OPEN ACCESS
perspektywy kultury / perspectives on culture
No. 48 (1/2025)

Andrzej Adamski
http://orcid.org/0000-0002-4075-4224
University of Information Technology and Management in Rzeszow
aadamski@wsiz.edu.pl
Marlena Krawczyk-Suszek
http://orcid.org/0000-0003-4100-588X
University of Information Technology and Management in Rzeszow
mkrawczyk@wsiz.edu.pl
Justyna Berniak-Woźny
http://orcid.org/0000-0002-3156-5755
SWPS University
jberniak-wozny@swps.edu.pl
Małgorzata Gosek
http://orcid.org/0000-0002-9645-9232
University of Information Technology and Management in Rzeszow
mgosek@wsiz.edu.pl
Arkadiusz Gaweł
http://orcid.org/0000-0001-8668-5626
University of Information Technology and Management in Rzeszow
agawel@wsiz.edu.pl
DOI: 10.35765/pk.2025.4801.16

Media Education and the Well-Being of Society: A Social and Medical Sciences Perspective

ABSTRACT

The impact of media, particularly digital media, on societal well-being, has been a subject of ongoing discussion. However, research in this area that can be effectively utilized by decision-makers remains scarce. This article explores key themes and emerging research trends in media literacy and its impact on societal well-being. The authors conducted a bibliometric analysis using scientific mapping techniques and an executive summary approach. The analysis was based on 85 publications from the Scopus database, utilizing MS Excel and VOSviewer for data processing. The findings reveal that the intersection of media literacy and societal well-being requires further research, leading to a scarcity of studies and limited influence on policy and decision-making in this area. Consequently, the impact of media, especially digital media, on societal wellbeing is not taken into account in the development of core curricula in child and adolescent education and preventive health programs for adults. There is a significant need for greater attention and commitment to this area of research. Due to the topics, research fields and methodologies applied, the article is relevant to several scientific disciplines. Media literacy is directly related to communication and media studies, while public health policy fits

Suggested citation: Adamski, A., Krawczyk-Suszek, M., Berniak-Woźny, J., Gosek, M. i Gaweł, A. (2025). Media Education and the Well-Being of Society: A Social and Medical Sciences Perspective. *Perspectives on Culture*, 1(48), pp. 255–284. DOI: 10.35765/pk.2025.4801.16
Submitted: 09.05.2024 Accepted: 06.09.2024

into management and quality studies. The examination of well-being and the impact of media on health falls within the medical sciences.

KEYWORDS: media literacy, well-being, health, public health policy, management

STRESZCZENIE

Edukacja medialna a dobrostan społeczeństwa: perspektywa nauk społecznych i medycznych

Wpływ mediów, zwłaszcza cyfrowych, na dobrostan społeczeństwa jest przedmiotem dyskusji od dłuższego czasu. Badania w tym obszarze, które mogą być skutecznie wykorzystane przez decydentów, są jednak bardzo rzadkie. Celem niniejszego artykułu jest zidentyfikowanie głównych tematów i trendów badawczych w obszarze edukacji medialnej i jej wpływu na dobrostan społeczeństwa. Autorzy zastosowali analizę bibliograficzną, wykorzystując techniki mapowania naukowego i tworząc analizę wykonawczą. Do analizy bibliograficznej wybrano łącznie 85 publikacji z bazy danych Scopus. Przeprowadzono ją przy użyciu aplikacji MS Excel i VOSviewer. Wyniki badań wskazują, że edukacja medialna i jej wpływ na dobrostan społeczny są rzadko badane przez naukowców, co skutkuje ograniczonymi wynikami badań i minimalnym wpływem na procesy decyzyjne w tej dziedzinie. W rezultacie, wpływ mediów, zwłaszcza cyfrowych, na dobrostan społeczeństwa nie jest uwzględniany przy tworzeniu podstaw programowych w edukacji dzieci i młodzieży oraz programów profilaktyki zdrowotnej dorosłych. Istnieje znaczna potrzeba większego poświęcenia i zaangażowania w ten obszar badań. Ze względu na tematykę, a także obszary badawcze i zastosowane metodologie, artykuł można przypisać do kilku dyscyplin naukowych. Tematyka umiejętności korzystania z mediów odnosi się bezpośrednio do studiów nad komunikacją i mediami. Polityka zdrowia publicznego wpisuje się w badania nad zarządzaniem i jakością. Z kolei tematyka dobrostanu i wpływu mediów na zdrowie człowieka wpisuje się w obszar badań nauk medycznych.

SŁOWA KLUCZE: edukacja medialna, dobrostan, zdrowie, polityka zdrowia publicznego, zarządzanie

Introduction

This article is grounded in social communication and media studies while also incorporating references to the medical aspects of addiction, health policy, pedagogy, and management. Its primary objective is to identify key themes and research trends in media literacy and its impact on societal

well-being. Additionally, it seeks to develop a policy briefing and outline a future research agenda. In particular, the paper covers a bibliometric analysis in the field of media literacy and well-being.

The authors formulated the following research questions:

RQ1. What is the research dynamic regarding the impact of media literacy and media literacy education on well-being?

RQ2. What is the intellectual structure of the research, and what are the key themes in the study of the impact of media literacy and media literacy education on well-being?

RQ3. What are the current research gaps and potential future directions in the area of media literacy and media literacy education on well-being?

The article is structured as follows: the next section provides background information for the study, followed by Section 3, which outlines the methodology and datasets used. Section 4 presents the main findings, while Section 5 explores the implications of these results. The final section concludes with a summary and recommendations for future research.

Mass media, media literacy and well-being: state of the art

Media literacy is traditionally defined as the ability to access, understand, and create media content across various contexts. Aufderheide (Ofcom, n.d.) describes it as a citizen's capacity to access, analyze, and produce information to achieve specific outcomes. Livingstone and Bovill (1999) broaden this definition, emphasizing the ability to trace information to its primary source and to assess the strengths, limitations, and framing of media content. Hobbs (2010) highlights the importance of the critical evaluation of news, advertising, and entertainment within mass media. The European Commission adopts a comprehensive approach, defining media literacy as encompassing technical, cognitive, social, civic, and creative skills that empower citizens to engage critically with media, participate in economic, social, and cultural life, and contribute to democratic processes. This concept applies universally across all media types (television, radio, print) and channels (traditional, internet, social media), as well as across all age groups (European Commission, n.d.; Łęcicki, 2010; Matusiak, 2020).

Potter (2013) identified three basic principles relating to media literacy: (a) media literacy should focus on all forms of media; (b) media literacy

should be seen as both skills (mainly critical thinking) and knowledge (about types of media, how the media work and how they affect people); and (c) media literacy should improve people's lives, giving them greater control over the media and awareness of the impact of the media on their lives.

Media literacy is recognized as a crucial competence for individuals of all ages in today's highly mediatized and digitized societies (Alcalá, 2019; Livingstone et al., 2012). The literature identifies three core areas influenced by media literacy: (a) democracy, participation, and active citizenship; (b) choice, competitiveness, and the knowledge economy; and (c) lifelong learning, cultural expression, and personal fulfillment (Livingstone et al., 2005). Consequently, integrating media literacy education into public education strategies at national, regional, and global levels is essential. In this research, media literacy is understood as a set of competencies encompassing the conscious, critical, and responsible use of various media types for cognitive, educational, and self-expressive purposes. It includes technical, ethical, and legal aspects of media use, evaluating content credibility, selective and responsible media consumption, understanding the impact of media on health and well-being, and the ability to collaborate with media producers.

The WHO defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (Krawczyk-Suszek & Kleinrok, 2022). A slightly different approach is found in Antonovsky's concept of salutogenesis, which emphasizes the importance of factors such as satisfaction, coping with stress, self-realization, perceiving meaning, social bonds, and coping with change (Antonovsky, 2005). Salutogenesis focuses on maintaining health. It also acknowledges that individuals are constantly affected by external and internal stimuli, with normal functioning being a dynamic state of equilibrium Antonovsky's model facilitates the analysis of prevention and risk factors, influenced by such aspects as stressors, immune resources, sense of coherence, and behavior and lifestyle (Antonovsky, 2005).The onion theory of happiness by J. Czapiński divides happiness and well-being into three levels and explains the mechanisms through which individuals return to balance after a crisis (Czapiński, 2012). The theory posits assumes that overall psychological well-being depends on a constant, genetically determined will to live and on variables of the general mental well-being (intermediate layer) on top of the level of life satisfaction (the outermost layer) (Czapiński, 2012). According to the theory, psychological well-being has a personal motivating function, influences the directions of actions, and determines the achieved results (Adamski, 2022; Czapiński, 2012). The subjective perception of well-being is shaped by specific circumstances, especially in the case of long-term evaluation (Sfeatcu, 2014).

The definitions above highlight the importance of not only physical well-being but also the mental sphere as a factor determining overall health. Mental health disorders can significantly affect an individual's general sense of health, with one contributing factor being addiction to uncontrolled use of the internet and the media. Promoting mental health and well-being is a key priority in the 2030 Agenda for Sustainable Development for all countries (UNIC Warsaw, n.d.).

