financial resources to adopt modern editorial platforms	25	44.64%
High costs associated with translating articles into widely used international languages	28	50.00%
Lack of essential technical infrastructure (e.g., Open Journal Systems – OJS, digital archiving)	23	41.07%
Difficulties in implementing unique identifiers (DOI, ORCID) for articles and authors	12	21.43%
Compatibility issues with international citation standards	19	33.93%
Lack of qualified personnel to manage the editorial process	22	39.29%
Difficulties organizing the peer-review procedure (e.g., identifying qualified reviewers, long evaluation times)	23	41.07%
Insufficient number of article submissions	12	21.43%
Difficulty maintaining publication periodicity in accordance with requirements	14	25.00%
Challenges in indexing journals in international databases (e.g., WoS, Scopus, DOAJ, etc.)	31	55.36%
Competition from other well-established national and international journals	11	19.64%
Limited access to authors capable of submitting high-quality articles	15	26.79%
Difficulties attracting international authors	27	48.21%
Regulations perceived as overly complex or difficult to implement	9	16.07%
Lack of a coherent national policy to support scientific journals	29	51.79%
Requirement to be indexed in the National Bibliometric Instrument (IBN)	3	5.36%
Other	6	10.71%

Notes: (n = 56)

The publishers' responses reflect a clear consensus on the need to revise and adapt the Regulation on the evaluation, classification and monitoring of scientific journals, with the aim of making its provisions more applicable to the national context. Identified priorities include the establishment of mandatory institutional financial support for the operation of editorial teams, which encompasses editors, translators, and IT technicians, as well as logistical support for the publication process.

Publishers also advocate for the diversification, expansion, and updating of the list of recognized databases. DOAJ is often cited as a viable yet underutilized alternative indexing platform. Furthermore, there is a call for the elimination of bureaucratic requirements, such as the

obligation to maintain printed documentation. Respondents emphasize the need to simplify evaluation processes and align them with international and European standards.

Respondents also emphasize the necessity of revising the classification criteria to accurately reflect the disciplinary specificity and status of generalist or humanities journals. It is proposed to extend the validity period of accreditation from four to five or six years, in accordance with international practices, to alleviate the administrative burden on editors.

In addition, specialized assistance is recommended to enhance indexing in international databases. Compliance with regulatory requirements, according to several publishers, should be accompanied by institutional incentives, including financial support, training opportunities, and dedicated promotion and digitization facilities.

3.7. Editorial Perspectives on the Future of Scientific Publications

Despite ongoing challenges, publishers' perceptions reflect a balanced optimism, influenced by clearly defined goals of modernization and internationalization. Approximately two-thirds of respondents expect improvements in article quality (64%, n = 32), enhanced international visibility (66%, n = 33), and the complete digitalization of editorial processes through the implementation of modern platforms such as OJS (66%, n = 33).

An equal proportion of respondents (66%) considers indexing in international databases to be a top priority, while nearly the same percentage (64%) anticipates an increase in the number of international contributors and enhanced financial support for editorial activities. Other identified measures include promoting open access and strengthening international collaborations, both of which received support from 62% of respondents (n = 31). Additionally, 46% of respondents (n = 23) highlighted the gradual integration of artificial intelligence into the editorial workflow as a significant measure.

However, more than 44% of respondents (n = 22) identified significant risks associated with insufficient financial resources and a lack of qualified personnel. Additionally, one-quarter (26%, n = 13) anticipate a potential reduction in the number of journals, driven by heightened competition and stricter regulatory requirements.

Qualitative comments highlight the necessity of training a new generation of editors, the significance of strategic state intervention, the expansion of international partnerships, and the strategic consolidation of journals as platforms for scholarly excellence. Simultaneously, respondents caution that these positive developments could be significantly undermined in the absence of structural reforms and coherent policy frameworks.

At the conclusion of the questionnaire, respondents were invited to express their opinions on the initiatives or policies necessary to foster the development of scientific publications in the Republic of Moldova. The editors' responses indicate a widespread belief that the progress of scientific journals in Moldova is impeded by a systemic lack of resources, the absence of a cohesive national strategy, and rigid regulations that are poorly adapted to local academic realities. At the same time, the suggestions provided are detailed and constructive, demonstrating a high level of professional engagement.

The most frequently suggested measures include:

- establishing dedicated grants for scientific journals;
- modernizing the digital editorial infrastructure;
- revising the criteria for classification and indexing;
- encouraging participation in international networks;
- professionalizing editorial work, including through appropriate compensation.

Editors emphasize that meaningful reform in the editorial field cannot occur without the allocation of sustainable financial resources, transparent and flexible policies, and formal

recognition of the professional value of editorial work. There is an urgent need for a strategic vision that incorporates competitive funding, modern infrastructure, continuous training, and regulations tailored to both local conditions and international trends.

Conclusions

The study offers a comprehensive overview of the perceptions of scientific journal editors in the Republic of Moldova, indicating an editorial environment undergoing structural transformation and strategic adjustment. The data obtained confirm a clear orientation towards inter- and multidisciplinarity in scientific journals.

The implementation of regulatory provisions regarding article structure, peer review procedures, and journal promotion at both national and international levels has significantly enhanced article quality and journal visibility, particularly within the national context, as reported by 85.72% of respondents.

However, the implemented regulations have proven insufficient in enhancing the international visibility of journals. Just 12.28% of respondents reported indexing in Scopus, and 3.51% in WoS database.

Accessing relevant international databases is among the challenges most frequently cited by editors, with 55.36% of respondents identifying this issue. This is followed closely by the lack of a coherent national policy to support scientific journals, which was cited by 51.79% of respondents.

Editorial teams recognize the importance of enhancing international visibility and are implementing specific measures to achieve this goal. A significant 91.07% of teams report that they include detailed and relevant English abstracts for all articles and index them in the IBN, which serves as a resource for various international platforms. Furthermore, 87.5% of teams publish in Open Access, 82.14% publish articles in widely used international languages, 87.5% assign DOI identifiers, and 83.93% include authors' ORCID IDs. Additionally, 80.36% of editors report that they publish on open access platforms and adhere to international citation and bibliographic standards.

Despite recognizing their importance, editors often struggle to implement international standards, particularly in the areas of internationalization and technological modernization. These challenges arise not only from financial limitations but also from insufficient institutional support, inadequate infrastructure, and the marginal status of Moldovan journals within the global scientific community. This situation underscores the necessity for coherent policies specifically designed for the local context, ensuring not only regulatory compliance but also administrative, financial, and technological support for effective implementation.

Although the application of international citation norms and style is outlined in the majority of editorial policies (as reported by 94.64% of respondents), with only 39.29% of respondents affirming full compliance.

The inconsistent application of international citation and formatting standards poses a significant barrier to the inclusion of national journals in international databases. These deficiencies draw attention to an additional systemic weakness: the peer review process. Although most editorial policies assert that they implement peer review, the actual execution of this process remains questionable.

The study also highlights the structural challenges that editors encounter, including a shortage of qualified personnel, time constraints, limited access to technology, and difficulties in maintaining the integrity of the peer review process. These issues are further exacerbated by a lack of transparency and ambiguities in editorial communication. However, promising initiatives are emerging to professionalize editorial work, such as the adoption of international standards for

ethics, transparency, and editorial independence. Digital technologies and artificial intelligence are viewed as opportunities, but they necessitate the establishment of clear regulatory policies.

