Journalism Education and Fake News: A Literature Review

Tijana Vukić*

SUMMARY

This article offers a scholarly review of the literature and research on journalism education and fake news from an international and a local (Croatian) perspective. The purpose of this paper is to examine the connection between the education for journalists as a scholarly and academic discipline (as well as a teaching practice) and the issues caused by fake news in the digital age of mass media. Based on a comprehensive critical conceptual analysis of the body of knowledge available on the subject, it was determined that there is a diverse discussion about the status of journalism education regarding fake news. In that context, fake news has so far been internationally researched from several angles – curriculum content, journalism students, journalism and media studies, journalism practice, media audience, etc. When addressing the issue of education of journalists and fake news, three streams can be singled out. The first and most voluminous one refers to the systematic formal or additional education regarding media and information literacy. The next one refers to various changes related to the higher education system for the education of journalists, but without any concrete propositions for system reconstruction or upgrading. The last one advocates providing additional professional education to employed journalists. From the local perspective, even though only two articles suggest journalism education as a solution for the problems caused by fake news, based on thorough research it can be concluded that fake news and journalism education are not yet topics of interest among communication scholars in Croatia.

Keywords: digital age, disinformation, fake news, journalism curricula, journalism education, journalism study program

* dr. sc. Tijana Vukić, docentica, Fakultet za interdisciplinarne, talijanske i kulturološke studije, I. Matetića Ronjgova 1/1, 52 100 Pula, Sveučilište Jurja Dobrile u Puli
E-adresa: tijana.vukic@unipu.hr
Introduction

This paper investigates the problem of fake news from the perspective of the journalism education discipline trying to understand how academia deals with the phenomenon of information disruption in the digital media era. The work starts with notes on concepts and terminology.

The journalistic profession is inherently challenging, and the novelties that the digital age brings to mass media make it even more demanding. The creation, production of fake news, dissemination of disinformation, and message content manipulation by the mass media organizations originate in their owners, editors, and journalists’ differently driven decisions and professional behavior and culture. For that kind of business, two main impulses are determined – finance and ideology (Tandoc, Wei Lim and Ling, 2017).

Even though the presence of the phenomenon in a scientific arena has been detected for centuries, since 2016 a significant increase in the number of fake news research has been noticed overall (Valero and Oliveira, 2018). The topic has been particularly explored within communication sciences in the last decade especially in relation to the digital media surroundings, contextually commonly denoted as “post-truth” era. Such perspective is expected since it is a research field aiming to continuously detect both social changes, technological development, trends in economic systems, and unpractised media professional standards as crucial causes of today’s media and journalism crisis denoted by the fake news pandemic in the digital environment.

The history of the scientific, professional, and media discourses proves that the idea of fake news has existed for a very long time in relation to the different means of information dissemination. In particular, it was always associated with the partisan press as publishing biased opinions and texts with questionable facts is its traditional main feature (McGonagle, 2017). Today it is regularly contextualized with politics, but it is common in contemporary everyday conversations as well. In connection to the digital age, research has been actual for more than a decade, most often with different meanings arising from different positions and goals.

An extensive terminology debate about that notion has to be noted from the start. As there is a common idea that fake news act like real ones, trying to undertake their credibility and legitimacy, different approaches to its definition argue it is – news satire, news parody, fabrication, manipulation, advertising, and propaganda which implies different levels of facticity and the authors’ immediate intention to deceive (Tandoc, Wei Lim and Ling, 2017). For example, Pepp, Michaelson and Sterken (2019) state that “fake news arises when stories which were not produced via standard journalistic practice are treated as though they had been” thereby negative in-
tensions are not indispensable. There is also an opposite scholarly perspective underlining the idea that fake news as a concept should not be in scientific or any other professional use at all. That includes several different reasons – unstable public meaning of the term, already existing vocabulary in the context of the explanation of the epistemic dysfunction, and the use of the notion as a propaganda tool (Habgood-Coote, 2019). As the basis for rethinking terminology, Wardle and Derachsan (2017) on the other hand argue that the concept of fake news is not appropriate for illustrating the complexity of specific forms of information and it opens the debate of textual problems as usual discussion often neglects visual material. Entering the conceptual framework of information disorder into the discussion of fake news, authors elaborate in detail its three types such as dis-information, mis-information and mal-information, three phases - creation, production and distribution, as well as three elements - agent, message and interpreter. Lastly, there are researchers who reject the idea that the phenomenon of production and dissemination of untruths in the media should be called “fake news” arguing it is an oxymoron aiming to undermine the credibility of the journalistic profession (Tandoc et al, 2017; Ireton and Posetti, 2018; Hussain et al, 2020, Moscadelli et al., 2020).