The digitization of radio and television, along with the new possibilities of these media offer (which were very limited in the analog world), has contributed to changes in the mentality of media consumers (Drzewiecki, 2010). While technological advancements facilitate daily life, they have also led to negative health effects in both the physiological and psychological spheres (Akarsu, Budak, & Okanlı, 2022). The education system implemented during the Covid-19 pandemic further increased the frequency of using electronic devices, with screen time rising to as much as 12 hours a day (Lange, 2021). Even before the pandemic, it had been pointed out that 6% of the world's population was addicted to the internet (Cheng & Li, 2014). Other addictions resulting from uncontrolled use of the internet should also be mentioned, such as cyberbullying (Caceres & Holley, 2023; Wojtasik, 2008) and gaming addiction (Bójko, 2019).

The emergence of new mobile technologies tends to result in new patterns of behavior among children and adolescents. An inseparable characteristic of Generation Y (18 to 35) is smartphone ownership, and the use of these devices is systematically increasing (Demirci, Akgönül, & Akpinar, 2015). Studies have reported a detrimental effect of smartphones on the quantity, quality, and duration of sleep, especially when smartphone use occurs just before bedtime (Calamaro et al., 2009; Van den Bulck, 2004). The brightness of the screen can disrupt melatonin release. The literature also reports the occurrence of delusional disorders such as phantom vibration or phantom ringing syndrome, described as a mental disorder associated with new technology (Deb, 2015). This syndrome consists of feeling the sensation of a phone ringing or vibrating that is not actually ringing. Studies show that among undergraduate students, the percentage of people suffering from phantom vibration syndrome can be as high as 90% (Drouin, Kaiser, & Miller, 2012). In addition, mood disorders such as bipolar and depression may appear. Indeed, some studies report that interacting with cyberspace, especially using smartphones, can lead to the onset of depression (Thomée, Härenstam, & Hagberg, 2011; Yen et al., 2009). The reason for this interaction may be interpersonal avoidance or isolation, which makes children and adolescents more vulnerable to stress. Risky behaviors may appear in a situation where phone addiction and depression are joined by negative content in messages.

The phenomenon of smartphone overuse, often termed "smartphoneization," has evolved into a recognized form of technological addiction (Lin et al., 2017), frequently replacing real interpersonal interactions (Ejdys, 2017). Excessive and uncontrolled smartphone usage is categorized as phone abuse (Delińska & Badowska, 2019), addiction (Aljomaa et al., 2016), or problematic use (Panova & Carbonell, 2018), all of which disrupt daily life and human functioning. Among students, phone addiction – referred to as "phonoholism" – can affect up to 48% of individuals (Aljomaa et al., 2016). Problematic internet use has also given rise to specific behavioral patterns, including FOMO (Fear of Missing Out), nomophobia, and phubbing (Tomczyk & Lizde, 2022). FOMO involves compulsively checking social media and messaging apps to maintain constant social engagement and avoid missing out on rewarding experiences (Elhai, Yang, & Montag, 2021; Tomczyk, 2021). Nomophobia refers to anxiety stemming from the inability to use a phone, often characterized by obsessive thoughts about internet access, preoccupation with the phone when offline, and an urge to keep the phone in hand, even in inappropriate situations, such as while cycling (Kazem et al., 2021). Phubbing is the excessive use of a smartphone in social settings, leading to the neglect of others in favor of phone interaction (Gong et al., 2019; Aagaard, 2020). This rise in technological addictions presents a paradox in modern societies, where knowledge and education are more accessible than ever. Despite widespread education and numerous preventive measures, the number of individuals addicted to both substances and behaviors continues to grow. Statistical data confirm a consistent upward trend in addiction rates (Ministerstwo Zdrowia, 2019).

The term Internet Addiction Disorder (IAD) was coined by American psychiatrist Goldberg in 1995. However, research on computer and internet addiction dates back to the 1990s. The term is quite broad and non-specific, hence internet use disorder has not been included in any of the classifications of mental illnesses, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and the International Classification of Diseases and Health Problems (ICD-10). However, this phenomenon has appeared in the area of interest of scholars working on the DSM-V classification, where gaming addiction appears in section DSM-III, i.e. [disorders] (American Psychiatric Association, 2013). It was recommended for further research (Rowicka, 2015). Internet gaming disorder is defined in the DSM-V as persistent and recurrent use of the internet for the purpose of non-gambling gaming, leading to significant harm or exhaustion (Borkowska, n.d.). The World Health Organization recognized addiction to video or digital games as a disease entity in 2018, later including it in the latest version of the International Classification of Diseases and Health Problems (ICD-11). Gaming disorder is defined in the ICD-11 as:

> a pattern of gaming behavior ("digital-gaming" or "video-gaming") characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences....For gaming disorder to be diagnosed, the behavior pattern must be severe enough that it results in significant impairment to a person's functioning in personal, family, social, educational, occupational or other important areas, and would normally have been evident for at least 12 months (WHO, n.d.-a).

The studies conducted so far indicate the need to unify and standardize diagnostic criteria (Darvesh et al., 2020) in light of public health and gaming disorder treatment strategies.

The inclusion of video game addiction into the official WHO classification of diseases is undoubtedly a step in the right direction, but it does not fully address the scope of the issue. Undesirable behaviors in the use of the internet and computers cannot be reduced to video gaming alone. The problem also includes addiction to social media, information as such (infoholism), FOMO, and smartphone addiction. In Poland, in June 2021, at the request of the Ombudsman for Children, a study was conducted on the scale of addiction of children and adolescents in Poland to social media, involving 5,800 students (Biuro Rzecznika Praw Dziecka, 2021). The study showed that 13% of children in grade 2 of primary school, 15% of children in grade 6 of primary school, and 11% of children in grade 2 of secondary school achieved a result in the Social Media Disorder Scale Questionnaire showing impaired use of social media (with at least 5 out of 9 questions answered "YES"). The duration of social media use was also investigated. Assuming that a student spends 8 hours online, excluding time for study and sleep, there is no room for other types of activities. However, the study confirmed that 4% of the youngest, 10% of sixth graders, and as many as 16% of the oldest students stayed online for at least 8 hours a day. These results show a similar spectrum of problems as found in the Health Behavior in School-aged Children (HBSC) Survey conducted in 2017-2018 (Biuro Rzecznika Praw Dziecka, 2021).

The recommendations of the Council of Experts at the Ombudsman for Children include the need for continuous education of children and youth in the area of social media within the school system, as well as raising awareness among parents (Biuro Rzecznika Praw Dziecka, 2021). This is in line with the OECD recommendations contained in the document *Children & Young People's Mental Health in the Digital Age, Shaping the Future*. According to the guidelines contained therein, "schools should develop digital literacy, providing young people with digital skills

to recognize risks such as cyber-bullying and excessive use of social media, as well as strengthening emotional resilience, empathy and reaching out" (OECD, 2018). In Poland, a pilot program of therapeutic interactions has been developed and is being implemented for children and adolescents with problems using new digital technologies and their families. This program aims to improve the quality and effectiveness of treatment of cyber disorders and improve the mental health of children and adolescents (Ministerstwo Edukacji i Nauki, n.d.). However, there are no permanent solutions in the field of media literacy (including digital literacy) in schools.

Materials and methods

To accomplish the objective outlined in the introduction, a two-stage research process was implemented: (1) a bibliometric performance analysis combined with science mapping to examine the structure and dynamics of the research field, and (2) an in-depth analysis of selected studies based on bibliographic linkages to identify current research challenges and trends. The Scopus database was chosen for this study, as it is widely recommended for bibliometric analyses due to its robust data export capabilities and extensive collection of publications (Quintero-Quintero, Blanco-Ariza, & Garzón-Castrillón, 2021; Saleem, Khattak, Ur Rehman, & Ashiq, 2021). The research process is summarized in Table 1.

Table 1. Research process

Scopus database	
Time period	No limitations
Search fields	'Title', 'Abstract', 'Keywords'
Search keywords	("media literacy" OR "media literacy education") AND ("well-being" OR "well-being" OR "wellbeing")
Subject area	'Business, Management and accounting', 'Social Sciences', 'Economics, Econometrics and Finance', 'Engineering', 'Computer Science', 'Decision Sciences', 'Environmental Science', 'Energy', 'Agricultural and Biological Sciences', 'Mathematics', 'Arts and Humanities', 'Psychology', 'Materials Science', 'Multidisciplinary', 'Chemical Engineering', 'Earth and Planetary' Sciences', 'Biochemistry, Genetics and Molecular Biology', 'Medicine', 'Chemistry', 'Physics and Astronomy', 'Nursing', 'Veterinary', 'Health Professions', 'Immunology and Microbiology', 'Neuroscience', 'Pharmacology, Toxicology and Pharmaceutics'
Document type	No limitations
Language	English

Source: authors' work.

The search yielded 85 documents published between 2002 and 2023. Since this study aims to analyze the overall structure of the research field, no time restrictions were applied.

