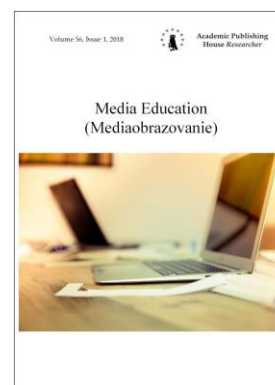




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Digitalization of the Communication Environment as an Incentive for Innovation in Media Education

Galina Melnik ^{a, *}, Konstantin Pantserev ^a

^a St. Petersburg State University, Russian Federation

Abstract

The article discusses research approaches to media developing in the digital era. It also studies the causes of reorganization of the global information space and the change in the content and presentation of information in network media. On the one hand, the paper reveals the contradictions of the functioning of mass media in the digital environment as well as the shortcomings and hazards posed by the content of uncontrolled media. On the other hand, the advantages and opportunities for the development of the media industry are also noted. Modern information and telecommunication technologies have led to unprecedented globalization of journalistic activity, as well as major change in the information staff training.

The article discusses: 1) the impact of quality conversions of the media, influenced by global competition, on the formation of qualifications of media professionals; 2) the influence of the modified concepts of information production on media specialist training system; 3) a change in competencies that contribute to optimization of the relationship “subject of information – consumer”. Media education is developing in accordance with the media industry. Thus, universities are restructuring their work with students in order to teach them how to work in the digital environment. Universities are also searching for resources to update journalism academic programs in accordance with current journalism tendencies. The issue of a multi-skilled or versatile journalist remains debatable. Finally authors come to the conclusion that in contemporary labor market, there is a demand in various specialists, whose profession is to collect and interpret information.

Keywords: digital age, media, social media, social responsibility, media education, competence.

1. Introduction

A change in the concept of news production in the digital environment has opened up new opportunities for reporting on events. This, in turn, requires new researches of news value and raises the question of efficiency of new and old forms of presenting information to an audience (Schepilova et al., 2019; Van der Haak et al., 2012; Vartanova, 2019; Vyrkovskii et al., 2017).

According to the latest studies in media production and media education, modern journalism combines traditional and new technologies in the search, processing and transmission of information, relies on social networks and citizen journalism. The main resources of the Russian Internet are *Vkontakte*, *YouTube* and *Odnoklassniki*.

* Corresponding author

E-mail addresses: g.melnik@mail.spbu.ru (G. Melnik)

Many Russian newspapers or magazines, have on-line-versions, *Telegram* channels, accounts on *Facebook*, *Twitter*, *Instagram*, and even *Odnoklassniki*. The media master social interaction tools on Internet platforms, providing maximum accessibility to any kind of information. The media have accounts on social networks and instant messengers, often several platforms simultaneously (Amzin et al., 2010; Meijer, 2013). Experts in mass media theory, who observe the work of Russian media, noted new trends in the development of the digital information area. These trends are as follows: a growth in popularity of Smart TV; search of solutions for non-linear consumption of television content; spread of mobile applications; hybridization of various types of texts (MSU) (Vartanova, Tamas, 2018). Internet users' expectations for information content and broadcast channels are getting higher. About 93 % of Smartphone owners use instant messengers such as *WhatsApp* (69 %), *Viber* (57 %) and *Skype* (45 %).

All over the world, the popularity of print media, television and radio is decreasing, while the popularity of online news is growing. Likewise, in Russia, news websites, analytical and official websites are the main source of information for respondents of all age categories (Vartanova, Tamas, 2018). Television is in second place. According to a research conducted by RBC, the number of media-active Russians aged 16–29 is 92 %, and aged 50–54 is 84 %. The Internet media activity growth index is the highest among all media channels (the index is +62 percentage points) (Media..., 2019).

According to the aggregate data of *Roskomnadzor*, *Mediascope*, *Liveinternet*, *Similarweb*, *Brand Analytic* and catalogs of regional publications, there are 25600 online publications in Russia alone. A research “Media Consumption in Russia”, conducted by the Deloitte CIS research centre, showed that in 2018, the average media reach of the Russian audience was 62 % (Social..., 2018).

The scientific community is widely discussing the future of the Russian media industry (Goodman, Steyn, 2017; Jandrić, 2019; Vartanova et al., 2015) and new approaches for preparing journalists for work in the digital environment (Nigmatullina, 2018).

Researchers and practitioners admit that the boundaries of the media system and the list of professions demanded by the media industry have fundamentally changed. In the information market, there is a sharp growth in the demand for multi-skilled specialists who are able to collect and “pack” information in different forms and post it on different platforms so that it is easily consumed by the audience (Josephi, 2008; Harlanova, 2019). This requires an update of the journalist training system (Nigmatullina, 2018; Pasti et al., 2012; Vartanova, 2018), as well as effective and efficient teaching. Different approaches to teaching journalists are proposed by the scientific community (Shesterkina, 2016; Tulupov, 2019).

The major issue for the theory of communication and media education is described in an article by V.V. Tulupov: “Is online journalism (and research approaches to it) totally different from traditional journalism, or does it contain problems traditional for journalism theory” (Tulupov, 2019).

Multimedia environment requires review of the components of organizational, creative and production activities of journalists (Urazova, 2011), and consequently new qualifications that will be acquired in the specialized universities.

