Summary

THE DIGITAL CAPITAL INDEX IN THE CONTEXT OF THE TRANSITION TO DIGITALIZATION OF THE SOCIAL WORK SYSTEM

New perspectives in socio-human research explore the impact and importance of digital technologies in the context of contemporary society. In the first theoretical part of this paper, we emphasized that digital sociology is relevant for understanding how technologies influence everyday life, social relationships, and economic structures. The theory and applicability of digital sociology are presented through various paradigms and specific terms such as "cyber sociology" and "internet sociology." The term "digital" gains significant relevance in the specialized literature, indicating the transformation of content into digital formats and the widespread use of these technologies in various aspects of social and economic life. In this context, access to education and information becomes a determining factor in shaping individuals' economic and social opportunities.

Education and knowledge are considered fundamental principles of modern society, influencing both the social structure and the distribution of power and resources. The evolution towards a knowledge society marks the transition from economic activities based on physical labor to those based on knowledge and information, thereby transforming economic and social dynamics. In a knowledge-based society, disparities in access to educational and informational resources can amplify social inequalities. At the same time, new digital technologies are redefining the way social data is collected and analyzed, contributing to the emergence of the "big data" phenomenon, with significant implications for the privacy and security of personal information.

Digital sociology is becoming an important sub-discipline in the analysis of these phenomena, investigating the impact of digital technologies on identity and social relationships. The actor-network theory and the theory of homophily in networks are relevant for explaining polarized behaviors and social dynamics in the digital environment. Digital sociology offers new and relevant perspectives on the interactions between technology and society, highlighting how new digital technologies shape social and economic structures, profoundly influencing social dynamics and the distribution of resources.

In a society characterized by accelerated digitalization, digital capital becomes a fundamental component for understanding social inequalities and how they are reflected in the online environment. Digital capital can be accumulated and transferred, similar to other forms of capital, and interacts with them in an ongoing process of conversion. The use of digital technologies requires both material resources, such as hardware and software, and intangible skills, such as digital abilities and knowledge. The interaction of digital capital with other forms of capital is complex and bidirectional. The efficient use of digital technologies can amplify an individual's social and cultural capital, while high levels of these types of capital can facilitate the

accumulation and use of digital capital. However, inequalities in access to technology and digital skills can exacerbate existing social disparities, disadvantaging those with limited access or skills in accumulating and utilizing digital capital. The level of digital capital is shaped by ongoing interaction with digital technologies and influenced by the level of other forms of capital held by the individual.

Familiarity with the concept of the digital divide and its various perspectives, as well as recognizing the ways in which technological benefits are not evenly distributed, can facilitate the identification of technological needs. This approach can contribute to the development of better-structured policies and frameworks to address these needs and to increase efforts to reduce and eliminate digital gaps. Although digital skills and digital literacy influence digital life, there are gaps in understanding how these dimensions affect active participation in society, thus highlighting social inequalities in a digital society.

Socio-demographic factors such as gender, age, ethnicity, education level, and social background are correlated with the digital divide. For example, studies show that women tend to use digital technology for social communication more than men, who prefer online gaming (Alkan & Meinck, 2016; Pagán et al. 2018). At the same time, age significantly influences the use of digital technology, with older people tending to exhibit anxiety and technophobia towards new technologies (Friemel, 2016). Similarly, income directly influences internet consumption behavior, with higher-income individuals having access to more resources and social support to develop digital skills (Zhang, 2013).

Ethnicity and social background also influence the digital divide. Students from non-immigrant families tend to score higher on computer and information literacy (CIL) compared to those from immigrant families (Fraillon et al. 2020). Additionally, the language barrier represents a significant obstacle in the use of digital technology for people who do not speak the predominant language of digital content (Heemskerk et al. 2012).

The digital divide not only affects access to and use of technology but also the opportunities and benefits derived from its use. Inequalities in digital skills and access to technologies influence job market opportunities, access to information and services, and ultimately, social and political participation. Therefore, to fully understand the impact of the digital divide, an integrative approach is needed that considers both socio-demographic factors and the social and cultural context of digital technology use.

The purpose of this thesis is to investigate and map the domains of knowledge of digital capital, digital inequalities, and the digital competencies required in the field of social assistance. Through empirical research, this paper aims to contribute to the understanding and integration of digital competencies in social work education and practice, considering the challenges and opportunities brought by digitalization.