For data analysis, Microsoft Excel was used for preliminary descriptive analysis, while VOSviewer (version 1.6.18) was employed for advanced analysis and visualization. VOSviewer is particularly effective in aggregating literature, identifying similarities between publications, and highlighting significant research themes (Nobanee et al., 2021; Orduña-Malea & Costas, 2021). The dataset, including full bibliographic information, was exported in CSV and TXT formats for further processing.

The first stage of analysis employed two bibliometric methods: performance analysis and scientific mapping. Performance analysis assessed research productivity and impact based on criteria such as document citations, affiliations, and countries.

Scientific mapping aimed to organize and visually present the structural and dynamic features of the research landscape, as well as the connections and evolution of scientific works (Baier-Fuentes et al., 2019; Koseoglu, 2016; Kumar Hota et al., 2023; Sun & Cao, 2020). Two specific analyses were conducted:

- Keyword Co-occurrence Analysis: This method explored current and potential relationships between research topics by analyzing publication content.
- Bibliographic Coupling Analysis: This approach established similarity relationships between documents by identifying shared references. Bibliographic coupling occurs when two documents cite the same source, demonstrating the influence of a publication within a broader research context.

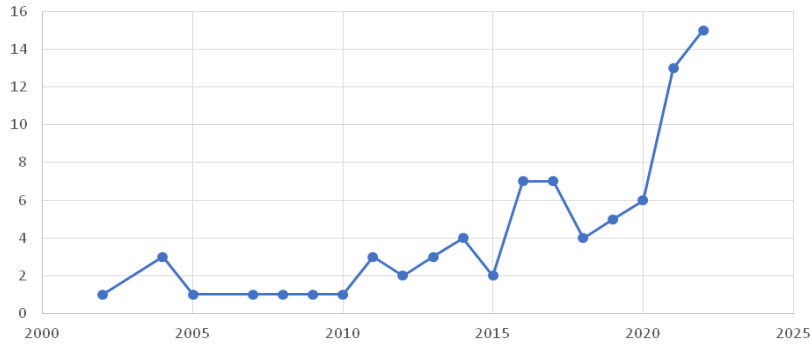
For studies involving animals or humans that require ethical approval, it is essential to specify the approving authority and provide the corresponding ethical approval code.

Results and discussion

One of the key indicators considered in the bibliometric analysis is the number of publications and their distribution over time. This indicator reflects the level of interest among researchers in a given subject and characterizes the expansion of the research field (Det Udomsap & Hallinger, 2020). As already mentioned, the number of publications on the impact of media literacy and media literacy education on well-being is very modest, with only 85 publications. As shown in Figure 1, the first publication in the researched area dates back to 2002 and until 2015, the number of publications per year

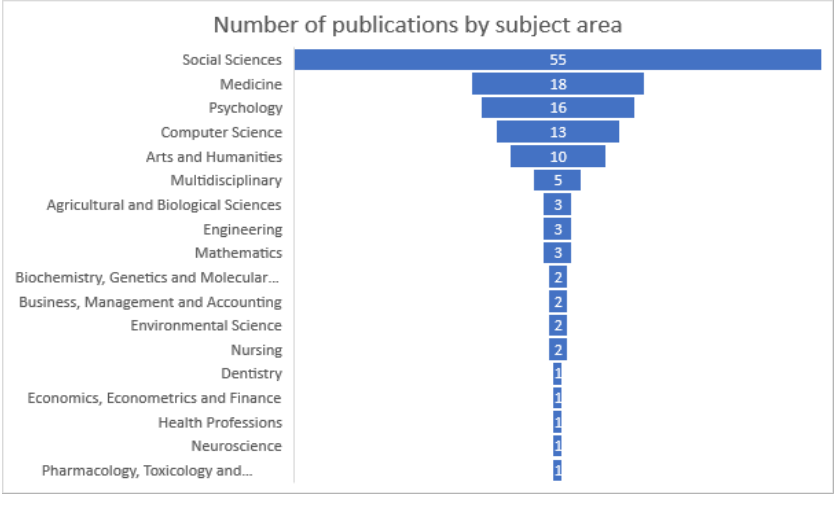
did not exceed 4. A significant increase in the activity of scientists in the researched area is observed in the last three years, although globally, the maximum number of publications per year is still only 15.

Figure 1. Number of publications per year (2000–2023)



Source: authors' work.

Figure 2. Number of publications by subject area



Source: authors' work.

From the perspective of scientific disciplines, the analyzed publications database is very diverse. As illustrated in Figure 2, social sciences (55 publications [39.6%]), medicine 18 publications [12.9%]), and psychology (16 publications [11.5%]) dominate. In total, publications span 18 subject areas. This proves the interdisciplinary nature of the research and may be

one of the reasons for the small number of studies conducted on an undeniably important problem for society and public health.

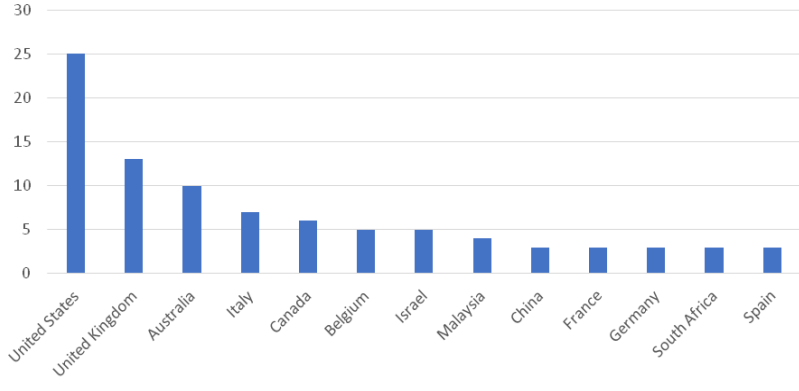
The multidisciplinary nature of the researched area is also reflected in the journals where the works included in the analyzed database were published. Table 2 presents the five journals with the largest number of publications. It is worth noting that most of these journals are highly indexed according to Impact Factor and Citescore. With such a small database, however, it is difficult to identify the dominant journals, because, with the number of publications being 2 or 3, this may be a random result. The analysis itself shows, however, that publications from the researched area have already appeared in recognized journals of various scientific and multidisciplinary disciplines.

Table 2. The most impactful journals

Source	Number of publications	Impact Factor	Scopus Score
Plos One	5	3.752	87
American Behavioral Scientist	2	2.531	98
Italian Journal Of Sociology Of Education	2	-	33
Computers In Human Behavior	2	8.957	99
Comunicar	2	5.725	99

Source: authors' work.

Figure 3. Number of publications per country

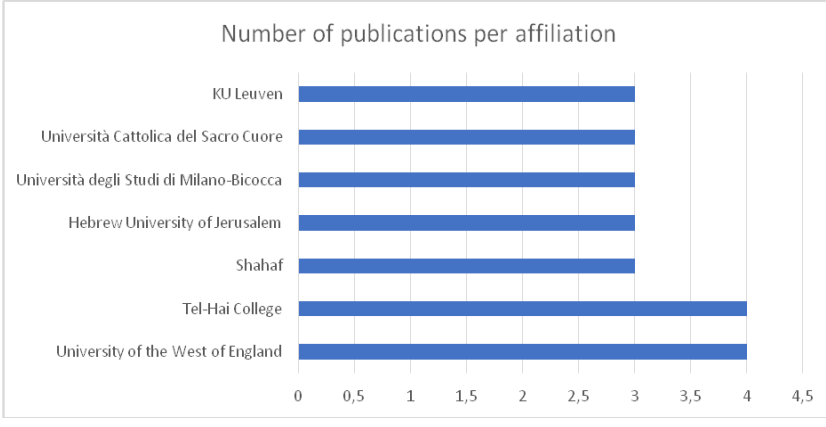


Source: authors' work.

When analyzing the structure of the research area, it is useful to consider it from the perspective of leading countries and research centers. As shown in Figure 3, Anglo-Saxon countries – the USA, United Kingdom, Australia,

and Canada – are the leaders in the field of research on the impact of media literacy and media literacy education on well-being. Among the European Union countries, the leaders are Italy, Belgium, France, Germany, and Spain. Israel, Malaysia, China, and South Africa also play an important role in this field.

Figure 4. Number of publications per affiliation



Source: authors' work.

Interestingly, from the perspective of prominent research centers, the leaders are the University of the West of England (Bristol, UK) and Tel-Hai College (Qiryat Shemona, Israel) in cooperation with Shahaf (Community Services for Eating Disorders) and the Hebrew University of Jerusalem. Noticeable activity is also shown by the EU universities, Università Cattolica del Sacro Cuore and Università degli Studi di Milano-Bicocca (both from Milano, Italy), on top of KU Leuven (Leuven, Belgium).