Considering there is a scholarly consensus about its implications, ideas on how to prevail, combat and/or deal with the whole range of problems arising from the fake news domain are detected. These phenomena have so far been responded to in a number of different ways from various angles - those that create, send and/or receive information. Generally, while media deontology directs for the avoidance of those kinds of non-journalistic actions which result in questionable media content, media sociology considers the overall public well-being as the primary media’s concern, and normative scholars advocate for the media system/organization restructuring and regulation. Suggestions to solve that serious and far-reaching problem from a media practice perspective are, for instance, applying automated procedures in journalistic work (Anderson, Bell and Shirky, 2014), encouraging the development of data journalism (Hermida and Young, 2019), raising awareness of the relationship of journalists and editors to political and marketing manipulation (Rodny-Gumede, 2018), etc.

Regarding the explanation of the second term of this papers’ research subject, the author agrees with the definition of journalism education saying it is an “organized and sustainable communication with the purpose of journalistic learning” (Vukić, 2017: 303). Even though there are different distributions of the journalism education system around the world considering other systems that are superior to them or in their surroundings, the most common classification consists of the system for academic education and the system for professional training and journalistic specialization (Vukić, 2017).
New jobs in mass media seeking for new journalistic competencies have been created due to the digital technology entering in a media environment that consequently conditioned the reconsideration of traditional journalism education. Globally, journalism education teaching considers fake news as one of the internationally shared challenges (Self, 2020), thus confirming the importance of this paper’s research subject.

Research goals and questions

The purpose of this article is to provide a comprehensive critical-conceptual literature review focused on the connection of education for journalists as a scholarly discipline and teaching practice with fake news (disinformation) in the digital age. It has been realized through the following research questions:

RQ1 – Is there an international set of scientific research about journalism education and the acute difficulties and challenges arising from the issues of the fake news in the digital age?
RQ2 – What are the main perspectives, positions, and suggestions?
RQ3 – How does the Croatian academic community in communication sciences research fake news and journalism education and what solutions does it suggest?

Named purpose and questions serve three research objectives - to investigate the state of knowledge on that specific topic, identify the emphasized problems, as well as proposals to overcome them. Those are legitimate goals, which authors usually try to achieve using literature reviews in social sciences (Braumeister and Leary, 1997).

Research meted

Literature review was chosen as the core research method, which “has been deemed a research methodology in its own right” (Jesson, Matheson and Lacey, 2011: 73). The traditional narrative review style of the field literature of communication science was used as it “serves a vital scientific function” (Braumeister and Leary, 1997: 311). Perceived as the traditional research tool on journalism education around the world, as well as in Croatia (Vukić, 2017), it reflects the scientific value and emphasizes the importance of the method.

Critical and conceptual approaches were set as principal. The first one enables the author to “assess theories or hypotheses by critically examining the methods and results of single primary studies, with an emphasis on background and contextual material”, while the conceptual one “aims to synthesise areas of conceptual knowledge that contribute to a better understanding of the issues” (Jesson, Matheson and
Lacey, 2011: 76). In order to do that, basic scientific cognitive methods were used. The problem-chronological method assisted the study of the subject in chronological order considering and identifying key issues. The comparative method helped to understand how certain ideas of solving the problems from the educational point of view relate to each other. Lastly, content and discourse analysis were essential in the investigation of scientific work published in the international and Croatian scientific arena of communication sciences.

Besides articles, other sources such as books, reports, website content, teaching materials, editorials, etc. were useful for this research. This approach to the sources is similar to the one McDougall (2019: 29) and many other authors have used, as it is common in communication studies.