Scientific publishing in the Republic of Moldova is currently undergoing institutional reconstruction, striving to achieve a balance between standardization and autonomy, as well as between international requirements and local realities. The findings of this study can serve as a foundation for developing more tailored editorial policies that promote a sustainable and competitive editorial system linked to global scientific networks. The challenges identified and the proposed solutions highlight a clear necessity: revising the regulatory framework through an integrated, contextualized, and financially supported approach that aligns with the realities and aspirations of Moldova's scientific publishing ecosystem.

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References

Anonymous. (2023) Integrarea socială a persoanelor cu dizabilități și susținerea acestora în procesul de informare prin intermediul bibliotecilor: license thesis. Bucharest: University of Bucharest.

Armato, S. (2016) 'The Business of Scientific Publishing', Journal of Applied Clinical Medical Physics, 17(1), 1-3, available: https://doi.org/10.1120/jacmp.v17i1.6239

Armstrong, J. S. (1982) 'Research on Scientific Journals: Implications for Editors and Authors', Journal of Forecasting, 1(1), 83-104, available: https://doi.org/10.1002/for.3980010109

Beigel, F. (2014) 'Introduction: Current tensions and trends in the World Scientific System', Current Sociology, 62(5), 617-625, available: https://doi.org/10.1177/0011392114548640

Bringula, R. P. et al. (2023) Predicting Suspected Predatory Open Access Computing Journals: An Analysis of Editorial Compliance, Publishing Efficiency, and Bibliometric Services, in NLPIR '23: Proceedings of the 2023 7th International Conference on Natural Language Processing and Information Retrieval. New York: Association for Computing Machinery, pp. 266-272, available: https://doi.org/10.1145/3639233.3639254

Chavarro, D., Ràfols, I. and Tang, P. (2018) 'To what extent is inclusion in the Web of Science an indicator of journal 'quality'?', Research Evaluation, 27(2), 106-118, available: https://doi.org/10.1093/reseval/rvy001

Chowdhary, R. R. (2013). 'Editorial. Changing Trends in Research Publication', International Journal of Prosthodontics and Restorative Dentistry, 3(3), V, available: https://doi.org/10.5005/ijoprd-3-3-v

Cooperman, S. R. and Brandão, R. A. (2023) 'AI Assistance with Scientific Writing: Possibilities, Pitfalls, and Ethical Considerations', Journal of Foot & Ankle Surgery, 4(1), 100350, available: https://doi.org/10.1016/j.fastrc.2023.100350

Fernandes, T. L. do N. and Falcão, F. da S. (2021) 'Editorial Production of Scientific Journals: The Influence of Technological Development on Scientific Certification, Editorial Management, and Post-publication', in L. Pereira et al. (eds) Proceedings of IDEAS 2019. IDEAS 2018. Smart Innovation, Systems and Technologies. Springer: Cham, vol. 198, pp. 322-331, available: https://doi.org/10.1007/978-3-030-55374-6_32

Fu, W., Xu, J., Fang, Q., Ding, J. and Ma, H. (2023) 'Going Open Access: The Attitudes and Actions of Scientific Journal Editors in China', Publications, 12(1), 1, available: https://doi.org/10.3390/publications12010001

Garrido, I. L. (2023) 'Artificial Intelligence and Academic Journals: For Better and for Worse', BAR - Brazilian Administration Review, 20(4), e230145, available: https://doi.org/10.1590/1807-7692bar2023230145

Gomez, C. J. (2023) 'The Growing Concentration of National Influence in Global Science and its Impact on Future Research', OSFPreprints, 30 Jan, available: https://doi.org/10.31219/osf.io/5yt4r

Hanna, M. (2019) 'Ethics of Scientific Publishing', in M. Hanna How to Write Better Medical Papers. Cham: Springer, pp. 233–238, available: https://doi.org/10.1007/978-3-030-02955-5_46

Khatoon, A., Daud, A. and Amjad, T. (2024) 'Categorization and correlational analysis of quality factors influencing citation', Artificial Intelligence Review, 57, 70, available: https://doi.org/10.1007/s10462-023-10657-3

Kratochvíl, J., Plch, L. and Koriťáková, E. (2019) 'Compliance with ethical rules for scientific publishing in biomedical Open Access journals indexed in Journal Citation Reports', Vnitřní Lékařství, 65(5), 338–347, available: https://doi.org/10.36290/VNL.2019.061

Martens, K. (2008) 'Editorial: the future of scientific publishing', Hydrobiologia, 600(1), 1-2, available: https://doi.org/10.1007/S10750-008-9333-0

McDonald, J., Eisemann, M. and Cox, A. (2007) 'A matter of trust: introducing the journal scientific integrity policy', The American journal of pathology, 1711, 1, available: https://doi.org/10.2353/AJPATH.2007.070458

Molinié, A. and Bodenhausen, G. (2013) 'On toxic effects of scientific journals', Journal of Biosciences, 38, 189-199, available: https://doi.org/10.1007/s12038-013-9328-5

Nielsen-Muñoz, V., Azofeifa-Mora, A. B. and Monge-Nájera, J. (2023) 'Seventy years of the Journal of Tropical Biology: historical trends by topic, authorship, country, and institution', Revista De Biología Tropical, 71(S3), e57976, available: https://doi.org/10.15517/rev.biol.trop.v71iS3.57976

Papadopoulou, P. and Lytras, M. D. (2024) 'Enhancing Scientific Rigor With Editorial Roles and AI', in M. D. Lytras, P. Papadopoulou and S. Konstantinopoulou (eds) Advances in Medical Technologies and Clinical Practice Book Series. Hershey: IGI Global, pp. 39-62, available: https://doi.org/10.4018/979-8-3693-4422-4.ch003

Petrushka, A. (2022) 'Editorial Policy of Scientific Journal as Factor in Ensuring Principles of Publication Ethics', Bìblìotekoznavstvo, Dokumentoznavstvo, Ìnformologìâ, 4, 63-71, available: https://doi.org/10.32461/2409-9805.4.2022.269808

Pölönen, J. and Late, E. (2022) 'How society publishers practice open science beyond open access publishing?', in: D. Cupar and Z. Džoić (eds) PUBMET2022: The 9th Conference on Scholarly Communication in the Context of Open Science, pp. 32-33, available: https://doi.org/10.15291/pubmet.3930

Redondo-Gómez, D., Arroyo-Machado, W., Torres-Salinas, D., Margalida, A. and Moléon, M. (2024) 'A long-term assessment of the multidisciplinary degree of multidisciplinary journals', PLOS ONE, 19(12), e0314616, available: https://doi.org/10.1371/journal.pone.0314616

Rozemblum, C., Unzurrunzaga, C., Banzato, G. and Pucacco, C. (2015) 'Calidad editorial y calidad científica en los parámetros para inclusión de revistas científicas en bases de datos en Acceso Abierto y comerciales', Palabra Clave [La Plata], 4(2), 64-80, available: https://www.palabraclave.fahce.unlp.edu.ar/article/download/PCv4n2a01/6597 [Accessed: 5 Apr 2025]