From the perspective of the most frequently cited publications (Table 3), it can be concluded that review publications (Brown & Bobkowski, 2011; Pratt & Woolfenden, 2002; Bergsma, 2004; Goldfarb & Lieberman, 2021), and conceptual publications (Gui, 2017a; Dawson & Siemens, 2014) dominate. The main topics addressed in these most cited publications are the patterns of use of old and new media shown by different audience groups, the influence of new media on attitudes, self-esteem, and behavior of different audiences, and in particular the influence of new media and media literacy on the sexual behavior of young people. Different programs and educational models in the area of media literacy also form an important topic.

Table 3. The most frequently cited publications

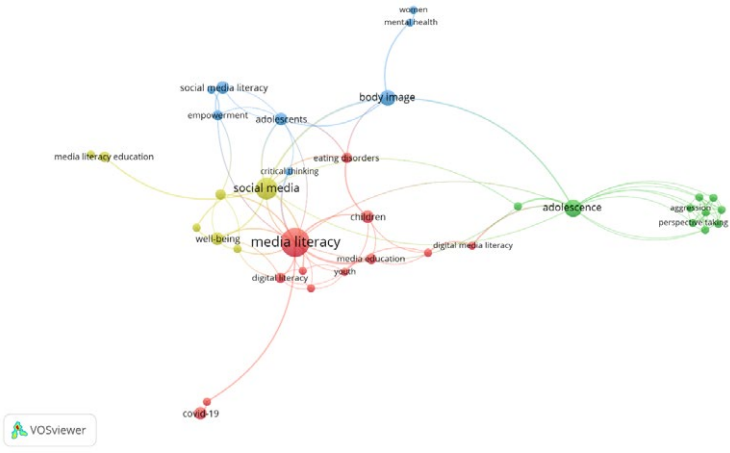
Author/Authors	Title	Year	Source	Number of citations	Research aim
Brown, J.D., Bobkowski, P.S. (Brown & Bobkowski, 2011)	Older and newer media: Patterns of use and effects on adolescents' health and well-being.	2011	Journal of Research on Adolescence	159	A review of the impact of traditional media (television, music, movies, magazines) and digital media (internet, cell phones, social networks) on adolescents' health and well-being.
Pratt, B.M., Woolfenden, S.R. (Pratt & Woolfenden, 2002)	Interventions for preventing eating disorders in children and adolescents.	2002	Cochrane database of systematic reviews	124	A systematic review evaluating the effectiveness of eating disorder prevention programs for children and adolescents, targeting both the general population and at-risk groups, with a focus on programs that incorporate media literacy and advocacy approaches.
Goldfarb, E.S., Lieberman, L.D. (Goldfarb & Lieberman, 2021)	Three Decades of Research: The Case for Comprehensive Sex Education	2021	Journal of Adolescent Health	115	A systematic literature review spanning three decades of research on school-based programs, examining evidence of the effectiveness of comprehensive sex education. Key outcomes include fostering an appreciation of sexual diversity, preventing dating and intimate partner violence, promoting healthy relationships, preventing child sexual abuse, enhancing social and emotional learning, and increasing media literacy.
Hanckel, B., Vivienne, S., Byron, P., Robards, B., Churchill, B. (Hanckel, Vivienne, Byron, Robards, & Churchill, 2019)	'That's not necessarily for them': LGBTIQ+ young people, social media platform affordances and identity curation	2019	Media, Culture and Society	62	The study employs the concepts of affordance and curation work to examine how LGBTIQ+ youth navigate various digital media platforms to explore their identities, seek support, and manage personal boundaries. It also investigates how they balance the risks and rewards associated with their everyday use of social media.

Bergsma, L.J. (Bergsma, 2004)	Empowerment education: The link between media literacy and health promotion	2004	American Behavioral Scientist	58	This paper, set within the context of media literacy and youth health promotion, reviews the literature suggesting that population health and well-being are closely linked to experiences of power and powerlessness. It argues that empowerment education is an effective model for driving both personal and social change.
Gui, M., Fasoli, M., Carradore, R. (Gui, 2017a)	Digital well-being. Developing a new theoretical tool for media literacy research	2017	Italian Journal of Sociology of Education	55	Based on an interdisciplinary review of the concept of "well-being," the authors define "digital well-being" as a state that can be achievable not only through an individual's personal "digital well-being skills" but also as a collective attribute of a community. This community fosters digital well-being through shared norms, values, and expectations that enhance the comfort, safety, satisfaction, and fulfillment of its members.
Collins, R.L., Strasburger, V.C., Brown, J.D., Donnerstein, E., Lenhart, A., Ward, L.M. (Collins et al., 2017)	Sexual media and childhood well-being and health	2017	Pediatrics	54	The authors examine the prevalence of sexual content in both traditional and digital media, highlighting the lack of information regarding the responsibilities and risks associated with sexual activity. Exposure to this content is linked to shifts in attitudes toward sex and gender, as well as an increased likelihood of early sexual initiation, adolescent pregnancy, and sexually transmitted infections.
Merskin, D.(Merskin, 2004)	Reviving Lolita? A media literacy examination of sexual portrayals of girls in fashion advertising	2004	American Behavioral Scientist	43	The author utilizes the seven-step Galician media literacy framework to analyze illustrative fashion advertisements in magazines. The primary focus is on the fetishization of young girls' innocence and their susceptibility to physical and emotional violence as potential consequences of sexualized media representations.

Dawson, S., Siemens, G. (Dawson & Siemens, 2014)	Analytics to literacies: The development of a learning analytics framework for multiliteracies assessment	2014	International Review of Research in Open and Distance Learning,	40	Building on the work of Jenkins et al. (2006) and the concept of participatory culture, this paper presents a conceptual framework for leveraging learning analytics to assess individual proficiency in multiliteracies. It also explores how this evaluation process can be scaled to provide an institutional perspective on educational progress in developing these essential skills.
Golan, M., Hagay, N., Tamir, S. (Golan, Hagay, & Tamir, 2014)	Gender related differences in response to "In favor of myself" wellness program to enhance positive self & body image among adolescents	2014	PLoS ONE	33	Positive self-esteem, emotional well-being, academic achievement, and strong family connections are recognized as protective factors against health-compromising behaviors. This study explores gender differences in the impact of a school-based interactive wellness program, *In Favor of Myself*, on self-image, body image, and eating attitudes and behaviors among young adolescents.

Source: authors' work.

Figure 5. Co-occurrence map



Source: authors' work.

To broaden knowledge about the research topics of all publications included in the analyzed database, scientific mapping using VosViewer was applied. Figure 5 presents a co-occurrence map highlighting the primary keywords identified by the authors in their publications. The color-coded clusters represent keywords that frequently appear together, while the circle size indicates each keyword's relevance and significance. The thickness of the connecting lines reflects the strength of their associations. To account for the limited number of publications in the dataset, the minimum keyword occurrence was set at 2, with a minimum cluster size of 5. Based on the mapping, it can be concluded that current research in the area relates to five thematic groups, as follows:

- Red Cluster (12 items) – groups around the "media literacy" term followed by "digital literacy," "digital media literacy," "media education," and "digital citizenship," in relation to children and youth, and focuses on such issues as inclusion, eating disorders, misinformation, as well as Covid-19, on top of infodemic phenomena;
- Green Cluster (10 items) – groups around the term "adolescence" in theory-based and school-based approaches, and focuses on such problems as aggression and cyberbullying prevention, health prevention, and universal prevention, as well as empathy, media heroes, and perspective taking;
- Blue Cluster (8 items) – groups around "body image" and covers such topics as social media literacy, critical thinking, development,

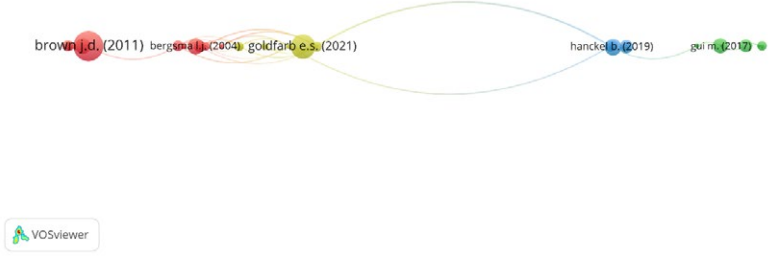
and empowerment in the case of adolescents, as well as mental health of women;

- Yellow Cluster (7 items) – groups around "social media" and covers such related topics as digital skills, well-being, wellness, health literacy, new media literacy, and media literacy education.

In the second step, 30 articles selected on the basis of bibliographic coupling of documents (Figure 6) were analyzed to identify current research topics.

Circles correspond to documents that feature the name of the first author of the document included in the study. The color of each circle represents the thematic cluster, while the size of the circle reflects the number of citations received by the corresponding document. For the bibliographic link map, the minimum citation count for a document was set to 5, and the minimum cluster size was defined as 5 items.

Figure 6. Bibliographic coupling of documents



Source: authors' work.