**Research parameters and limitations of the study**

Scientific and academic sources were in the research focus of this work. The basic idea was to give an overview of the works published from 2015 to 2020. The author has primarily explored scientific sources in English from the international scientific databases WOS and SCOPUS and then within the Portal of Croatian Scientific and Professional Journals – HRČAK. The search was conducted in English and in Croatian, whereas searching criteriums were the same for all sources - the main combination of keywords with same or similar meanings:

<table>
<thead>
<tr>
<th>Keywords in English</th>
<th>Keywords in Croatian</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION</td>
<td></td>
</tr>
<tr>
<td>journalism education</td>
<td>novinar* obrazova*</td>
</tr>
<tr>
<td>journalistic education</td>
<td>obrazova* novinar*</td>
</tr>
<tr>
<td>education for journalists</td>
<td></td>
</tr>
<tr>
<td>journalists’ education</td>
<td></td>
</tr>
<tr>
<td>journalism training</td>
<td>novinar* usavršava*</td>
</tr>
<tr>
<td>training for journalist</td>
<td>novinar* obuk*</td>
</tr>
<tr>
<td></td>
<td>novinar* radionic*</td>
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<tr>
<td>INFORMATION DISORDER</td>
<td></td>
</tr>
<tr>
<td>fake news</td>
<td>laž* vijest*</td>
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<tr>
<td>false news</td>
<td></td>
</tr>
<tr>
<td>disinformation</td>
<td>dezinformacija*</td>
</tr>
<tr>
<td>misinformation</td>
<td></td>
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<tr>
<td>malformation</td>
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</tbody>
</table>
It was, however, not enough for the article to have the exact keywords in the abstract, keyword list or text as it was detected that lots of authors just mention those terms in different contexts with no further topic elaboration or deeper insight, so a stronger relationship among them was required.

The first search, carried out on the 3rd of April 2019, detected a too small number of sources - WOS (3), SCOPUS (5), HRČAK (5), from which only a few passed to the second phase of analysis. Therefore, sources within the academic search engine Google Scholar (both English and Croatian version) were investigated using expanded criteriums regarding the type of text. Although the total number of sources in English, found on 7th May 2019, was much larger (651), many of them were again not directly related to the main objectives of this paper, and so dismissed. The last search with the same parameters, conducted on 7th September 2020, resulted as follows - WOS (6); SCOPUS (6), Google Scholar (EN=904). For example, three articles from both WOS and SCOPUS databases were identical, while only one (Mutsvairo and Bebawi, 2019), twice cited in SCOPUS, directly corresponded to the quest.

Despite hundreds of sources were analysed, there is still a possibility that some important work is missing from this review, which could be one possible limitation of this study. The second one lies in the fact that the research was done only including English and Croatian references, while within the default search criteria there were a lot of titles in native Spanish, Portuguese, Russian, German, Italian, etc.

Lastly, it should be noted that the repetition of authors was to the greatest extent avoided in order to present as much research as possible, even though similarities regarding cited literature, argumentation, or proposals have been detected in many texts. They are, therefore, presented considering what they emphasize. After a long process of declining texts regarding the mentioned restrictions, this overview resulted in a deep analysis of 80 sources.

**Findings and discussion**

**RQ1 – Scientific research and discussion about journalism education and fake news issues in the digital age**

Bearing in mind that fake news in the digital age is a relatively novel topic for communication sciences, there is an extensive international body of work problematizing it from the scope of journalism education, as well as a fruitful debate about the most effective solutions to prevailing it.

Findings show there are fewer papers in the field of journalism education focusing solely on that topic, while many of them contextually frame the issue within other
aspects of communication sciences. These include research into the attitudes of journalism students (Jackson, Thorsen and Reardon, 2019), media and journalism literacy (Brayton and Casey, 2018), employed journalists’ information credibility associated with behavior verification (Vergeer, 2018), news values in communication and education (Gurba, Kaczmarczyk and Pajchert, 2020), the causes of that phenomenon as a consequence of a broader social issue (Chavarro Cardozo, Pacho and Vargas, 2018), journalism education methods as IL teaching in libraries (Noe, 2015), the crisis of contemporary journalism (Curran, 2019), and its future (Bebawi and Evans, 2019), the type of news in practice (Glogger, 2018), the public’s trust in news media (Fisher, 2018), professional journalistic identity and ethics (Egbujor, 2018), journalists’ perception of the fake news and ethics (Blanco-Herrero and Arcila-Calderón, 2019), theoretical models and concepts (Rubin, 2019), environmental journalism (Gillam, 2020), democratic processes (Mohammed, Adamu and Kolo Lawan, 2019), revision of the curricula by journalism educators (Kothari and Hickerson, 2020), etc.