Schniedermann, A. (2021) ‘A comparison of systematic reviews and guideline-based systematic reviews in medical studies’, Scientometrics, 126(12,) 9829-9846, available: https://doi.org/10.1007/s11192-021-04199-0

Seeber, M. (2024) ‘Changes in scientific publishing and possible impact on authors’ choice of journals’, ChemTexts, 10(3), 5, available: https://doi.org/10.1007/s40828-024-00190-3

Shah, P. S. and Acharya, G. (2024) ‘Artificial intelligence/machine learning and journalology: Challenges and opportunities’, Acta Obstetricia et Gynecologica Scandinavica, 103(2), 196-198, available: https://doi.org/10.1111/aogs.14772

Smart, P. (2014) ‘The big picture: scholarly publishing trends 2014’, Science Editing, 1(2), 52-57, available: https://doi.org/10.6087/KCSE.2014.1.52

Smith, G. (2000) ‘Scientific journals with editorial independence: an endangered species?’, Current Opinion in Anaesthesiology, 13(2), 187-190, available: https://doi.org/10.1097/00001503-200004000-00018

Tabatadze, B. (2024) ‘Prospects of Using AI Technologies in Open Journal Systems (OJS)’, Journal of Technical Science and Technologies, 8(2), 68-74, available: https://doi.org/10.31578/jtst.v8i2.163

Toth, L., Compton, S. and Tolwani, R. (2009) ‘Competing interests policy for AALAS journals’, Comparative medicine, 59(3), 249-250, available: https://pmc.ncbi.nlm.nih.gov/articles/PMC2696825/ [Accessed: 5 Apr 2025]

Young, G. (2009) ‘Psychology Journals: Proposal for Financial Disclosure Policies’, Psychological Injury and Law, 2, 143-148. https://doi.org/10.1007/S12207-009-9048-1

Zarif, A. (2023) ‘The Economics of Scientific Publishing’, The Yale Journal of Biology and Medicine, 96(2), 267-273, available: https://doi.org/10.59249/OMSP9618

Zhang, J., Yang, L. and Shen, Z. (2024) ‘Analyzing Journal Category Assignment Using a Paper-level Classification System: Multidisciplinary Sciences Journals’, Scientometrics, 129(10), 5963-5978, available: https://doi.org/10.48550/arXiv.2305.02530

Zhang, M. and Charbonneau, D. H. (2024) ‘Artificial intelligence (AI) and scholarly publishing ethics: A content analysis of journal policies’, in ALISE Proceedings of the Association for Library and Information Science Education Annual Conference, Portland, pp. 1-2, available: https://doi.org/10.21900/j.alise.2024.1718

Zhao, L. (2016) ‘Application of Network Technology in Sci-tech Journal Editing and Publishing Process’, in ICIMM 2016. Proceedings of the 6th International Conference on Information Engineering for Mechanics and Materials, Atlantis Press, pp. 696–699, available: https://doi.org/10.2991/ICIMM-16.2016.124

Zhao, L. (2017) ‘Application of Modern Information Technology in Sci-tech Journal Editing and Publishing Process’, in ICEISS 2017 Proceedings of the International Conference on Education Innovation and Social Science (ICEISS 2017), Atlantis Press, pp. 61–64, available: https://doi.org/10.2991/ICEISS-17.2017.15

Zhenchenko, M., Izarova, I. and Kharlamova, G. (2024) ‘Editorial Policy and Publication Ethics of the Series of Scientific Journals “Bulletin of Taras Shevchenko National University of Kyiv”. Kyiv: Київський університет, available: https://doi.org/10.17721/edit.policy.2024

University of Bucharest Website

An Approach from the Perspective of Information and Documentation Resources for Students

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Abstract:
This study represents an extract from a broader practical research whose main objective is to concretely illustrate how a university creates, acquires, and makes available information and documentation resources to its users, students, during their academic studies, both for educational and research activities, as well as for administrative and extra-curricular activities. The website of the University of Bucharest is analysed, including faculty pages, from the perspective of the information and documentation resources made available to the students, highlighting the differences between the different faculty websites regarding the structure of the information and the accessibility of the resources. The study emphasizes the need to improve access to information and standardize educational platforms for optimized academic experience.

Keywords*: educational resources, access to information, university site, digital resources.*

Introduction

In the age of digitalisation, access to online educational resources has become paramount for the process of academic learning and research. Universities play a crucial role in ensuring a well-structured digital environment, supporting students and teachers in their academic activities. The sudden transition from university education with physical presence in amphitheatres, classrooms and seminar rooms to online education during the pandemic period determined a number of challenges for both students and teachers, who have to adapt to the process of teaching and learning in an online format (‘Învățământul universitar din România în contextul pandemiei COVID-19: Experiențele studenților’ 2025).

From the moment the education moved to the online environment, all learning resources had to be moved to the online environment. Also, it became necessary to provide platforms to facilitate communication between students and teachers in the online environment.

This paper analyses the website of the University of Bucharest from the perspective of the information and documentation resources available for students, with the objective of identifying the strengths and weaknesses of their structure and accessibility. It examines the types of educational resources provided – databases, digital libraries, e-learning platforms, academic publications – and how they have been integrated to facilitate learning and research. Faculty webpages are also investigated to observe to what extent they contribute to a coherent, accessible digital experience.

Data collection was carried out between March 2021 and September 2024, i.e., both pandemic and post-pandemic periods.

Through this analysis, the author aims to highlight the importance of university digital platforms and to provide suggestions for optimizing access to academic resources to improve the learning experience in a digitised environment.

1. University of Bucharest: Overview

The University of Bucharest is considered one of the most prestigious higher education institutions in Romania. It was established in 1864 by the royal decree no. 765 of July 4/16, 1864, of ruler Al. I. Cuza. The University of Bucharest is a state university, being the second institution of higher education on the territory of Romania (‘Scurt istoric al învățământului superior românesc: cele mai vechi universități românești’ 2025).

As an institution of higher education and research, the University of Bucharest has 19 faculties that include “95 Bachelor’s programs, 223 Master’s programs, 8 teaching master’s programs, 23 doctoral schools in specific fields, and a school for interdisciplinary doctoral studies” (‘Scurtă prezentare’ n.d.) to which are added “over 50 institutes, departments, and research centres, most of them working in collaboration with similar scientific centres from abroad”(‘Scurtă prezentare’ n.d.). In 2024, at the University of Bucharest were registered nearly 34,000 students in Bachelor’s, Master’s and doctoral specialisations served by about 1,300 tenured professors (‘Scurtă prezentare’ n.d.).

2. University of Bucharest Website

The most important source of information for students, teachers, and researchers of a university community remains the university website.

In the context of the COVID-19 pandemic, when access to educational and library spaces was not possible, the University made a special effort to compensate for physical access to learning resources with access to digital resources.

Below are identified the educational resources, which the University of Bucharest offers to students at the University level, through its site (Larisa 2020). Thus, in the sections “About UB” and “educational resources”, the following types of resources have been identified:

a) Editorial resources. Two publishing houses – *Editura pentru Literatură Contemporană* and *Editura Universității din București* – are reported on the website of Bucharest University(‘Edituri’ n.d.).