The Red Cluster (11 documents) explores areas where media education and related intervention programs are essential, effective, or highly beneficial. Rich (2004) introduces an innovative intervention approach in pediatric medicine through Video Intervention/Prevention Assessment (VIA), which leverages the comfort that children and young people have with audiovisual media. In this program, clinicians provide video cameras to young people with chronic conditions, asking them to share their experiences and needs. Their visual narratives have proven to be unexpectedly insightful and valuable in improving the clinician-patient relationship in healthcare. Paul and Bryant (2005) examine general trends in youth internet use, highlighting how the medium allows individuals to expand and create new social networks. Collins et al. (2017) note that sexual content on social networking sites is associated with problematic beliefs and behaviors, both among those posting the content and their recipients.

Internet pornography, they argue, poses a greater issue for young people than offline sources. Given the increasing amount of time young people spend online, Collins suggests that more research is needed on digital sexual media. Brown and Bobkowski (2011) emphasize teens' widespread access to media, underscoring the importance of teaching them to use media intelligently and healthily. They also point out that media can convey health-enhancing messages, and that media literacy skills can help ensure that media serves as a positive force in young people's lives. Impett et al. (2011) explore the role of health, physical, and sex education, along with media literacy programs, in reducing objectification and improving girls' well-being. Schultze-Krumbholz et al. (2018) present the *Media Heroes* program, designed to promote media literacy and prevent cyberbullying. The program was well-received by teachers and students, proving effective in reducing cyberbullying behaviors and enhancing social-emotional skills and subjective well-being. Vanderhoven et al. (2016) found that while parental involvement did not significantly improve interventions on risk awareness, it did influence adolescents' intentions to engage in risky behaviors, such as posting personal and sexual information on social media, and helped reduce problematic behaviors. Bergsma (2004) concludes from a literature review that population health and well-being are deeply connected to power dynamics and their consequences, and that empowerment education is a powerful tool for achieving personal and social change. Golan et al. (2013, 2014) investigate the community-based *In Favor of Myself* program and its impact on media literacy, self-image, body image, eating attitudes, and behaviors in young adolescents. Agam-Bitton et al. (2018) show that co-ed settings are more effective than girls-only settings in delivering prevention programs for teens, improving media literacy, self-esteem, and body image.

The Green Cluster (7 articles) examines the challenges associated with digital media use and its impact on well-being. Kosić (2018) explores the integration of media literacy and social-emotional skills in school curricula to promote mental health and well-being, detailing the implementation of the experimental module within the *Growing Up Together What's Up* program. Gui et al. (2017b) highlight the challenges faced by digital media users, such as information overload and the constant availability of social relationship options. They argue that existing digital skills frameworks do not adequately address the ability to manage communication overload. Drawing from interdisciplinary literature on well-being, the authors propose a definition of "digital well-being" as a state that can be achieved not only through individual "well-being skills" but also as a characteristic of a community whose norms, values, and expectations contribute to the comfort, safety, satisfaction, and fulfillment of its members.

Collard et al. (2017) introduce a conceptual framework featuring two models of digital media literacy: one based on functional-operational skills, where the employee is seen as compliant, and another based on critical-creative competencies, where the employee is defined as resourceful. Dawson and Siemens (2014) emphasize the importance of measuring literacy in relation to individual and community well-being, asserting that this measurement is crucial for assessing the impact of compulsory education. Drawing on the work of Jenkins et al. (2009) and the concept of participatory culture, they propose a framework for how learning analytics can assess individual achievement in multiliteracies and scale this assessment to provide an institutional perspective on educational progress.

Lim et al. (2016) present the *Cyber Wellness* program at Nan Chiau Primary School in Singapore, aimed at fostering well-being in the digital space. However, the program's limitations are noted in its failure to identify community-driven mechanisms to influence the development of students' digital skills. Nakayama et al. (2019) examine the impact of the Fukushima Daiichi nuclear disaster on residents' anxiety, showing that the source of information played a role in anxiety levels, and highlighting a relationship between anxiety and health literacy skills. Carenzio et al. (2021) explore the media use, digital competence, and media literacy of older adults, advocating for the promotion of media literacy education across all age groups. Their research revealed a significant increase in digital media use due to the Covid-19 pandemic, as digital media became essential for maintaining social connections and performing daily tasks.

The Blue Cluster, consisting of 6 documents, primarily focuses on digital literacy across various social groups and patterns of digital media consumption. Schreurs and Vandenbosch (2021) developed a Social Media Literacy (SMILE) model, drawing on media literacy, media effects, social psychology, interpersonal communication, and educational literature. Turner et al. (2017) suggest that interventions designed to help youth critically navigate their digital environments can have a positive effect, mitigating the potentially harmful impacts of engaging in digital spaces and encouraging more thoughtful consumption of digital media. However, they note that political and educational efforts to develop these critical skills have been lacking. Hanckel et al. (2019) explored how LGBTIQ+ youth create supportive spaces across different social media platforms. Merskin (2004) used media literacy to examine how girls and women are portrayed in fashion advertisements, highlighting the ways in which media influences perceptions of gender. Moran (2017) argues that dominant discourses of heterosexuality, viewed through a post-feminist and neoliberal lens, obscure the sexist nature of contemporary culture and repackage it in a way that makes

it appear as a personal choice for women. To address these issues, the development of critical media literacy skills is essential.

The Yellow Cluster, consisting of 6 documents, focuses on the impact of media on the well-being of various social groups, particularly children and adolescents, and evaluates different interventions in this area. Nairn and Spotswood (2015) argue that consumption is deeply integrated into children's relationships and is closely tied to their overall well-being. They suggest that media literacy training alone, aimed at addressing media's influence on children's consumption behavior, is likely to have limited effectiveness. Instead, these efforts should be comprehensive and integrated. Research by Sundgot-Borgen et al. (2021) highlights the significance of body image issues among students and emphasizes the need for actions that promote body appreciation and reduce societal pressures. Suggested interventions include incorporating media literacy, body functionality, and exercise topics into educational curricula to safeguard students' health and well-being. Craddock et al. (2018) demonstrate that teens may experience colorism in various environments, including schools, the criminal justice system, workplaces, and the media. Gordon et al. (2021, 2020) evaluated the effectiveness of a school-based social media literacy program for early adolescents, showing that it led to positive changes in body image, body change strategies, and overall well-being. Goldfarb and Lieberman (2021), through a review of literature over the past three decades, strengthen the argument for adopting national standards for sex education.

Conclusions and future research directions

The authors of this paper have presented both the dynamics of research on the influence of media literacy and media education on well-being, as well as the intellectual structure of these studies and the key research topics addressed in the area of media literacy and media education impact on well-being. As a result, it can be stated that media education, understood as fostering conscious and critical media consumption and the safe and responsible use of media as communication tools, is also linked to public health policy. Improper media usage affects the health and well-being of recipients, a view that is well-established and supported by rigorous scientific research. Therefore, media education should focus on shaping skills for conscious and critical use of social media across all social and age groups and should be conducted throughout life. Forms and technologies of communication, as well as society, are subject to constant and dynamic changes. Hence, it is the responsibility of educational and care

environments to provide media education, with the primary goal of implementing preventive actions targeting children and youth to limit and minimize the negative consequences of cyber threats (Polcyn, 2019).

During the course of this project, an important question that emerged was the effectiveness of developing media skills, particularly digital media skills, in enhancing societal well-being, with a specific emphasis on children and adolescents. While the literature highlights numerous negative effects associated with the excessive and unregulated use of digital technologies, it is essential to recognize that media platforms can also serve as valuable educators in the realm of health (Manca, Bocconi, & Gleason, 2021; Montazeri, Eslami, & Afshani, 2022). The World Health Organization's definition of public health describes it as "the organized effort of society, primarily through public institutions, to improve, promote, protect, and restore the health of the population through collective action" (WHO, n.d.-b). By combining the efforts of these institutions and attaining optimal outcomes in media education and digital media education, it becomes possible to influence human behavior and well-being. Therefore, we recognize the need for further research on the effectiveness of actions undertaken by governmental and non-governmental entities in this field. It is crucial to address whether and to what extent these actions consider the link between media usage and well-being and whether they are perceived as part of public health policy, or if they primarily focus on the effects of media education in the functioning of societies, strengthening democracy, and state mechanisms. We see the need to examine the extent to which the actions of individual institutions are coordinated or detached from the efforts of other institutions in the same field. One important aspect is investigating actions taken by NGOs, as experiences from many countries show that these entities, often unburdened by bureaucratic constraints, tend to be more effective. The research findings indicate that media education and its impact on societal well-being are rarely explored, leading to limited research outcomes and minimal influence on decision-making processes in this field. As a result, the impact of media, especially digital media, on the societal well-being is not adequately considered in the development of core curricula in child and adolescent education and preventive health programs for adults. There is a significant need for greater attention and commitment to this area of research.

The authors highlight that future research will primarily focus on Poland, with a comparison to selected European Union countries. This approach will enable the formulation of precise and feasible policy recommendations regarding the design and implementation of state interventions aimed at enhancing well-being through media education. Additionally, we have identified a noticeable gap in existing research concerning

the impact of media on the well-being of adults. Most studies to date have concentrated on children and adolescents. Given that this age group is still within the educational system, state interventions have primarily focused on school-based programs. However, there is a need for effective educational initiatives that also address adults.