RQ2 – The main perspectives, positions and attitudes

General issues that fake news implicate could be summarized into three different sets of solutions (Table 2) within the field of journalism education, which I argue should be combined to achieve systematic and far-reaching changes. Those are media education for all, from the kindergarten, followed by structural and other changes of and in the academic system of journalism education and professional training for employed journalists in different topics illuminating these serious challenges, including all their informal education.

MIL as basis

As journalists start their formal education with primary and secondary school, MIL, digital/technical literacy and similar education being part of those educational degrees should be understood as the necessary ground to their lifelong education. Since there are more countries with supplementary MIL education, in the context of fake news, McDougall (2019) advocates the introduction of media studies in schools as compulsory, emphasizing such an approach as “more effective and sustainable” because

If every young person learns the key concepts of Media Studies – genre, narrative, representation, audience, ideology, and applies ‘classic’ deconstructive approaches to contemporary media texts, news content and technological developments in mediation, we will avoid both the false binary of ‘real vs fake’ and the danger of hyper-cynical distrust of all media (McDougall, 2019: 43).
**Table 2. Approaches to journalism education as solutions to challenges connected to fake news**

*Tablica 2. Pristupi novinarskom obrazovanju kao rješenja za izazove povezane s lažnim vijestima*

<table>
<thead>
<tr>
<th>Educational proposals</th>
<th>Authors</th>
<th>Suggestions’ key determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIL and similar education</td>
<td>Levitskaya and Seliverstova (2020)</td>
<td>Media Education for professionals (journalists, etc.) and future teachers, as a part of secondary and higher education in combination with ICT, as an additional education in institutions, distant media education and independent/continuous media education (lifelong learning).</td>
</tr>
<tr>
<td></td>
<td>Marchete and Turpin (2020)</td>
<td>Information Literacy in high education to encourage critical thinking.</td>
</tr>
<tr>
<td></td>
<td>Frau-Meigs (2019)</td>
<td>MIL in schools, Digital Literacy (DL) for teachers and cross sectors; transdisciplinarity within the MILCITIZEN Study.</td>
</tr>
<tr>
<td></td>
<td>McDougall (2019)</td>
<td>Media Studies (MS) as an obligatory course in primary and secondary schools.</td>
</tr>
<tr>
<td></td>
<td>Melro and Pereira (2019)</td>
<td>Literacy Education related to news and media; except schools, family has an important role in MIL.</td>
</tr>
<tr>
<td>Academic journalism education</td>
<td>Frohlich and Magolis, 2020</td>
<td>Responsive and adaptable emergent media curriculum with the focus on media literacy, skills development, and experiential learning; regular teaching combined with online.</td>
</tr>
<tr>
<td></td>
<td>Kovalova and Yevtushenko, 2020</td>
<td>Broad humanity, interdisciplinary education.</td>
</tr>
<tr>
<td></td>
<td>Rochyadi-Reetz, 2020</td>
<td>Integrated technology literacy as a part of journalism curricula included in the didactic process of competence development.</td>
</tr>
<tr>
<td></td>
<td>Trifonova Price and Subryan, 2020</td>
<td>Critically researched dissertation on the university level of journalism study programs.</td>
</tr>
<tr>
<td></td>
<td>Mutsvairo and Bebawi, 2019</td>
<td>Updating journalism curricula, introducing individual courses and cross-curricular topics that interdisciplinarily and comprehensively process the issues regarding fake news.</td>
</tr>
<tr>
<td></td>
<td>Jia, 2019</td>
<td>Model of innovative personnel in journalism and communication through three aspects: social needs, creative training system that focuses on innovative personnel, and upgrading discipline construction with value-oriented vision of journalism.</td>
</tr>
<tr>
<td></td>
<td>Courtney, 2017</td>
<td>MIL as a part of the journalism curriculum.</td>
</tr>
</tbody>
</table>
### Table 2. Continued