This paper is structured into three theoretical chapters, each accompanied by three empirical studies. The research methodology adopts a mixed approach, utilizing both qualitative and quantitative research

methods. Methodological triangulation enhances the rigor of the study by combining several complementary research strategies, reducing potential errors concerning the validity and reliability of the results.

The first theoretical chapter supports the approach that digital capital can be integrated as a distinct form of capital within existing sociological theories. In a society increasingly influenced by digital technologies, digital capital plays a central role in understanding and analyzing modern social and economic dynamics. In the first section, the paper explores the emerging field of digital sociology, a study area that examines how digital technologies influence daily life, social relationships, and economic structures. Various terms, such as "internet sociology" and "social media sociology," reflect the multitude of directions in which this field is developing. In a digital society, digital technologies have profoundly transformed how we interact, manage information, and generate knowledge. Access to education and information has become a central pillar in structuring social relationships, influencing the individual's position and role in society.

As knowledge becomes a fundamental principle of societal organization, digital sociology gains increasing importance. The concept of the knowledge society, introduced by Drucker and elaborated upon by Bell, emphasizes the fundamental transformations in the workforce structure and the shift from professions based on physical labor to those based on knowledge. This evolution not only redefines the economy but also influences social relationships, values, and how communities are organized and developed.

The next section focuses on digital capital, considered an essential component in modern society. In the theoretical foundation of the term, Bourdieu's theories were taken into account, so in this paper, digital capital is seen as a valuable resource that can be accumulated, transferred, and converted into other forms of capital. This concept integrates digital competencies and access to technology, which are essential for navigating and capitalizing on opportunities in the digital environment. Research shows that like other forms of capital (cultural, economic, social, political, and personal), digital capital requires an investment of time and effort to accumulate. Thus, individuals with a high level of digital capital can more effectively leverage the resources available online, transforming them into tangible benefits that contribute to improving their quality of life.

The final section of the chapter analyzes how digital capital interacts with other forms of capital and contributes to reducing social and digital inequalities. The use of digital technologies is influenced by individuals' tangible and intangible resources, generating outcomes that can be converted into economic, social, and cultural benefits. The concept of digital habitus, derived from Bourdieu's theories, highlights how an individual's experiences and resources influence the use of digital technologies. Digital habitus and the digital field are important for understanding how individuals accumulate and leverage digital capital.

The second chapter explores the digital divide in higher education in Romania, highlighting access to digital technologies (DT) and the level of digital skills. In the past, studies focused on the discrepancies between those who had internet access and those who did not, and the factors contributing to these inequalities. With

the increasing level of access to devices, inequalities now manifest in terms of opportunities to develop digital skills and the ability to transfer new knowledge gained online into offline life. In the early stages of internet expansion, disparities in access were an important topic in public policy due to possible effects on access to education, the labor market, healthcare services, and political participation. Research has redefined the notion of access from both technical and social perspectives, referring to the ways individuals use the internet after establishing a connection (DiMaggio & Hargittai, 2001).

To better understand the digital divide in higher education, it is essential to analyze Romania's digital profile. Regional development influences individuals' access to digital infrastructure and economic opportunities to invest in education and training for acquiring digital skills. Access to and use of the internet are affected by regional economic disparities, influencing the motivation for internet use. According to the Digital Economy and Society Index (DESI), Romania ranks among the last in Europe in terms of digital skills and internet usage. There is a clear digital divide between the urban and rural populations, with women using the internet less than men, and significant differences related to age and occupational status, with young people and employed individuals being more active online.

In 2019, Romania was among the last in terms of digital performance according to DESI, despite the presence of IT specialists and good connectivity. The digitalization process risks accentuating Romania's competitiveness gap compared to other EU countries. Romania's 2020 National Digitalization Strategy aimed to integrate ICT into education by equipping schools with ICT infrastructure, developing digital skills among students and teachers, and promoting open educational resources. These measures were intended to reduce the discrepancies between urban and rural areas and improve educational efficiency. The digital divide in higher education in Romania is influenced by multiple socio-economic and regional disparities. The effective integration of DT in education and the development of digital skills are essential and necessary for reducing inequalities and promoting digital inclusion.

The third chapter discusses the process of adopting digital technologies in education, training, and practice in social work, with the foundation justified by the need for a paradigmatic shift in pedagogy, where the focus shifts from merely teaching theoretical knowledge to developing essential digital skills for the modern practice of the profession. The traditional content-centered paradigm is gradually being replaced by an educational model that promotes competencies and performance, emphasizing the importance of transferring and applying knowledge in real-world situations (European Commission, 2016; OECD, 2005; UNESCO, 2011).