Editura pentru Literatură Contemporană – Contemporary Literature Press (CLP)

It specialized in the literary and linguistic fields with the purpose of scientific research. It publishes in Romanian and English, offering books in both printed and digital support. On the site, the publishing house reports, as a good example, the *Joyce Lexicography* series, in 130 volumes(‘Joyce Lexicography - Contemporary Literature Press’ 2025). This publishing house aims to publish poetry, prose, theatre, and literary criticism, in original or translation, specialised research volumes, Romanian literature translated into English, English literature translated into Romanian, volumes for learning English, linguistic and literary research volumes, and dictionaries(‘Edituri’ n.d.). The “Poetry Pro” project is also reported, in which the publishing house has concluded a partnership with the group of over 400 English poets represented by the literary agency Anne Stewart. This project aims to promote contemporary poetry, creating a dialogue between Romanian and world poets, by translating and publishing their literary creations(‘poetry pRO translation

English to Romanian' 2025).

Editura Universității din București – University of Bucharest Publishing House (EUB-BUP) was established in 1993 by ministerial order and aims to support the didactic and research activity: books, treaties, monographs, dictionaries, university courses, collections, seminar notebooks, homage volumes, periodic and international scientific periodicals, etc. At the University of Bucharest Publishing House (EUB-BUP), about 200 titles, including new titles, revised editions, print runs continuation, and research volumes appear every year. Most of them are printed in the typography of their own publisher, which ensures rigorous control of the production process and a higher quality of the printed materials. Part of the publisher's collections can be seen at.

b) Library resources. This section presents the "Carol I" Central University Library (BCUB), considered the Library of the University of Bucharest, which offers access to its collections on both traditional and electronic support, an important info-documentation basis for the Romanian university community(Larisa 2020).

By its complex organizational structure, which includes the central unit, 16 branch libraries located in the spaces of the University of Bucharest and the "I. C. Petrescu" Pedagogical Section, BCUB offers a current collection of over 2,400,000 volumes from different fields. The areas covered are: fiction, economy, psychology, history, geography-geology, management, philosophy, mathematics, etc.(Larisa 2020). At the bottom of the page are the links to the branches of the Central University Library (BCU), providing access to essential information, such as operating program, contact details, access to the online catalogue, and details about the book fund available in each subsidiary.

Also, useful information is presented regarding the process of obtaining a library permit, facilitating the access of users to the available resources.

To support the people studying remotely and to contribute to the efficiency of the educational process, the "Carol I" Central University Library has provided a mobile access guide to the databases through *Enformation* and *Romdiac* applications(Saftiuc n.d.).

Another digital platform marked on the website of the "Carol I" Central University Library is the *RESTITUTIO* digital deposit, which contains a series of digitised collections of manuscripts, Romanian and foreign books, iconographic resources, old and rare books, press and other serial publications, and cartographic resources('Resurse electronice' Unibuc).

c) Electronic resources accessible online. the University of Bucharest offers its students and teachers a number of educational resources, such as:

- *Databases*. The University of Bucharest offers 5 subscribed databases with direct access from within the institution based on the institutional IP address. The five databases are: *ProQuest*, *Science Direct*, *Springer Link*, *ProjectMUSE*, and *Thomson Reuters*. The last two are not included in the list of databases offered through the *ANELIS Plus 2020 program*[1]; the databases offered on the website of the University of Bucharest are in addition to the databases offered to the students by the BCUB; in this section, the way of creating an account for the mobile access of the databases through the *Anelis* is not specified; this information can be found in another section of the site;
- *Unibuc CLASSICA* includes a list of about 80 titles of books of historical value in digital format[2];
- *Recovery of the Anglistics in Romania* includes a link to the web catalogue of digitised books within the project Anglistics Recovery in Romania; this project, initiated by the University of Bucharest through the Faculty of Foreign Languages and Literatures in partnership with the Library of the Romanian Academy, aimed to capitalise and promote the cultural heritage written in the field of Anglistics in Romania. The main objective was to

[1] *Universitatea din București. Resurse electronice*. Available at https://unibuc.ro/despre-ub/resurse-educationale/resurse-electronice/#1543839955326-09a43134-728f. Accessed 28.11.2024.

[2] *Unibuc CLASSICA*. Available at: http://ebooks.unibuc.ro/CLASSICA/. Accessed 28.11.2024.

identify and digitise a documentary corpus of about 250 volumes. At present, however, the link to the catalogue is no longer functional;

- *E-books*. In this section, are posted a series of books in digital format, being grouped into several fields such as exact sciences, theology, humanistic sciences, sciences of life and earth, social and political science, and legal sciences[3]; at a first analysis, it is observed that most authors are teachers of the University of Bucharest;
- *UB journals*, a series of journals published online and grouped in several fields are presented: Administration and business, Centre for Phenomenological Studies, Ethnology, Philosophy, Geography, Geology, History, Journalism, Languages and Literatures, Centre for Excellence in the Study of Image, Mathematics, Psychology and Education Sciences, Sociology and Social work[4]; Following a more thorough analysis, by accessing several journals, it was found that the page is not updated, a series of links did not work;
- *Annals of the University of Bucharest*, a section in which are presented the annals for 11 of the 19 faculties of the University of Bucharest: the faculties of Chemistry, Economics and Administration, Law, Philosophy, Physics, Geography, History, Languages and Literatures, Mathematics-Informatics, Mathematics, Political Sciences[5].

d) Institutes. Another type of identified resources in this section is the Confucius Institute, a non-profit organization resulted from the partnership between the University of Bucharest and the University of Political and Legal Studies in Beijing. It was inaugurated on November 22, 2013, following the cooperation agreement between the University of Bucharest and Henban[6]. In addition to the Chinese language courses offered, the Institute organises cultural exhibitions, book launches, work conferences, debates on various topics on friendship and collaboration between the two countries, as well as cultural exchanges with other Confucius Institutes, but also from other countries. Courses are addressed to both children and adults and are organized on study levels[7].

Within the section "About UB", to help support the online educational activities under pandemic conditions, a link named "online UB" was created with a separate page, which includes all the means or tools to support online activities, through connecting links to the digital resources, which the University of Bucharest provides to its academic community. For the use of these resources, an institutional account is required[8].

This site with online educational resources is administered by *GCAEO-UB (the Coordination Group of Online Educational Activities at the University of Bucharest)* and *DITC-UB (IT&C Department)*.

A series of recommendations are presented to support online educational activities at the University of Bucharest and a guide that briefly presents the methods that can be used to carry out the educational activities carried out online[9].