Limitations of the research

The research presented in this article has certain limitations. The primary limitation is the exclusive use of the SCOPUS database. While this choice is supported by the methods, techniques, and analytical tools employed, future studies should consider incorporating additional databases such as WOS, PubMed, Cochrane, or EMBAS. Furthermore, due to language constraints, only English-language publications were included in the analysis. The authors acknowledge that valuable publications in other languages may have been overlooked. To address this limitation, it is recommended to form an international research team with linguistic expertise, capable of analyzing resources in the five most widely spoken languages for a more thorough evaluation.

References

Aagaard, J. (2020). Digital akrasia: a qualitative study of phubbing. *AI & Society*, *35*(1), 237–244. DOI: 10.1007/s00146-019-00876-0.

Adamski, A. , Gaweł, A. & Popek, M. (2022). Pandemia, przedsiębiorcy, emocje i social media. Co mówi o akcji #OtwieraMY analiza sentymentu w mediach społecznościowych? *Kultura – Media – Teologia*, 49, 48–76. DOI: 10.21697/kmt.49.3.

Agam-Bitton, R., Abu Ahmad, W., & Golan, M. (2018). Girls-only vs. mixed--gender groups in the delivery of a universal wellness programme among adolescents: A cluster-randomized controlled trial. *PLoS ONE*, 13(6), e0198872. DOI: 10.1371/journal.pone.0198872.

Akarsu, Ö., Budak, M.İ., & Okanlı, A. (2022). The relationship of childhood trauma with cyberbullying and cyber victimization among university students. *Archives of Psychiatric Nursing*, 41, 181–187. DOI: 10.1016/j.apnu.2022.06.004.

Alcalá, L.A. (2019). Media Literacy among the Elderly. In: *The International Encyclopedia of Media Literacy*. Wiley, pp. 1–5. DOI: 10.1002/9781118978238.ieml0117.

Aljomaa, S.S., Al.Qudah, M.F., Albursan, I.S., Bakhiet, S.F., & Abduljabbar, A.S. (2016). Smartphone addiction among university students in the light of some variables. *Computers in Human Behavior*, 61, 155–164. DOI: 10.1016/j.chb.2016.03.041.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders*. American Psychiatric Association. DOI: 10.1176/appi.books.9780890425596.

Antonovsky, A. (2005). *Rozwikłanie tajemnicy zdrowia. Jak radzić sobie ze stresem i nie zachorować*. Warszawa: Wydawnictwo Fundacja IPiN.

Baier-Fuentes, H., Merigó, J.M., Amorós, J.E., & Gaviria-Marín, M. (2019). International entrepreneurship: a bibliometric overview. *International Entrepreneurship and Management Journal*, 15(2), 385–429. DOI: 10.1007/s11365-017-0487-y.

Bergsma, L.J. (2004). Empowerment Education. *American Behavioral Scientist*, 48(2), 152–164. DOI: 10.1177/0002764204267259.

Biuro Rzecznika Praw Dziecka. (2021). *Raport Rzecznika Praw Dziecka Ogólnopolskie badanie jakości życia dzieci i młodzieży w Polsce*. Warszawa. Retrieved from: https://brpd.gov.pl/wp-content/uploads/2022/01/Raport-RPD--korzystanie-z-medi%C3%B3w-spo%C5%82eczno%C5%9Bciowych-i--internetu-PDF.pdf (access: 02.04.2024).

Bójko, M., Dzielska, A., Mazur, J., Oblacińska, A. (2019). Computer gaming and symptoms of addiction in relation to selected emotional competencies in adolescents. *Problemy Higieny i Epidemiologii*, 95–103.

Borkowska, A. (n.d.). Uzależnienie od gier komputerowych na liście WHO. Retrieved from: https://akademia.nask.pl/blog/uzaleznienie-od-gier-komputerowych-na-liscie-who_i10.html (access: 19.04.2024).

Brown, J.D., & Bobkowski, P.S. (2011). Older and Newer Media: Patterns of Use and Effects on Adolescents' Health and Well-Being. *Journal of Research on Adolescence*, 21(1), 95–113. DOI: 10.1111/j.1532-7795.2010.00717.x.

Caceres, J., & Holley, A. (2023). Perils and Pitfalls of Social Media Use: Cyber Bullying in Teens/Young Adults. *Primary Care: Clinics in Office Practice*. DOI: 10.1016/J.POP.2022.10.008.

Calamaro, C.J., Mason, T.B.A., & Ratcliffe, S.J. (2009). Adolescents Living the 24/7 Lifestyle: Effects of Caffeine and Technology on Sleep Duration and Daytime Functioning. *Pediatrics*, 123(6), e1005–e1010. DOI: 10.1542/peds.2008-3641.

Carenzio, A., Ferrari, S., & Rasi, P. (2021). Older People's Media Repertoires, Digital Competences and Media Literacies: A Case Study from Italy. *Education Sciences*, 11(10), 584. DOI: 10.3390/educsci11100584.

Cheng, C., & Li, A.Y. (2014). Internet Addiction Prevalence and Quality of (Real) Life: A Meta-Analysis of 31 Nations Across Seven World Regions. *Cyberpsychology, Behavior, and Social Networking*, 17(12), 755–760. DOI: 10.1089/cyber.2014.0317.

Collard, A., De Smedt, T., Dufrasne, M., Fastrez, P., Ligurgo, V., Patriarche, G. & Philippette, T. (2017). Digital Media Literacy in the Workplace: A Model Combining Compliance and Inventivity. *Italian Journal of Sociology of Education*, 9(154), 122–154. DOI: 10.14658/PUPJ-IJSE-2017-1-7.

Collins, R.L., Strasburger, V.C., Brown, J.D., Donnerstein, E., Lenhart, A., & Ward, L.M. (2017). Sexual Media and Childhood Well-being and Health. *Pediatrics*, 140(Supplement_2), S162–S166. DOI: 10.1542/peds.2016-1758X.

Craddock, N., Dlova, N., & Diedrichs, P.C. (2018). Colourism: a global adolescent health concern. *Current Opinion in Pediatrics*, 30(4), 472–477. DOI: 10.1097/MOP.0000000000000638.

Czapiński, J. (2012). Ekonomia szczęścia i psychologia bogactwa. *Nauka*, 1, 51–88. Retrieved from: https://journals.pan.pl/Content/91819/mainfile.pdf (access: 14.04.2024).

Darvesh, N., Radhakrishnan, A., Lachance, C.C., Nincic, V., Sharpe, J.P., Ghassemi, M. & Tricco, A.C. (2020). Exploring the prevalence of gaming disorder and Internet gaming disorder: a rapid scoping review. *Systematic Reviews*, 9(1), 68. DOI: 10.1186/s13643-020-01329-2.

Dawson, S., & Siemens, G. (2014). Analytics to literacies: The development of a learning analytics framework for multiliteracies assessment. *The International Review of Research in Open and Distributed Learning*, 15(4). DOI: 10.19173/irrodl.v15i4.1878.

Deb, A. (2015). Phantom vibration and phantom ringing among mobile phone users: A systematic review of literature. *Asia-Pacific Psychiatry*, 7(3), 231–239. DOI: 10.1111/appy.12164.

Delińska, L., & Badowska, S. (2019). Od zachowań nawykowych do kompulsywnych. 360 stopni wokół smartfonu wśród pokolenia Y – badania empiryczne. *Przegląd Organizacji*, 36–45. DOI: 10.33141/po.2019.12.05.

Demirci, K., Akgönül, M., & Akpinar, A. (2015). Relationship of smartphone use severity with sleep quality, depression, and anxiety in university students. *Journal of Behavioral Addictions*, 4(2), 85–92. DOI: 10.1556/2006.4.2015.010.

Det Udomsap, A. & Hallinger, P. (2020). A bibliometric review of research on sustainable construction, 1994–2018. *Journal of Cleaner Production*, 254, 120073. DOI: 10.1016/J.JCLEPRO.2020.120073.

Drouin, M., Kaiser, D.H., & Miller, D.A. (2012). Phantom vibrations among undergraduates: Prevalence and associated psychological characteristics. *Computers in Human Behavior*, 28(4), 1490–1496. DOI: 10.1016/j.chb.2012.03.013.

Drzewiecki, P. (2010). Supermarket telewizji. Cyfryzacja sektora audiowizualnego – wyzwanie dla edukacji medialnej. *Kultura – Media – Teologia*, 1(1), 96–104.

Ejdys, J. (2017). Determinanty zaufania do technologii. *Przegląd Organizacji*, 20–27. DOI: 10.33141/po.2017.12.03.

Elhai, J.D., Yang, H., & Montag, C. (2021). Fear of missing out (FOMO): overview, theoretical underpinnings, and literature review on relations with severity of negative affectivity and problematic technology use. *Brazilian Journal of Psychiatry*, 43(2), 203–209. DOI: 10.1590/1516-4446-2020-0870.