**Educational proposals** | **Authors** | **Suggestions’ key determinants** |
--- | --- | --- |
UNESCO’s model curricula regarding fake news and disinformation. | Ireton and Posetti, 2018 |  |
To create courses that make sense of the phenomenon and acquire the skills of digital verification | Garman and van der Merwe, 2017 |  |
To focus curricula on to the traditional journalistic values and foundation skills – firstly to verify the facts and report truthfully, accurately and balanced. | Richardson, 2017 |  |
Online courses and journalism certifications for employed journalists. | Frohlich and Magolis, 2020 |  |
Raising the digital journalism education deficiency of employed journalists. | Jamil, 2020 |  |
Innovations and multidisciplinary approach in combination with the traditional professional journalistic values, storytelling/writing expertise and finding facts using technology. | Scholl, 2019 |  |
Thematic workshops for journalists. | Peran and Raguž, 2019 |  |
UNESCO’s model curricula regarding fake news and disinformation. | Ireton and Posetti, 2018 |  |

Izvor – WOS, SCOPUS, Google Scholar  
Source – WOS, SCOPUS and Google Scholar

Emphasizing the role of literacy education related to news and media, Melro and Pereira (2019) believe that in addition to what the school can do, attention should also be focused on the family. Frau-Meigs (2019) further cites several solutions related to education for the identified problems, all of which are also related to the introduction of media and information literacy in primary and secondary schools, teacher education and cross-sectoral digital education managed by agencies. Additionally, the author points out to the new study program MILCITIZEN created as a reaction to information disorders in the digital age, and a combination of several different disciplines - information culture, digital humanities and creative industries (Frau-Meigs, 2019). In the literature review by Marchete and Turpin (2020), IL and critical thinking are highlighted as “essential skills to evaluate the credibility of online information” while the authors found there were works showing a link between critical thinking and fake news identification. Stating media education in
Georgia (former state of SSSR) as “one of the most popular trends … to identify fake news”, Levitskaya and Seliverstova (2020: 86) bring a Fedorov’s list of the different population included in that kind of interventions, one of which are future professionals such as journalists.

**Academic journalism education as a prevention**

Journalism education researchers are mainly gathered around the idea that academic journalistic qualification is the precondition for their proficiency and employment in the media. In this sense, several perspectives from which implementing changes that could prevent fake news and disinformation overflow in mass media through higher journalism education could be considered – those related to system, curriculum content and others.

(1) Dynamic digital environment, more than any other so far, imposes flexibility to higher institutions that educate journalists, as they ought to react to contemporary problems in order to be actual by making necessary changes. However, it must be concluded that no wider picture was presented; respectively there is a lack of concrete proposal for restructuring the journalism higher education system regarding the information disorder phenomenon. Therefore, the sustainable *journalism education* paradigm (Vukić, 2019) could answer the above challenges because its key mechanisms are self-renewal and self-regulation, as introducing new content in the curriculum is not enough for deeper and systemic changes. Nevertheless, such sources are the most numerous since they are the most convenient - surface interventions are cheap, fast and mostly depend on the teacher.

(2) Considering journalism study programs, the main idea that connects all positions is that media occurrences as fake news can and should be prevented with quality educated journalists. That is why the key teaching and learning outcome is to generate journalistic actions that will primarily produce protection. Namely, there are detailed propositions focusing on the curriculum design changes. It is, however, significant and encouraging that the most comprehensive one comes right from professional organizations, which have traditionally been proactively involved in contemporary educational processes for journalists, so UNESCO itself published a handbook for journalism education and training titled “Journalism, Fake News and Disinformation”, verifying it as an important topic. It is one of the newest works in the UNESCO Series on journalism education edited by Ireton and Posseti (2018), which refers to a new model curricula dealing also with fake news in a digital age. The publication is the first complete pedagogical material so far prepared for high education teaching. It consists of seven modules: Truth, trust and journalism; Thinking about ‘information disorder’: formats of misinformation, disinformation and mal-information;
News industry transformation: digital technology, social platforms, and the spread of misinformation and disinformation; Combatting misinformation and disinformation through MIL; Fact Checking 101; Social media verification; assessing sources and visual content; Combatting online abuse: when journalists and their sources are targeted (UNESCO, 2018). Those modules were prepared as a model curriculum containing all its necessary parts such as – synopsis, outline, module aims, learning outcomes, module format, suggested assignment, materials and reading. The range of topics proves that fake news as a digital-age phenomenon penetrates into various aspects of contemporary journalistic work, confirming the value, complexity and possibilities of academic education. Considering journalism curricula, professors could use it as a kit, separately as courses or topics within them. Still, there is no scientific or academic feedback of its use in educational practice.