In the context of social work, technology-mediated learning, simulation-based learning, experiential learning, and gamification are relevant methods that combine digital technologies with practical education. Technology-based simulations and virtual reality (VR) allow students to practice and improve their skills in a

safe environment, preparing them for real-life situations (Craig et al., 2017). Additionally, experiential learning and gamification enhance student engagement and the development of interpersonal and cognitive skills.

In the last two decades, digital social work has become an important topic of discussion, addressing the utility and ethics of using technology in social work education and practice. This evolution contributes to the improvement of ethical standards, skills, and relational approaches in social work practice. In this context, preparing students in digital literacy becomes essential for collaborating with other specialists and promoting human rights. Active student engagement in technology-related field tasks offers numerous benefits, including the opportunity to use online social work methods and ethics, involvement in the development of technological products that promote inclusion, and collaboration with organizations providing social services.

Digital social work not only enables more efficient and faster interventions but also creates opportunities for social innovation. Digital technologies in social work education not only enhance the learning process but also facilitate collaboration between students and teachers, promoting a student-centered educational environment. The use of digital technologies as an educational tool modernizes the curriculum and allows students to acquire the skills necessary to meet the demands of a digital and interconnected society. The integration of digital technology into social work brings multiple advantages but also theoretical, ethical, and practical challenges. Rapid technological development redefines traditional methods of social intervention, influencing the relationships between social workers and clients.

From a theoretical perspective, digital ecosystems are essential for understanding the process of digital inclusion. These ecosystems are based on the dynamic interaction between individual development and contextual factors, offering interconnected technological resources that support social interventions. The ethical aspects of digitizing social services include protecting confidentiality and privacy, managing expectations, and maintaining effective and secure communication with clients. Social workers must navigate ethical dilemmas related to the use of social networks and other digital tools, ensuring that professional boundaries are clearly defined and respected.

Technology-mediated social work practice requires the development of specific skills for the efficient use of digital tools. Social workers need to adopt a participatory approach in the development and implementation of technologies, collaborating with professionals from various fields to ensure that technological solutions meet clients' needs. In addition, strategies need to be developed to address digital inequalities and ensure universal access to technological resources.

In the first empirical study, the research approach included exploring and identifying elements of digital literacy and digital skills in the context of education, emphasizing their importance for lifelong learning and the preparation of future generations of social workers. Through a conceptual and operational analysis, digital literacy is investigated in relation to individuals' ability to use and evaluate digital resources for personal

development. Digital skills are also analyzed as a complex set of essential aptitudes for navigating and actively participating in the digital society. The study investigates how digital skills are integrated into undergraduate Social Work programs using a mixed-methods approach based on the European DigComp 2.2 framework. The method combines exploratory and descriptive approaches, and the content analysis of educational standards examines the extent to which digital skills are integrated into existing study programs.

The results provide a detailed perspective on the presence and quality of digital skills development in Social Work education. By applying the Step-by-step model (Mayring, 2001; 2012), the study goes through the essential stages of research: establishing research questions, theoretical contextualization, defining the research design, delimiting data collection and analysis methods, and drawing conclusions, offering a comprehensive understanding of educational initiatives in this field.

The second study explores students' perceptions of digital skills and the usefulness of digital technologies (DT) in Social Work practice. The main goal is to identify the training and development needs of these skills, which are essential for future social workers. In this regard, the research measures the level of digital skills in the five competence areas of the DigComp model, and identifies and presents students' perceptions regarding the usefulness of DT in social work practice and intervention. Additionally, it aimed to identify the non-formal support network that students use in situations of digital liminality. The study is based on a sociological survey methodology.

The results of this paper highlight important correlations between the Digital Capital Index (DCI) score and various socio-demographic characteristics such as age, socio-economic status, and education level. It is important to note that these correlations vary depending on each specific area of digital skills. The Digital Capital Level Index (DCLI) for ($N = 214$) is ($M = 3.62$).

Referring to the scores recorded by participants in the 5 areas of competence, in terms of digital and informational literacy, the average skills in this area are 3.68. The analysis did not identify significant differences regarding the distribution of the average in relation to participants' gender or background.

Communication and collaboration skills recorded the highest average ($M = 3.85$). These skills vary significantly depending on age and socio-economic status, indicating that access to digital resources and development opportunities plays an important role in the level of competence perceived by young people.