European Commission. (n.d.). Register of Commission Expert Groups and Other Similar Entities. Retrieved from: https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&do=groupDetail.groupDetail&groupID=2541 (access: 18.04.2024).

Golan, M., Hagay, N., & Tamir, S. (2013). The Effect of "In Favor of Myself": Preventive Program to Enhance Positive Self and Body Image among Adolescents. *PLoS ONE*, 8(11), e78223. DOI: 10.1371/journal.pone.0078223.

Golan, M., Hagay, N., & Tamir, S. (2014). Gender Related Differences in Response to "In Favor of Myself" Wellness Program to Enhance Positive Self & Body Image among Adolescents. *PLoS ONE*, 9(3), e91778. DOI: 10.1371/journal.pone.0091778.

Goldfarb, E.S., & Lieberman, L.D. (2021). Three Decades of Research: The Case for Comprehensive Sex Education. *Journal of Adolescent Health*, 68(1), 13–27. DOI: 10.1016/j.jadohealth.2020.07.036.

Gong, Y., Chen, Z., Xie, J., & Xie, X. (2019). Phubbing: Antecedents, consequences and functioning mechanisms. *Advances in Psychological Science*, 27(7), 1258–1267. DOI: 10.3724/SP.J.1042.2019.01258.

Gordon, C.S., Jarman, H.K., Rodgers, R.F., McLean, S.A., Slater, A., Fuller-Tyszkiewicz, M., & Paxton, S.J. (2021). Outcomes of a Cluster Randomized Controlled Trial of the SoMe Social Media Literacy Program for Improving Body Image-Related Outcomes in Adolescent Boys and Girls. *Nutrients*, 13(11), 3825. DOI: 10.3390/nu13113825.

Gordon, C.S., Rodgers, R.F., Slater, A.E., McLean, S.A., Jarman, H.K., & Paxton, S.J. (2020). A cluster randomized controlled trial of the SoMe social media literacy body image and wellbeing program for adolescent boys and girls: Study protocol. *Body Image*, 33, 27–37. DOI: 10.1016/j.bodyim.2020.02.003.

Gui, M., Fasoli, M., & Carradore, R. (2017). "Digital Well-Being". Developing a New Theoretical Tool For Media Literacy Research. *Italian Journal of Sociology of Education*, 9, 155–173. DOI: 10.14658/PUPJ-IJSE-2017-1-8.

Hanckel, B., Vivienne, S., Byron, P., Robards, B., & Churchill, B. (2019). 'That's not necessarily for them': LGBTIQ+ young people, social media platform affordances and identity curation. *Media, Culture & Society*, 41(8), 1261–1278. DOI: 10.1177/0163443719846612.

Hobbs, R. (2010). *Digital and media literacy: A plan of action (A white paper on the digital and media literacy recommendations of the Knight Commission on the Information Needs of Communities in a Democracy). Communications and Society Program*. Retrieved from: https://files.eric.ed.gov/fulltext/ED523244.pdf (access: 02.04.2024).

Impett, E.A., Henson, J.M., Breines, J.G., Schooler, D., & Tolman, D.L. (2011). Embodiment Feels Better. *Psychology of Women Quarterly*, 35(1), 46–58. DOI: 10.1177/0361684310391641.

Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison, A.J. (2009). *Confronting the Challenges of Participatory Culture*. The MIT Press. DOI: 10.7551/mitpress/8435.001.0001.

Kazem, A.M., Emam, M.M., Alrajhi, M.N., Aldhafri, S.S., AlBarashdi, H.S., & Al-Rashdi, B.A. (2021). Nomophobia in Late Childhood and Early Adolescence: the Development and Validation of a New Interactive Electronic Nomophobia Test. *Trends in Psychology*, 29(3), 543–562. DOI: 10.1007/s43076-021-00068-0.

Koseoglu, M.A. (2016). Growth and structure of authorship and co-authorship network in the strategic management realm: Evidence from the Strategic Management Journal. *BRQ Business Research Quarterly*, 19(3), 153–170. DOI: 10.1016/j.brq.2016.02.001.

Kosic, M. (2018). *Media literacy and for the net generation*.

Krawczyk-Suszek, M., & Kleinrok, A. (2022). Health-Related Quality of Life (HRQoL) of People over 65 Years of Age. *International Journal of Environmental Research and Public Health*, 19(2), 625. DOI: 10.3390/ijerph19020625.

Kumar Hota, P., Manoharan, B., Rakshit, K., & Panigrahi, P. (2023). Hybrid organization deconstructed: A bibliographic investigation into the origins, development, and future of the research domain. *International Journal of Management Reviews*, 25(2), 384–409. DOI: 10.1111/ijmr.12314.

Lange, R. (2021). *Nastolatki 3.0. Raport z ogólnopolskiego badania uczniów*. Warszawa. Retrieved from: https://www.nask.pl/pl/raporty/raporty/4295,RAPORT-Z-BADAN-NASTOLATKI-30-2021.html (access: 06.04.2024).

Łęcicki G. (2010). Edukacja medialna jako istotna cecha nowoczesnego społeczeństwa. . *Kultura – Media – Teologia*, 3, 70–80.

Lim, W.Y., Tan, C.M., Nizam, M., Zhou, W., & Tan, S.M. (2016). Toward Digital Citizenship in Primary Schools: Leveraging on Our Enhanced Cyberwellness Framework. In: *Future Learning in Primary Schools*. Singapore: Springer Singapore, 97–107. DOI: 10.1007/978-981-287-579-2_7.

Lin, Y.-H., Lin, Y.-C., Lin, S.-H., Lee, Y.-H., Lin, P.-H., Chiang, C.-L., … Kuo, T.B.J. (2017). To use or not to use? Compulsive behavior and its role in smartphone addiction. *Translational Psychiatry*, 7(2), e1030–e1030. DOI: 10.1038/tp.2017.1.

Livingstone, S. & Bovill, M. (1999). *Young people, new media. Summary report of the research project: Children, young people and the changing media environment. LSE Research Online*. Retrieved from: http://www.lse.ac.uk/Depts/Media/people/slivingstone/young_people_report.pdf (access: 05.04.2024).

Livingstone, S., Van Couvering, E., & Thumim, N. (2005). *Adult media literacy: A review of the research literature on behalf of Ofcom*. Department of Media and Communications, London School of Economics and Political Science. Retrieved from: https://dera.ioe.ac.uk/5283/1/aml.pdf (access: 02.04.2024).

Livingstone, S., Papaioannou, T., Grandio, M. & Trültzsch-Wijnen, C. (2012). Critical insights in European media literacy research and policy. *Media Studies*, 3(6), 5–15.

Manca, S., Bocconi, S., & Gleason, B. (2021). "Think globally, act locally": A global approach to the development of social media literacy. *Computers & Education*, 160, 104025. DOI: 10.1016/j.compedu.2020.104025.

Matusiak, R. (2020). Media education in France. *Kultura – Media – Teologia*, 40, 27–41. Retrieved from: https://kmt.uksw.edu.pl/media/pdf/40_matusiak.pdf (access: 03.04.2024).

Merskin, D. (2004). Reviving Lolita? *American Behavioral Scientist*, 48(1), 119–129. DOI: 10.1177/0002764204267257.

Ministerstwo Edukacji i Nauki. (n.d.). *Pilotażowy program skierowany do dzieci i młodzieży uzależnionych od nowych technologii cyfrowych oraz ich rodzin*. Retrieved from: https://www.gov.pl/web/edukacja-i-nauka/pilotazowy-program-skierowany-do-dzieci-i-mlodziezy-uzaleznionych-od-nowych-technologii (access: 04.04.2024).

Ministerstwo Zdrowia. (2019). *Raport Ministerstwa Zdrowia. Oszacowanie rozpowszechnienia oraz identyfikacja czynników ryzyka i czynników chroniących hazardu i innych uzależnień behawioralnych – edycja 2018/2019*. Warszawa. Retrieved from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjplcbHtc39AhWQrosKHchNCXwQFnoECBsQAQ&url=https%3A%2F%2Fwww.kbpn.gov.pl%2Fportal%3Fid%3D15%26res_id%3D9249205&usg=AOvVaw1KUwbAoY6pkjOl60_whNnu (access: 02.04.2024).

Montazeri, L., Eslami, H., & Afshani, S.A. (2022). Role of Students' Media Literacy on Their Health: A Narrative Review. *Journal of Community Health Research*. DOI: 10.18502/jchr.v11i1.9095.

Moran, C. (2017). Re-positioning female heterosexuality within post-feminist and neoliberal culture. *Sexualities*, 20(1–2), 121–139. DOI: 10.1177/1363460716649335.

Nairn, A. & Spotswood, F. (2015). "Obviously in the cool group they wear designer things." *European Journal of Marketing*, 49(9/10), 1460–1483. DOI: 10.1108/EJM-10-2013-0557.