Similarly, Mutsvairo and Bebawi (2019) advocate updating journalism curricula as a key preventive measure, i.e. introducing individual courses and cross-curricular topics that deal in an interdisciplinary way with not only fake news, but also the context in which that phenomenon arises and all its consequences. Trifonova, Price and Subryan (2020: 2), on the other hand, hold the position that journalists should have critical awareness which is why at the university level of journalism study programs they suggest producing a “critically researched dissertation as part of their conditions of earning a degree”. Courtney (2017) narrows her recommendation for increasing journalists’ MIL which is, additionally, consistent with its European Commission’s definition as a prevention to deal with the challenges of the digital environment (HLEG Report, 2018). The importance of implementing these topics in journalism curricula is confirmed also by the positive outcome of the research conducted on undergraduate students in Portugal. It showed that, after completing such a course, students of communication science programs “were able to identify the news article as fake. These students also revealed greater understanding of the news production and analysis, partly due to being more familiar with the subject, which reinforces the need for news and media literacy in early education” (Melro and Pereira, 2019: 62).

Integrated technology literacy is a proposal in future designing of journalism curricula in Indonesia, “not only in the technology courses, but also in the didactic process of delivering the knowledge competencies” (Rochyadi-Reetz, 2020: 89). There are also authors who see “providing future media professionals with a broad humanity, interdisciplinary education and building coalition … with the other stakeholders as an educational strategy to respond to those problems” (Kovalova and Yevtushenko, 2020).

Further, the set of quality effort research on academic journalism education through the lens of fake news at the national level must not be left out. The circumstances in
Ireland (Courtney, 2017), India (Bhaskaran, Mishra and Nair, 2017 and 2019), the Middle East and Africa (Mutsvairo and Bebawi, 2019), Estonia (Himma-Kadakas, 2017), etc., were reviewed.

(3) An additional important role of higher education institutions dealing with the education of journalists, besides the development of science and teaching, is that they are platforms for scholarly exchange of opinions which are most often manifested as conferences. Thus, for example, the issues of information disruption have been discussed at several international scientific conferences in Croatia and the neighboring countries. Specifically, in 2018, at the 9th regional scientific conference “Credibility of the Media”, organized by the Faculty of Philosophy in Tuzla, the fight against fake news was discussed (Information, 2018) where it was concluded that education was a legitimate way to solve those problems. A year later, an international conference “Suppression of disinformation in the era of digital media” was held in Zagreb, where some of the ways of regulatory solution to this problem were presented from several perspectives - media literacy, civil society and journalism (Pančić, 2020: 141). On the other side, scientific conferences of the ECREA TW group Journalism and Communication Education for a few years now have discussed “Media education in a changing media world”, where the topics such as fake news and disinformation were presented. On the latest World Journalism Education Congress (2019) fake news issues was discussed in its program agenda as well.

**Professional training for journalists as a corrective**

In the era of digital media, changes should occur quickly, in the right way, and seriously, thus taking professional journalism training as more important than ever before. That could result in the awareness of frequent changes in the development of the profession, and presentation of an appropriate set of tools. In that sense, from the perspective of those already employed in mass media, especially those who have not completed a formal journalism education degree or it happened a long time ago, professional training for journalists most often serves as a corrective.