Digital content creation is the area with the lowest average ($M = 3.26$). In this area of skills, the distribution of the variables of gender and background influenced the recorded level of skills, with young people from rural areas showing higher competencies compared to those from urban areas.

Online safety was perceived as the highest among all areas of digital skills, with an average of ($M = 4.00$). The score obtained in this skill dimension is significantly influenced by socio-economic status and parents' education level, particularly the mother's.

Problem-solving skills had an average of ($M = 3.26$). Socio-economic status and parents' education level influenced this score in this skill area, but the variability was not as pronounced as in other areas.

Analyzing the initial hypotheses, not all were fully confirmed. For example, the influence of gender on the level of digital capital was not statistically significant [$r^2 (214) = .018$, $F = .150$, $b = .054$, $\beta = .027$, $p > .05$], contradicting initial expectations. In contrast, age ($F = 4.142$; $p < .000$; $R^2 = .019$) and socio-economic status ($F = 4.142$; $p < .000$; $R^2 = .001$) had a significant impact on the Digital Capital Index (DCI) score, partially confirming the hypotheses.

In our sample, participation in alternative digital literacy courses does not correlate positively with the respondents' DCI level. On the other hand, modeling DCI according to the year of study indicates a statistically significant influence, with results showing that the year of study is a significant predictor of the level of digital skills, suggesting that as students advance in their studies, their digital skills improve.

Statistical analyses confirm the hypothesis ($p < 0.05$) that students more frequently use digital platforms designed for social media for educational purposes, rather than digital platforms and products designed specifically for educational purposes.

The results of this research note the frequent use of digital technologies among students to maintain social relationships. Young people predominantly use instant messaging platforms and social networks to stay connected with family and friends. WhatsApp, for example, is constantly used to facilitate quick and efficient communication within study groups and among colleagues, with an average usage frequency of ($M = 5.26$). Additionally, platforms like Facebook/Messenger play a significant role in facilitating social and academic interactions, providing a conducive environment for the exchange of educational resources and mutual support.

Regarding entertainment activities, smartphones and laptops are the preferred devices. The distribution of frequencies shows significant variability in the use of digital technologies for online games, with an average of 3.53, indicating that about one-fifth of participants intensively use these technologies for entertainment, while a similar proportion avoids them entirely. Online collaboration platforms, such as Microsoft Teams and Google Classroom, are integrated into academic activities, facilitating distance learning and real-time collaboration.

Another important aspect is the use of digital technologies for purchasing goods and services. E-commerce has seen significant growth, with young people being attracted by the facilities offered by online platforms, such as product diversity and home delivery. The use of digital technologies for shopping is frequent, with an average of 4.43, reflecting the general trends in contemporary society. The use of these technologies is determined by individual goals and motivations, with a clear preference for platforms that offer flexibility and efficiency in communication and collaboration.

The use of digital technologies in the education and practice of social work in Romania requires a significant change in professional training. Adapting the educational curriculum to include digital skills is essential, considering the increasingly important role of technology in the professional and personal lives of social workers. The evolution towards a competency-centered education model, in contrast to the traditional content-centered one, emphasizes the acquisition of essential skills and the ability of students to use these skills in various professional contexts. Additionally, technology-mediated learning, including simulations and virtual reality, offers students opportunities to develop their skills in a protected environment before interacting with real-life situations.

Implementing digital technologies in social worker training facilitates a hybrid educational approach that combines traditional and innovative methods. This approach allows students to benefit from both theoretical and practical learning while promoting the development of critical skills and transversal competencies needed to face contemporary challenges.

Bronfenbrenner's Ecological Systems Theory provides a useful theoretical framework for understanding digital ecosystems. It suggests that individual development is influenced by multiple contextual levels and interactions, which requires social workers to consider these complex dynamics in delivering digital social services.

On the other hand, the use of digital technologies raises significant ethical challenges, including managing professional boundaries and protecting personal data. Social networks can blur the boundaries between the personal and professional lives of practitioners, promoting informal interaction that can undermine professionalism. Social workers must navigate these environments carefully, self-censoring published information and managing clients' access to personal data. Implementing clear organizational policies and a specific code of ethics is essential to address these dilemmas.

Furthermore, digital technologies can exacerbate the digital divide, making social services less accessible to groups without digital access or skills. Although technology can facilitate access to services for certain groups, such as socially withdrawn youth, it can create additional obstacles for others. In the context of a rights-based approach, digital social intervention should ensure universal access to the internet and technology, promote their safe and inclusive use, and support necessary policy changes to protect digital rights.