The site with educational resources of the University of Bucharest offers the following types of resources:

[3] *Universitatea din București. E-books*. Available at: https://unibuc.ro/despre-ub/resurse-educationale/resurse-electronice/#1543840057990-25fd5f38-bf67. Accessed 28.11.2024.
[4] *Universitatea din București. Reviste UB*. Available at: https://unibuc.ro/despre-ub/resurse-educationale/resurse-electronice/#1543840094045-6647648a-75ff. Accessed 28.11.2024.
[5] *Universitatea din București. Analele Universității din București*. Available at: https://unibuc.ro/despre-ub/resurse-educationale/resurse-electronice/#1543840190732-8849ccd6-9c3a. Accessed 28.11.2024.
[6] *Universitatea din București. Institutul Confucius*. Available at: https://unibuc.ro/despre-ub/resurse-educationale/institute/institutul-confucius/. Accessed 28.11.2024.
[7] *Ibidem.*
[8] *Universitatea din București. Alege o resursă*. Available at: https://online.unibuc.ro/alege-o-resursa/. Accessed 28.11.2024.
[9] *Universitatea din București. Recomandări pentru susținerea activităților educaționale online*. Available at: https://online.unibuc.ro/wp-content/uploads/2020/03/GCAEO-UB_Recomandari_activitati_educationale_online_v1.pdf. Accessed 28.11.2024.

a. *The Moodle Platform*[10] is a learning management system made available to the faculties by the University, being hosted locally on the institution's servers. In the beginning, several faculties were included, but, with the COVID-19 pandemic, the process of integrating the other faculties was accelerated. Currently, on this platform are included 14 of the 19 faculties of the University of Bucharest. The platform has a series of tools that can facilitate online education, such as loading of teaching materials in electronic format (courses, video materials, images, etc.); the discussion forum for open communication, through which students and teachers can send ads, ask questions, and organise debates; making online questionnaires that can help collect the responses of a target group of participants, etc.[11] Through this platform, the teachers have the possibility to test the students through the questionnaires and the proposed topics. Following the topics received, students can upload documents, files, images, and audio and video clips. Also, teachers can leave comments and organise discussions on the proposed topic.
b. *The UB Moodle platform* is available on any type of device connected to the Internet. Access to the *Moodle platform* is not indicated on the university website, on the first page in the form of a clearly defined button. Access to the application is done by authentication with user and password, using the *GSuite* account or the *MS365* account. The *UB Moodle platform* is available in multiple languages.
c. *The Microsoft Platform 365 for Education*. In order to connect to this platform, both students and teachers need an institutional address allocated by the University institution in Bucharest. The same *Microsoft 365* institutional addresses are used for access to *Microsoft Teams*, for both teachers and students.
d. *The GSuite for Education platform*[12]. For access to Google apps (*GSuite for Education*), Gmail addresses and additional options to all software applications (*Google Class* and *Google Meet*) are required. Students can connect with any Gmail address.
e. The Anelis Plus 2020 project. This section provides a necessary information guide for the use of electronic resources available through the *Enformation* platform within the *Anelis Plus* project. Also, the way of accessing the databases is presented, creating accounts, through the two *Enformation* and *Romdiac* platforms, each offering access to certain online resources sites.
f. *Guides for the use of online educational resources*. On this page, there is a synthesis of the main methods of carrying out the online educational activities made by the group of coordination of online educational activities at the University of Bucharest and partners to support teachers in choosing the right solutions according to the objectives of each activity followed. For each method, free software or free versions of a licensed software program, which are made available to the University Community in Bucharest, are used for each method[13].
g. *Links to other online educational resources*. On this page, there is a list of links to other online educational resources made available to the university community by various national, European or international organizations[14].
h. *Various online resources*, represented by a page with links to other types of educational resources than those listed above provided through the site by publishers and other

[10] https://moodle.unibuc.ro/login/index.php.
[11] *Recomandări pentru susținerea activităților educaționale online*. Available at https://online.unibuc.ro/wp-content/uploads/2020/03/GCAEO-UB_Recomandari_activitati_educationale_online_v1.pdf. Accessed 28.11.2024.
[12] *Universitatea din București. Alege o resursă*. Available at: https://online.unibuc.ro/alege-o-resursa/. Accessed 28.11.2024.
[13] *Universitatea din București. Folosește un ghid*. Available at: https://online.unibuc.ro/ghiduri/. Accessed 28.11.2024.
[14] *Universitatea din București. Resurse externe*. Available at: https://online.unibuc.ro/resurse-externe/. Accessed 28.11.2024.

organizations outside the University[15]. This page is not found in the site menu and can be accessed using the Google search engine.

Also, on the website of the University of Bucharest, in the "Student UB" section, students are offered a series of information, also found on the faculty websites, regarding the campus, information about scholarships, information about student associations at faculties, counselling and career guidance, camps, regulations and taxes, information about applications and online documents necessary for school attendance, information about the delivery of study documents, as well as information about the competition of professional practice projects. Some categories in this section, for example, "Mobilities", are under construction.

All the 19 faculties of the University of Bucharest[16] have their own sites, as a sub-domain on the website of the University of Bucharest, on which students can identify a series of information and learning resources, detailed information about their own study programs, remote access to the secretariat, student booklet, etc. Only the Faculty of Letters has its own site with its own domain.

Next, the educational resources offered to students at faculty level through the site are identified.

Faculty of Administration and Business[17]. It has a visual identity of the site, but it does not have a sub-domain from the university website. On the first page, as well as in the "Student FAA" section, there is a direct link to the Moodle platform[18]. This section includes information about the library in the form of a web page that contains the description of the library, the services offered, information about access, program, as well as a link to the library catalogue. Also, there are information for students about time, exams, taxes, student book, structure of the year, scholarships, international scholarships, forms, etc. The site does not have a version of the interface in English.

Faculty of Biology[19]. It has a visual identity of the site and a sub-domain from the university website. No library information are reported on the site. There is very little information for students, which are centralized in the "Students" section of the site menu. Information on the practice, taxes, careers, alumni, and the Association of Biochemist, Biologist and Ecologist Students are included here. The site has been updated with a new version, but the previous version is still available, and the process of migration of all the data in the old site has not been completed yet. It also does not have a version of the English interface.

Faculty of Chemistry[20]. It has a visual identity of the site and a sub-domain from the university website. There is information about the library in the "Library" section, visible on the first page. This includes more details about the program, organized in the form of ads for several years.[21] Student information resources include a link to their own platform, but it is not functional. A number of computer resources intended for online teaching activity, both for teachers and students are available, but some of them are not updated and do not work. Student information is related to schedule, exams, optional and selective courses, practice, scholarships, camps, and mobilities[22]. There is no button to the Moodle platform or other classes and databases. The site does not have a version of the interface in English.

Faculty of Law[23]. It has no visual identity of the site, but it has a sub-domain from the university website, and the information resources for students include a link to their own platform,

[15] *Universitatea din București. Resurse educaționale online*. Available at: https://unibuc.ro/resurse-educationale-online/. Accessed 28.11.2024

[16] *Universitatea din București. Facultăți*. Available at: https://unibuc.ro/studii/facultati/. Accessed 28.11.2024.

[17] *Facultatea de Administrație și Afaceri*. Available at: faa.ro. Accessed 28.11.2024.

[18] *Facultatea de Administrație și Afaceri. Pentru student*. Available at: https://faa.ro/index.php/pentru-student. Accessed 28.11.2024.

[19] *Facultatea de Biologie*. Available at: https://www.bio.unibuc.ro. Accessed 28.11.2024

[20] *Facultatea de Chimie*. Available at: chimie.unibuc.ro. Accessed 28.11.2024.

[21] *Facultatea de Chimie. Biblioteca.* Available at: https://chimie.unibuc.ro/index.php/biblioteca. Accessed 28.11.2024.