An example of good practice is the Austrian Press Agency (APA) based in Vienna, which in 2019 served 182 private and 8 national media. They are branded on the values of journalistic quality, which is why they invest a lot in additional professional training of journalists and introduce many innovations that come through a multidisciplinary approach in MediaLab (e.g. APA SourceCheck, EGON, EasyVisi, etc.) to facilitate journalism in the digital age. They have their own APA Campus for journalism education, and they see the quality of media content in a combination of traditional professional journalistic values, storytelling/writing expertise and finding facts in a way that relies as much as possible on technology (Scholl, 2019).
Further, while there are detailed pedagogical guidelines dealing directly with the topic of fake news for the journalism training as well (Ireton and Posseti, 2018), some argue for raising digital journalism education of employed journalists of the mainstream media (Jamil, 2020), while others report about the usefulness of the journalism certificate (Frohlich and Magolis, 2020). The proposition of the workshops for journalists on specific topics are useful as well (Peran and Raguž, 2019).

RQ3 – Croatian research about fake news and journalism education

The last search of the Croatian overall scientific-professional corpus available on the Portal of Croatian scientific and professional journals (HRČAK) performed on the 25th August 2020 does not result in any article that connects the terms journalism education and fake news as the main research subject. Furthermore, Croatian scholars in general do not conduct sufficient research on that contemporary topic. From the year 2007, only 15 scientific articles, 4 professional and 3 other type of texts written by Croatian authors (22 out of 44 which include foreign authors) have been investigating or mentioning the phenomenon of fake news in the mass media or in connection with the (mass) media from different scientific fields and disciplines: communication sciences / COM (12), medicine / MED (2), political sciences / POL (7) and law / LAW (1), which are available in Table 3 in more detail.

As far as communication sciences are concerned, there are numerous approaches to researching fake news, similarly to international ones: media and information education and literacy (Svirić, 2020; Hercigonja 2019), social networks (Klepić, Lesko Bošnjak and Mabić, 2020; Kovačić, Musa and Tomić, 2019); new media (Kovačić and Baran, 2018), tools application (Milković, Samadržija and Ognjan, 2020), analysis of media content (Peran and Raguž, 2019, Polović, 2019, Labaš and Grmuša, 2011), audience (Biloš, 2020) and media system research (Vozab, 2017).

As the results of those studies, and in light of the fake news issue, Croatian authors propose solutions from different perspectives of (journalism) education. While Kovačić and Baran (2018) are for media consumers’ MIL arguing that critical questioning of the information is crucial, Svirić (2020) and Hercigonja (2019) see media literacy and education for the young as a solution. Vozab (2011) does not consider MIL enough, which is why she advocates social media regulation, quality journalism, its economic sustainability, and media credibility. Polović (2019) similarly emphasizes the importance of the reconstruction of the corporative mass media organization systems. Furthermore, two author couples believe the solution lies in the regulation of the journalistic behaviour in practice. While Labaš and Grmuša (2019) direct it towards truth and responsibility and greater self-criticism, considering that more frequent research of the ethics of journalism is important, Milković, Samadržija
Table 3. List of works by Croatian authors who have dealt with the topic of fake news so far

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Type of Article</th>
<th>Title</th>
<th>Scientific Field</th>
<th>Connection with Journalism Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biloš</td>
<td>2020</td>
<td>scientific</td>
<td>Challenges of internet information space: how do Croatian citizens perceive fake news issue?</td>
<td></td>
<td>COM</td>
</tr>
<tr>
<td>Milković, Samardžija i Ognjan</td>
<td>2020</td>
<td>scientific</td>
<td>Application of Blockchain Technology in Media Ecology</td>
<td></td>
<td>COM</td>
</tr>
<tr>
<td>Svirić</td>
<td>2020</td>
<td>scientific</td>
<td>Media literacy: a hybrid warfare against the fake news and misinformation</td>
<td></td>
<td>COM</td>
</tr>
<tr>
<td>Cvrtila</td>
<td>2019</td>
<td>scientific</td>
<td>„Post-truth” discourse: what happened with truth in politics?</td>
<td></td>
<td>POL</td>
</tr>
<tr>
<td>Domović</td>
<td>2019</td>
<td>scientific</td>
<td>20 years of disinformation, forgery and media manipulation*</td>
<td></td>
<td>POL</td>
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<tr>
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### Table 3. Continued

*Tablica 3. Nastavak*

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Izvor: HRČAK
Source: HRČAK

*The author of the article translated the title from Croatian, as there was no English version*
and Ognjan (2020) stand up for the responsibility of the media content creators in using blockchain methodology in order to determine information sources.