In exploring students' perceptions of the usefulness of digital technologies (DT) in social work practice, 17 fundamental dimensions for the sustainability of intervention in this field were identified. The analysis highlighted three major areas of DT applicability: management and streamlining of administrative tasks, client counseling and monitoring, and collaboration and professional development. The study revealed that 50% of participants consider DT extremely useful for updating information on intervention methods, managing databases, and formatting necessary documents. Additionally, 51.4% of respondents stated that DT is very

useful for interinstitutional communication and collaboration, facilitating service coordination and improving outcomes for beneficiaries.

Regarding case monitoring and intervention planning, 44.4% of participants recognized the high utility of DT for these activities. However, activities related to client counseling and maintaining a trust relationship with beneficiaries recorded the lowest averages of utility. These observations indicate the need for continuous training and the development of digital skills to optimize the use of DT in all aspects of social work.

To improve the quality of education in social work and prepare students for future challenges, a holistic and integrated approach to digital literacy is necessary. The content analysis results from this paper reveal that ARACIS standards and curricula do not systematically include the development of digital skills. Although there is a complementary subject, "Social Informatics," aimed at developing some digital skills, it is not mandatory and does not cover all student needs. Digital skills are considered to be acquired implicitly or assumed to already exist, leading to a lack of structured assessment and development of these skills. The study also highlights a significant gap in the specialized literature in Romania regarding digital skills in social work. There is insufficient evidence to explain the source of these skills and the role of the context in which they are acquired by students. Detailed analyses could provide a deeper understanding of the effectiveness of both formal and informal practices in the digital literacy process, potentially leading to significant improvements in training future social workers.

The third study uses a qualitative approach to explore the role of digital skills in the education, training, and integration of social workers into the labor market. The research leverages the perspectives of heads of Social Work departments and employers in the social services field, analyzing how digital skills can support the professional development of social workers and identifying the benefits and challenges associated with the use of digital technology in this field.

From the perspective of the heads of social work departments who participated in this research, universities have the responsibility to develop professionals capable of meeting job demands, but digital inequalities can influence course participation and student academic success. Differences in perceptions of digital inequalities are influenced by the type of institution: large university centers (e.g., University of Bucharest) vs. smaller universities. Students from smaller universities benefit from more frequent interaction with teachers, facilitating the identification and resolution of digital inequalities where resources are available. Digital inequalities among students are associated with limited access to technology and a low level of digital skills, exacerbated by age, socio-economic status, ethnic background, and the presence of a disability.

Digital skills are fundamental in social work, both for interacting with clients and for collaboration within the multidisciplinary team. Developing strategies to minimize digital inequalities among students and social workers is necessary. The main difficulties include a lack of collaboration between teachers and students,

resistance to change from teachers, and limited use of technology in the teaching process. Implementing digital technology in education requires continuous teacher training and adapting pedagogy to student needs.

From the perspective of employers in the social field, the digitalization of social services is essential for reducing bureaucracy and improving the efficiency of social workers' tasks. The main advantages include work efficiency and data accessibility, but major challenges are related to the lack of technological infrastructure and insufficient staff training. Implementing digitalization requires proper preparation and gradual adaptation.

Participants emphasized that limited access to technology and varying digital skills are the main causes of the digital divide among social workers. An effective digital literacy strategy should target professionals in rural areas and include basic ICT courses and continuous training for all actors involved in the social assistance system, including clients.

Based on the results of this research, a digital profile of the novice social worker was developed, mentioning the skills needed to navigate efficiently in the digital environment. These skills include continuous learning, demonstrating professional behavior online, assessing digital risks and opportunities, applying professional ethics, and integrating digital tools into social practice. Another important outcome of this work is the drafting of a policy recommendation document on the inclusion of digital technologies in the educational curriculum of social work specialization.

The digital profile of a novice social worker includes competencies in information and digital literacy, communication and collaboration, digital content creation, digital security, and problem-solving (as operationalized in Tab.14). These skills are essential for effectively managing administrative tasks and professional interaction in the digital environment. To create opportunities for the next generation of social workers to come as close as possible to this digital profile, it is necessary to integrate digital skills courses into the curriculum, ensure access to modern technological infrastructure, and collaborate closely with employers to adapt the curriculum to labor market requirements. Digital inclusion policies and investments in infrastructure and continuous training can significantly reduce digital inequalities.