[22] *Facultatea de Chimie. Studenti.* Available at: https://chimie.unibuc.ro/index.php/studenti. Accessed 28.11.2024.

[23] *Facultatea de Drept*. Available at: drept.unibuc.ro. Accessed 28.11.2024.

but it is not functional. A number of computer resources intended for online teaching activities are available for both teachers and students, but some of them are not updated and do not work[24]. Also, information about extra-curricular courses, such as the psycho-pedagogical module, Spanish and German law courses, are presented. The site does not have a version of the interface in English.

Faculty of Philosophy[25]. It has no visual identity of the site, but it has a sub-domain from the university website, and the information resources for students are related to the library that is described on a page on the site. In the section "Publications", are reported a series of publications: *Analele UB seria Filozofie*, *Public reason*, *Revista Română de Filozofie Analitică*, *IJPHC- International Journal of Aesthetics and Philosophy of Culture* and a few volumes[26]. Students can be informed from the site related to the completion of studies, schedule, taxes, etc.

Above the main menu, was added a button entitled "Access to scientific and research literature", which represents a direct link to the page that provides mobile and direct access to the databases of the Central University Library[27]. Also, a "Student Notes" button appears both in this location and within the "Faculty" menu, where various events, interviews, workshops, etc. are presented[28].

The site includes a button for the English version, but its content is not completely updated, being absent or incomplete on certain pages.

Faculty of Physics[29]. It has a visual identity of the site and a sub-domain from the university website. No library information on the site is reported. In the section "Students", there are general information, such as schedule, taxes, exams and completion of studies, but also a series of activities organized by the Learning Centre of the University of Bucharest, in which the students can participate in both physical and online format[30]. There is also a section for courses, but it is currently without content[31]. The site benefits from an English version, but its content is not updated or it is absent on the announcement pages. In addition, the site was recently updated with a new version, but the previous version is still reported on the new site, and the process of migration of all the data from the old site has not yet been completed.

Faculty of Geography[32]. It has no visual identity of the site, but it has a sub-domain from the university website; the library is reported on the site by its description on its own page and it includes information about the BCUB catalogues and the available scientific databases. Also, in this section, are described the collections held by the library, as well as the services it provides to users. In the section "Research", are posted a number of publications such as *Revista Master Turism*, *Revista de Geomorfologie*, *Human Geographies*, *Journal of Urban and Regional Analyses*, *TOBUB revista online*, research works and reports, *Analele Universității din București – seria Geografie*, a series of communications etc.[33].

In the section "Students", there are general information such as schedule, practice, taxes, exams, completion of studies, scholarships, accommodation, camps, and student clubs. Also, in this menu, there is an access guide for the Moodle (UB) app, but it is easily outdated compared to the

[24] *Facultatea de Drept. Resurse informatice pentru desfășurarea de activități didactice în regim online*. Available at: https://drept.unibuc.ro/Resurse-informatice-pentru-desfasurare-de-activitati-didactice-in-regim-online-pentru-studenti-s937-ro.htm. Accessed 28.11.2024.
[25] *Facultatea de Filosofie*. Available at: https://filosofie.unibuc.ro/. Accessed 28.11.2024
[26] *Facultatea de Filosofie. Volume*. [Accessed 28.11.2024]. Available at: https://filosofie.unibuc.ro/volume/. Accessed 28.11.2024.
[27] *Facultatea de Filosofie. Acces la literatura științifică și de cercetare*. Available at: https://filosofie.unibuc.ro/acces-la-literatura-stiintifica-si-de-cercetare/. Accessed 28.11.2024.
[28] *Facultatea de Filosofie. Avizier studenți*. Available at: https://filosofie.unibuc.ro/avizier-studenti/. Accessed 28.11.2024.
[29] *Facultatea de Fizică*. Available at: http://fizica.unibuc.ro/Fizica/Main.php. Accessed 28.11.2024.
[30] *Facultatea de Fizică. Cursuri*. Available at: http://fizica.unibuc.ro/Fizica/Studenti/Oportunitati/. Accessed 28.11.2024.
[31] *Facultatea de Fizică. Cursuri*. Available at: http://fizica.unibuc.ro/Fizica/Studenti/Cursuri/. Accessed 28.11.2024.
[32] *Facultatea de Geografie*. Available at: http://geo.unibuc.ro. Accessed 28.11.2024.
[33] *Facultatea de Geografie. Publicații*. Available at: https://geo.unibuc.ro/publicatii-cercetare/. Accessed 28.11.2024

current application interface[34]. In addition, the site does not have a version of the interface in English.

Faculty of Geology and Geophysics[35]. It has no visual identity of the site, but it has a sub-domain from the university website. No library information on the site is reported. Materials on studying, admission, *Civis*, and essential information for students, such as the structure of the academic year, educational plans, schedule, grades, exams, exam sessions, psycho-pedagogical module, etc. are posted. However, the site does not have a version of the interface in English. Also, if too large a number of pages are accessed, there is an error regarding the number of pages accessed.

Faculty of History[36]. It has a visual identity of the site, but it has a sub-domain from the university website, information about the library (history, collections, operating program, link to catalogue, and BCUB) is posted. In addition to the basic information for students, there are links to student clubs, volunteering, and practice. Also, on the site, in the section "Research", are presented the following academic publications: *Revista CICSA*, *Analele Universității București, seria Istorie* and *Romanian Journal of History and International Studies*[37]. The site does not have a version of the interface in English.

Faculty of Journalism and Communication Sciences[38]. It has no visual identity of the site, but it has a sub-domain from the University website, information about the library (history, collections, operating program)[39]. At the end of the page, there is a link to an external site, the digital library, but it is incomplete[40]. In the section "Research", are published invitations to conferences organized by *FJSC*, the description of national and international projects, as well as a series of research reports.

In the section "Students", there are general information such as schedule, academic year structure, taxes, scholarships, accommodation, volunteering opportunities, exams, completion of studies, camps, and student competitions. Also, within this section, there are also information about *ADMA*, a school management app using Google Apps for Education, made available to students[41]. However, the site does not have a version of the interface in English.

Faculty of Foreign Languages and Literatures[42]. It has no visual identity of the site, but it has a sub-domain from the university website. No library information on the site is reported. The section "Research" presents conferences and research projects carried out within the faculty. Various publications are also reported here, and the access of the page offers information about: *Analele UB – Limbi și Literaturi Străine*, *Revista Limbă și Cultură și Revista Romano-Bohemica, Revista Cercurilor studențești ale Departamentului de Limba și Literatura Franceză* [43]. In the main menu, when selecting the "Publications" button, other journals are displayed, such as *Revista Melisendra* and *Revista româno-arabică*. In the section "Students", general information dedicated to them is available. However, the site does not have a version of the interface in English.