Nakayama, C., Sato, O., Sugita, M., Nakayama, T., Kuroda, Y., Orui, M., … Rudd, R.E. (2019). Lingering health-related anxiety about radiation among Fukushima residents as correlated with media information following the accident at Fukushima Daiichi Nuclear Power Plant. *PLoS ONE*, 14(5), e0217285. DOI: 10.1371/journal.pone.0217285.

Nobanee, H., Hamadi, F.Y.Al, Abdulaziz, F.A., Abukarsh, L.S., Alqahtani, A.F., Alsubaey, S.K., … Almansoori, H.A. (2021, March 2). A bibliometric analysis of sustainability and risk management. *Sustainability (Switzerland)*, Vol. 13. MDPI. DOI: 10.3390/su13063277.

OECD. (2018). *Children & Young People's Mental Health in the Digital Age. Shaping the Future*. Retrieved from: https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf (access: 02.04.2024).

Ofcom. (n.d.). *Adults' media use and attitudes: Report 2019*. Retrieved from: https://www.ofcom.org.uk/__ data/assets/pdf_file/0021/149124/adults-media-use-and-attitudes-report.pdf (access: 02.04.2024).

Orduña-Malea, E. & Costas, R. (2021). Link-based approach to study scientific software usage: the case of VOSviewer. *Scientometrics*, 126(9), 8153–8186. DOI: 10.1007/s11192-021-04082-y.

Panova, T. & Carbonell, X. (2018). Is smartphone addiction really an addiction? *Journal of Behavioral Addictions*, 7(2), 252–259. DOI: 10.1556/2006.7.2018.49.

Paul, B. & Bryant, J. (2005). Adolescents and the Internet. *Adolescent Medicine Clinics*, 16(2), 413–426. DOI: 10.1016/j.admecli.2005.03.001.

Polcyn, S. (2019). Profilaktyka cyberzagrożeń wśród współczesnej młodzieży. In W.W. Tanaś (ed.), *Mass media we współczesnym świecie*. Łódź: Wydawnictwo Naukowe Wyższej Szkoły Biznesu i Nauk o Zdrowiu, 331–342.

Potter, W.J. (2013). Review of Literature on Media Literacy. *Sociology Compass*, 7(6), 417–435. DOI: 10.1111/soc4.12041.

Pratt, B.M., & Woolfenden, S. (2002). Interventions for preventing eating disorders in children and adolescents. *Cochrane Database of Systematic Reviews*. DOI: 10.1002/14651858.CD002891.

Quintero-Quintero, W., Blanco-Ariza, A.B., & Garzón-Castrillón, M.A. (2021). Intellectual Capital: A Review and Bibliometric Analysis. *Publications*, 9(4), 46. DOI: 10.3390/publications9040046.

Rich, M. (2004). Health Literacy via Media Literacy. *American Behavioral Scientist*, 48(2), 165–188. DOI: 10.1177/0002764204267261.

Rowicka, M. (2015). *Uzależnienia behawioralne. Terapia i profilaktyka*. Warszawa: Fundacja Praesterno.

Saleem, F., Khattak, A., Ur Rehman, S., & Ashiq, M. (2021). Bibliometric Analysis of Green Marketing Research from 1977 to 2020. *Publications*, 9(1), 1. DOI: 10.3390/publications9010001.

Schreurs, L. & Vandenbosch, L. (2021). Introducing the Social Media Literacy (SMILE) model with the case of the positivity bias on social media. *Journal of Children and Media*, 15(3), 320–337. DOI: 10.1080/17482798.2020.1809481.

Schultze-Krumbholz, A., Zagorscak, P., & Scheithauer, H. (2018). A school-based cyberbullying preventive intervention approach: The Media Heroes

program. *Reducing Cyberbullying in Schools: International Evidence-Based Best Practices*, 145–158. DOI: 10.1016/B978-0-12-811423-0.00011-0.

Sfeatcu, R., Cernuşca-Miţariu, M., Ionescu, C., Roman, M., & Burcea, C.C. (2014). The concept of wellbeing in relation to health and quality of life. *European Journal of Science and Theology*, 10(4), 123–128.

Sun, Y. & Cao, C. (2020). The dynamics of the studies of China's science, technology and innovation (STI): a bibliometric analysis of an emerging field. *Scientometrics*, 124(2), 1335–1365. DOI: 10.1007/s11192-020-03500-x.

Sundgot-Borgen, C., Sundgot-Borgen, J., Bratland-Sanda, S., Kolle, E., Torstveit, M.K., Svantorp-Tveiten, K.M.E., & Mathisen, T.F. (2021). Body appreciation and body appearance pressure in Norwegian university students comparing exercise science students and other students. *BMC Public Health*, 21(1), 532. DOI: 10.1186/s12889-021-10550-0.

Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults – a prospective cohort study. *BMC Public Health*, 11(1), 66. DOI: 10.1186/1471-2458-11-66.

Tomczyk, Ł. (2021). *FOMO Among Polish Adolescents. Fear Of Missing Out as a Diagnostic and Educational Challenge*. DOI: 10.1007/978-3-030-72657-7_54.

Tomczyk, Ł. & Lizde, E.S. (2022). Nomophobia and Phubbing: Wellbeing and new media education in the family among adolescents in Bosnia and Herzegovina. *Children and Youth Services Review*, 137, 106489. DOI: 10.1016/j.childyouth.2022.106489.

Turner, K.H., Jolls, T., Hagerman, M.S., O'Byrne, W., Hicks, T., Eisenstock, B., & Pytash, K.E. (2017). Developing Digital and Media Literacies in Children and Adolescents. *Pediatrics*, 140(Supplement_2), S122–S126. DOI: 10.1542/peds.2016-1758P.

UNIC Warsaw. (n.d.). *Przekształcamy nasz świat: Agenda na rzecz zrównoważonego rozwoju 2030*. Retrieved from: http://www.un.org.pl/agenda-2030--rezolucja (access: 02.04.2024).

Van den Bulck, J. (2004). Television Viewing, Computer Game Playing, and Internet Use and Self-Reported Time to Bed and Time out of Bed in Secondary-School Children. *Sleep*, 27(1), 101–104. DOI: 10.1093/sleep/27.1.101.

Vanderhoven, E., Schellens, T., & Valcke, M. (2016). Decreasing Risky Behavior on Social Network Sites: The Impact of Parental Involvement in Secondary Education Interventions. *The Journal of Primary Prevention*, 37(3), 247–261. DOI: 10.1007/s10935-016-0420-0.

WHO. (n.d.-a). Gaming disorder. Retrieved from: https://www.who.int/standards/classifications/frequently-asked-questions/gaming-disorder (access: 17.04.2024).

WHO. (n.d.-b). WHO Health Systems Strengthening Glossary. Retrieved April 19, 2023, from WHO Health Systems Strengthening Glossary.

Retrieved from: http://www.who.int/healthsystems/hss_glossary/en/index8.htlm (access: 12.04.2024).

Wojtasik, Ł. (2008). Cyberprzemoc – charakterystyka zjawiska. In: Ł. Wojtasik (ed.), *Jak reagować na cyberprzemoc? Poradnik dla szkół*. Fundacja Dzieci Niczyje, 6–10.

Yen, C., Tang, T., Yen, J., Lin, H., Huang, C., Liu, S., & Ko, C. (2009). Symptoms of problematic cellular phone use, functional impairment and its association with depression among adolescents in Southern Taiwan. *Journal of Adolescence*, 32(4), 863–873. DOI: 10.1016/j.adolescence.2008.10.006.

Andrzej Adamski – Professor at the University of Information Technology and Management (UITM), is a media scholar with extensive experience as a journalist and publicist. He is the founder and was the first Editor-in-Chief (until 2016) of the scientific quarterly *Kultura – Media – Teologia*. In 2015, he received the prestigious Bogliasco Fellowship Award. Dr. Adamski is currently the head of the Department of Media and Social Communication at UITM in Rzeszów.

Marlena Krawczyk-Suszek – a physiotherapist, public health specialist, and expert in data analysis. Her research focuses on quality of life and well-being among both healthy and ill individuals. She is the head of the Department of Physiotherapy at the University of Information Technology and Management in Rzeszów and serves as a health expert at SFF. DeepT+ (Horizon Europe, 2023/2024).

Justyna Berniak-Woźny – holds a PhD in Social Sciences from Leeds Metropolitan University and an MBA from Oxford Brookes University. She specializes in corporate social responsibility (CSR), sustainability, and project and business process management. She is the author of numerous national and international publications, as well as teaching and training materials in these fields.

Małgorzata Gosek – is a media scholar, mathematician, and pro-rector for Innovation and Sustainable Development at the University of Information Technology and Management in Rzeszów. She has professional experience in business, education, and NGOs. Her research interests include media education and the digital and green transformations.

Arkadiusz Gaweł – is an Assistant Professor in the Department of Cognitive Science and Mathematical Modeling at the University of Information Technology and Management in Rzeszów. He holds a Ph.D. in Social Sciences, specializing in Social Communication and Media, as well as a Master's degree in Applied Informatics. His research interests include analytics, statistics, Big Data, natural language processing (NLP), and data visualization.