Finally, only two articles recommend journalism education as a possible answer to the contemporary fake news issue. Within the topic of refugee and migrant issues, Peran and Raguž (2019) are aimed at specialized journalism training advocating for thematic workshops for journalists, along with which they appeal for the use of recommendations, guidelines and pedagogical contributions, and the effort to enable MIL among youth. Bebić and Volarević (2018) resent the traditional approach arguing MIL should be directed to media users while “media-related education”, which journalism is one of, “should be focused on understanding the new media paradigm and factors that influence changes and ensure tools and methods for mastering the new media environment” (Bebić i Volarević, 2018: 114).

### Conclusion

This study, examining the link between journalism education and fake news, resulted in a few worthy insights. There is a notable international debate on that important subject, which goes into three directions. One advocates for media and information literacy, and education for children, youth and journalists, the other focuses on the regular change of the high journalism education system, with emphasis on the curriculum content update, and the third directs towards professional journalism training on specific topics.

As the journalistic profession in the contemporary digital age requires regular updating, three concrete propositions can be summarized regarding the found body of knowledge on the topic of journalism education and fake news. Those are from the scientific perspective, the position of the academic journalism education system, and from the angle of the journalistic profession. The first recommendation encourages the conduction of scientific research on journalism education in the light of current problems worldwide, the second suggests applying quality scientific knowledge in the higher system of journalism education as soon as possible. Further, there are thoughts about the systematic creation of preconditions for its flexibility as a whole, as well as for regularly stimulating and enabling journalists to be further professionally educated. That idea would be of most value if it officially positioned journalism as a profession that requires lifelong learning, which would be assisted by the sustainable journalism education approach.

Finally, even though journalism education has a strong predisposition to overcome those challenges and obstacles, far-reaching consequences are possible only if solving the fake news syndrome becomes important from the related systems as well.
Besides the limitations considering search criteriums, this literature review has been focused only on texts in English and Croatian. To gain a deeper insight into the scientific and professional attitudes, as well as the situation about journalism teaching in specific countries, references in other languages should also be considered in future studies.

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Novinarsko obrazovanje i lažne vijesti: Pregled literature

Tijana Vukić

SAŽETAK

Ovaj članak donosi znanstveni pregled literature i istraživanja o novinarskom obrazovanju i lažnim vijestima iz međunarodne i lokalne, hrvatske perspektive. Svrha je rada ispitati povezanost obrazovanja za novinare, kao znanstvene i akademske discipline i nastavne prakse, s problemima koje fenomen lažnih vijesti donosi u digitalno doba masovnih medija. Na temelju sveobuhvatne kritičko-konceptualne analize skupa znanja toga određenog predmeta utvrđeno je da je rasprava o položaju novinarskog obrazovanja u vezi s lažnim vijestima prisutna i raznolika. U tom se kontekstu lažne vijesti zasad međunarodno istražuju s različitih stajališta – sadržaja visokoškolskih kurikula, stavova studenata, novinarska i medijskih studija, novinarske prakse, medijske publike itd. U rješavanju problema obrazovanja novinara i lažnih vijesti mogu se izdvojiti tri struje. Prvo se odnosi na sustavnu formalnu ili dodatnu edukaciju o medijskoj i informacijskoj pismenosti. Sljedeće se odnosi na razne promjene vezane uz sustav visokog obrazovanja za obrazovanje novinara (najčešće su sugestije vezane uz studijski program), ali bez konkretnih prijedloga za njegovu rekonstrukciju ili nadogradnju. Posljednje zagovara dodatno stručno obrazovanje zaposlenih novinara. Iz lokalne perspektive, iako sugestiju za novinarsko obrazovanje kao rješenje problema lažnih vijesti donose samo dva članka, nakon temeljitog istraživanja može se zaključiti da lažne vijesti i novinarsko obrazovanje još uvijek nisu tema od interesa hrvatskim znanstvenicima iz komunikacijskih znanosti.

Ključne riječi: digitalno doba, dezinformacija, lažne vijesti, novinarski kurikul, novinarsko obrazovanje, studijski program novinarstva