Faculty of Letters[44]. It has no visual identity of the site or sub-domain from the university website, managing its own site. The Library of the Faculty of Letters (a brief history, information

[34] *Facultatea de Fizică. Moodle*. Available at: https://geo.unibuc.ro/moodle/. Accessed 28.11.2024.
[35] *Facultatea de Geologie și Geofizică*. Available at: www.gg.unibuc.ro. Accessed 28.11.2024.
[36] *Facultatea de Istorie*. Available at: https://istorie.unibuc.ro. Accessed 28.11.2024.
[37] *Facultatea de Istorie. Publicații Academice*. Available at: https://istorie.unibuc.ro/cercetare/publicatii-academice/. Accessed 28.11.2024.
[38] *Facultatea de Jurnalism și Științele Comunicării. Biblioteca FJSC*. Available at: http://www.fjsc.unibuc.ro. Accessed 28.11.2024.
[39] *Facultatea de Jurnalism și Științele Comunicării*. Available at: https://fjsc.unibuc.ro/biblioteca/. Accessed 28.11.2024.
[40] *Biblioteca Digitală UB*. Available at: https://unibucro0.sharepoint.com/sites/BibliotecaDigitala. Accessed 28.11.2024.
[41] *Facultatea de Jurnalism și Științele Comunicării. ADMA*. Available at: https://fjsc.unibuc.ro/adma/. Accessed 28.11.2024.
[42] *Facultatea de Limbi Străine*. Available at: http://lls.unibuc.ro. Accessed 28.11.2024. Accessed 28.11.2024.
[43] *Facultatea de Limbi Străine. Publicații*. Available at: http://lls.unibuc.ro/publicatii/. Accessed 28.11.2024.
[44] *Facultatea de Litere.* Available at: https://litere.ro. Accessed 28.11.2024.

about structure, program, library ads, as well as a series of events in the library) is presented[45].
In the section "Research", are presented various conferences carried out within the faculty, as well as a series of publications, including the magazine *Revista Analele UB – Limba și Literatura Română*, *Tal@.ro* și *Romanian Studies Today*. Although, initially, there was a link to a virtual tour for students, especially those of the first year who did not have access to the faculty spaces because of the COVID-19 pandemic, it remains functional, but is reported only on the site[46].
The information dedicated to the students includes usual aspects such as schedule, tuition fees, completion of studies, camps, accommodation, student events, optional courses, practice, scholarships, student choices, and alumni network. However, the site does not have a version of the interface in English.

Faculty of Mathematics and Informatics[47]. It has a visual identity of the site, being reported at the end of the page, and a sub-domain from the university website. There are no information about the library on the site. On the first page, in the main menu, the "Research" section includes details about scientific seminars, programs, and grants for young researchers at the University of Bucharest, as well as a series of scientific events and communications for students organized at the faculty level[48]. The information intended for students aims to access accounts and resources for online education, use of the *MoodleUB platform*, institutional email address, student card, *HelpDesk* service, scholarships, medical assistance, psychological counselling, internships, a work editing guide, regulations, and academic calendar, etc.[49]. The site has an English interface, and the content is updated in real time, including the latest ads. Also, the site was restructured, having a new interface, but maintaining the same architecture as the previous version.

Faculty of Psychology and Education Sciences[50]. It has a visual identity of the site and a sub-domain from the university website. The library is reported in the "Students" section, but the available information is limited to the operating program[51]. The section dedicated to publications, which previously included *Journal of Experiential Psychotherapy*, *Revista de Psihologie Organizațională*, *Revista REPERE*, *Revista de Psihopedagogie și Studia Doctoralia*, is no longer active on the site. The information intended for students covers aspects such as schedule, scholarships, student card, useful information, university year structure, volunteering opportunities, taxes, and the process of completing studies. The site does not have a version of the interface in English.

Faculty of Sociology and Social Assistance[52]. It has a visual identity of the site and a sub-domain from the faculty site. It has a new version of the site, but the "Research" section is no longer available, and the information regarding the *Biblioteca Digitală SociolBuc* is not presented. Previously, the section "Students" offered access to information on the schedule, practice, issuing documents, accommodation, career opportunities, scholarships, student camps and summer schools, student guide, scientific communications session, regulations, discipline sheets, and the guide for the editing of the graduation and dissertation theses. In the updated version of the site, this section also includes information about schedule, practice, accommodation, scholarships, exam programming, secretariat, student camps, applicable methodologies, process of completing studies,

[45] *Facultatea de Litere. Întâlniri în Bibliotecă*. Available at: https://litere.ro/media/intalniri-in-biblioteca/. Accessed 28.11.2024.
[46] *Universitatea din București. Tur Virtual*. Available at: https://unibuc.ro/tur_virtual/palatul-ub/. Accessed 28.11.2024.
[47] *Facultatea de Matematică și Informatică*. Available at: https://fmi.unibuc.ro/. Accessed 28.11.2024.
[48] *Facultatea de Matematică și Informatică. Comunicări științifice studențești.* Available at: https://fmi.unibuc.ro/cercetare/. Accessed 28.11.2024.
[49] *Facultatea de Matematică și Informatică. Resurse pentru studenți*. Available at: https://fmi.unibuc.ro/studenti/. Accessed 28.11.2024.
[50] *Facultatea de Psihologie și Științele Educației*. Available at: http://fpse.unibuc.ro/. Accessed 28.11.2024.
[51] *Facultatea de Psihologie și Științele Educației. Biblioteca*. Available at: https://fpse.unibuc.ro/biblioteca/. Accessed 28.11.2024.
[52] *Facultatea de Sociologie și Asistență Socială*. Available at: https://sas.unibuc.ro. Accessed 28.11.2024.

and a general presentation of available services within the University of Bucharest. The site does not have a version of the interface in English. Although a new version of the site has been implemented, the previous version is still accessible, but all data has not been transferred to the new format.

Faculty of Political Sciences[53]. It has no visual identity of the site, but it has a sub-domain from the university website. It has a new version of the site, and the link to the previous version is no longer valid, being replaced with a new wen address. However, the old site is not explicitly reported. In the section "Students", information about the *FSPUB* library is presented including a general description, links to other libraries, access to the databases available through the Anelis Plus platform and various web resources[54]. Students can also find details about the completion of studies, a student guide, exams, schedules, practice, accommodation, etc. The "Research" section includes information on the *Analele Universității din București. Științe Politice* as well as various publications and scientific journals[55]. The site has an interface in English, but not all content is updated in this language.

Faculty of Baptist Theology[56]. It has a visual identity of the site and a sub-domain from the university website. The site has a new version, which contains only the essential information, without signalling the existence of the previous version. The library is mentioned in the section "About us", having a page that provides details about the Library Fund and the operating program[57]. Compared to the sites of other faculties, the information available for students is limited. Moreover, there is no distinct section dedicated to students, such as "Students", to centralize the information relevant to them. The site does not have a version of the interface in English.

The "Justinian Patriarhul" Faculty of Orthodox Theology[58]. It has visual identity of the site and a sub-domain from the university website. In the "Research" section, information about the *Ecclesia* Library is available, including a general description, its organization and sections, as well as access to the online catalogue[59]. Also, the "Carol I" Central University Library, the *Orthodox Theology Branch* is presented [60]. The information intended for students covers aspects such as schedule, completion of studies, scholarships, student dormitories, courses, academic regulations, and methodologies. The site does not have a version of the interface in English.

Faculty of Roman Catholic Theology[61]. It has visual identity of the site, has a sub-domain from the university website. In the "Research" section, library information is available, including a general description and a list of available books. Also, there are details about the Sita annual conference and a series of publications, such as Verbum magazine, Catholic Institute Notebooks and various journals. Also here, information on access to the databases through the Anelis Plus project is provided. For students, the site offers details about time, ads, exams, elections in doctoral schools, student liturgy, theses support, taxes and forms.[62] The site does not have a version of the interface in English.

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[53] *Facultatea de Științe Politice*. Available at: http://fsp.unibuc.ro. Accessed 28.11.2024.
[54] *Facultatea de Științe Politice. Resurse*. Available at: https://fsp.unibuc.ro/resurse/. Accessed 28.11.2024.
[55] *Facultatea de Științe Politice. Analele UB. Seria Științe Politice*. Available at: https://fsp.unibuc.ro/publicatii/. Accessed 28.11.2024.
[56] *Facultatea de Teologie Baptistă*. Available at: http://ftb.unibuc.ro/. Accessed 28.11.2024.
[57] *Facultatea de Teologie Baptistă*. Available at: https://ftb.unibuc.ro/despre-noi/biblioteca/. Accessed 28.11.2024.
[58] *Facultatea de Teologie Ortodoxă „Justinian Patriarhul"*. Available at: https://ftoub.unibuc.ro/cercetare/bcub-filiala-teologie-ortodoxa/. Accessed 28.11.2024.
[59] *Facultatea de Teologie Ortodoxă. Biblioteca Ecclesia*. Available at: https://opac3.ftoub.qulto.ro/ro/search/-/search/clearform. Accessed 28.11.2024.
[60] *Facultatea de Teologie Ortodoxă. BCUB – Filiala teologie Ortodoxă*. Available at: https://ftoub.unibuc.ro/cercetare/bcub-filiala-teologie-ortodoxa/. Accessed 28.11.2024.
[61] *Facultatea de Teologie Romano-Catolică*. Available at: https://ftcub.unibuc.ro. Accessed 28.11.2024.
[62] *Facultatea de Teologie Romano-Catolică. Cercetare*. Available at: https://ftcub.unibuc.ro/activitati-stiintifice/. Accessed 28.11.2024.

Conclusions

The analysis of the University of Bucharest website highlights the importance of digital resources for students and teachers, especially in the context of the transition to online education. Although the University provides access to a wide range of educational resources – libraries, databases, e-learning platforms and academic publications – there are aspects that require improvements. These include the lack of constant information update, the limited accessibility of some resources, and the need to better integrate digital platforms.

From the point of view of technologies, of the applications used in the education process, the faculties need to take an extra step in the direction of training students and teachers in the use of learning resources, so that each of them knows how to display information on the site, use online applications, consult databases and tutorials, etc.

Generally analysing the information published on the websites of the 19 faculties of the University of Bucharest, the most important information accessed by the students, before the COVID-19 pandemic, were about admission, the structure of the academic year, the necessary study and information programs about the completion of the education program, and most of the students preferred physical resources when the libraries were functioning.

The faculty websites have developed unequally from the point of view of the structure and information provided and do not fully meet the information needs of the students, especially during the COVID-19 pandemic period when, for some of them, the site represented the only source of information.

Observing the sites of the faculties of the University of Bucharest from the point of view of the general resources and information provided during the COVID-19 pandemic, as well as today, the following conclusions can be drawn:

- Each faculty site has developed its own content in a different way, and addressed a different structure as there is no unitary format;
- Most often, on the faculty websites, there are information about publications and libraries in the “Research” section;
- On some sites, the information for the students is not centralized in a clear section, but are dispersed in different pages or hidden under sliding buttons, which makes quick access to essential data (time, scholarships, accommodation, etc.) difficult;
- Only the Faculty of Mathematics and Informatics, the Faculty of Law, and the Faculty of Administration and Business refer, through a link, the Moodle platform of the University of Bucharest and the databases offered by it on the site through the *ANELIS* project;
- The documentation resources posted on the faculty websites are considered insufficient, and, often, the addresses indicated on the sites are not functional because they are not updated;
- Many of the faculty libraries are not reported on the site or have only a short presentation and a link to the online catalogue. Library information is presented in the form of a table or are difficult to follow;
- There is emphasis on admission information, but less on the completion of studies;
- Some valuable initiatives, such as digitisation projects of academic collections, are no longer accessible to the public because of the non-functional links or lack of update;
- There is a discrepancy between the faculty websites regarding the English version of the sites. Some offer an updated and accessible interface, while others do not have a translated version or the English content is not completely updated; some faculties have gone to new versions of the sites, but the process of migration of information is not completed, which leads to the loss of valuable resources or difficulties in accessing them.

The analysis of the faculty websites shows a diversity in the way of organising and presenting the information, some faculties having well-structured pages, while others offering incomplete or difficult resources to access. A unitary strategy of managing online resources could improve users' experience, facilitating students' access to study materials and promoting a more efficient academic environment.

In conclusion, the University of Bucharest has made significant progress in digitising educational resources, but a continuous optimization of platforms is required to better respond to the needs of the academic community.

This study is based on the PhD thesis *Information and Documentation Resources in University Education* / Ștefan-Cristian Ciortan, Elena Tîrziman (tutor), Faculty of Letters, University of Bucharest, September 9, 2022 (public presentation). The information has been updated as of March 1, 2025.

References

'Edituri' (n.d.) *UniBuc - Universitatea din București*, available: https://unibuc.ro/despre-ub/resurse-educationale/edituri/ [accessed 3 Aug 2025].

Învățământul Universitar Din România În Contextul Pandemiei COVID-19: Experiențele Studenților [online] (2025) *Programul Fondul pentru Inovare Civica in Romania*, available: http://inovarecivica.fdsc.ro/invatamantul-universitar-din-romania-in-contextul-pandemiei-covid-19--experientele-studentilor [accessed 3 Aug 2025].

Joyce Lexicography - Contemporary Literature Press [online] (2025) available: https://editura.mttlc.ro/Joyce%20Lexicography.html [accessed 3 Aug 2025].

Larisa (2020) 'Resurse educaționale online', *UniBuc - Universitatea din București*, available: https://unibuc.ro/resurse-educationale-online/ [accessed 3 Aug 2025].

Poetry pRO Translation English to Romanian [online] (2025) available: http://www.poetrypf.co.uk/poetrypro.html [accessed 3 Aug 2025].

'Resurse electronice' (n.d.) *UniBuc - Universitatea din București*, available: https://unibuc.ro/despre-ub/resurse-educationale/resurse-electronice/ [accessed 3 Aug 2025].

Saftiuc, B. (n.d.) 'Acces la baze de date științifice', *Biblioteca Centrală Universitară*, available: https://www.bcub.ro/acces-la-baze-de-date-stiintifice/ [accessed 3 Aug 2025].

Scurt istoric al învățământului superior românesc: cele mai vechi universități românești [online] (2025) available: https://historia.ro/sectiune/general/scurt-istoric-al-invatamantului-superior-romanesc-576055.html [accessed 3 Aug 2025].

'Scurtă prezentare' (n.d.) *UniBuc - Universitatea din București*, available: https://unibuc.ro/despre-ub/ub-astazi/scurta-prezentare/ [accessed 3 Aug 2025].