2. Materials and methods

The analysis of data, derived from sociometry systems that record the state of media production and media consumption and from scientific papers on media education, revealed the factors that define changes in teaching young journalists. Different services and tools, which provide teachers with the possibility to work remotely and offer various ways of remote communication with an audience, were examined. The media resources used in education were analyzed.

To reach the goal and meet the objectives, the current study is based on the classic scientific papers on media education, primarily, the ones of the main ideologist and head of the leading national scientific school A.V. Fedorov (Fedorov, Levitskaya, 2020; Chelysheva, 2006) and innovative works in the field of communication and journalism (Baran, Davis 2012; Burns, 2017 et al.; Tulupov, 2019; Vartanova 2019).

3. Discussion

Photos, videos, “infographics, instantly updating social network ribbons erase the boundaries between verbal, visual, audio and other components” (Kokhanova, 2017; Misonzhnikov, 2017) and change the media profile. Texts are acquiring the properties of rapidity, transmedia, interactivity, multimedia, hypertextuality, mobility, and personalization (Gasnov, 2017). It is now required to create multifunctional media texts that meets these parameters. A creator of texts has to have multimedia skills, i.e. the ability to produce materials for any media (Yakovleva, Fomina 2020). According to K.R. Nigmatullina, a university graduate is also required to be able to examine the audience and control audience’s attention and involvement, create media projects from scratch, know the main ways of monetizing in media, promote texts and media and use computer technologies at all stages from text creation to analytics and editorial content management (Nigmatullina, 2018).

According to S.L. Urazova, “the production of information is based on the categories of producing an intellectual product on the basis of newly generated knowledge, where the main criteria are novelty, informativeness, objectivity and reliability of facts and events” (Urazova, 2011: 133).

With the change in text creation methods, journalists are now required to have multimedia thinking. Multichannel media and metamedia utilize sound, animation, hyperlinks, large electronic archives and various ways of getting feedback from the audience. The process of collecting and processing information in the media sphere is becoming automated. Convergence media combine diverse types of information and information distribution channels. Paper-based media are disappearing. In 2019, mobile platforms accounted for about 25 % of the whole media traffic. Future journalists now have to be able to create texts for mobile applications (Baranova, 2017). The following competencies were included in university academic programs: a journalist is able to use modern devices and information and communications technology in their professional activities, able to use modern communications technology in work, able to create an image that meets the requirements of a channel/program, etc.

Media are currently undergoing major changes, influenced by marketing tools (Bagrin, 2019; Bolshakova, 2012; Bondarenko, Azizov 2014; Neti, 2011; Zlobina, Zavrzhina, 2015), which include: 1) website (online chat; callback widget; analytics); 2) search engine marketing, SEJ and SEO (digital display advertising; SEO (search engine optimization) helps to increase the visibility of a website in the search engine by users’ request keywords); 3) SMM; 4) email newsletters (or email marketing); 5) content marketing; 6) SERM (Danilina, Deinekin, 2014). SERM (search engine reputation management) is aimed at enhancing brand credibility. SMM, which became popular in journalism, helps periodicals to expand their audience by attracting new friends from social networks. Journalist training programs now include disciplines related to understanding the marketing mechanisms of the existence of information.

Social media marketing (SMM) is a new direction in the educational system (Olshansky, 2017). Students acquire skills of attracting audience’s attention to mass media brand and information products. SMM is studied as a set of tools aimed at involving the audience in business activity. Future journalists learn new methods of work with an audience, for example, by using word of mouth (viral marketing). This requires not only efforts to enhance the credibility of a particular media, but also promotion on *Twitter*, *Facebook*, *YouTube*. According to some researchers, online content created by professional journalists is surrounded by Internet blogs, personal online diaries and information platforms of several co-authors, and competes with them for audience reach (O’Sullivan, Carr, 2018). Education is aimed at developing the capability to work in a tough competitive environment, as university graduates have to compete with freelancers, bloggers, and all kinds of leaders. Trendsetters and influencers, who regularly communicate with their subscribers, set cultural trends, increase audience engagement, and interact directly with the source, helping innovators and early adapters tell their story to the masses through social media (Vypryazhkin, 2018). Technologies can replace human in certain areas. Today, robots capable of collecting information on a certain topic can take part in creation of news (Zamkov et al., 2017), and compete with journalists.

Official media and web platforms often cooperate. News from social networks instantly gets into official media, where users see images and eyewitness reports on events in real time. Traditional media are forced to change their working hours because of the competition in the information market. There is a high demand in creative specialists who are able to find new

impulses and ideas in communication with the audience, create new trends and implement them in business projects in the media sphere.

In pursue of audience attention, editors use gamification techniques, offer game products and tests that give basic information about current events, use multimedia features and adaptive web design, and their own news feeds. Often, short video lectures, audio programs and photo galleries are posted on websites in addition to journalistic texts (Pavlushkina, 2018). This increases audience's intellectual curiosity. However, in pursuit of audience expansion, editors use clickbait, i.e. sensationalized headlines, as well as attractive and provocative images to increase the number of views and clicks. The sensational headlines are often misleading and do not match the content. Editorial staff are mostly targeted at frivolous tastes of the audience.

The way people read and consume information is changing dramatically (Krajnikova, 2017: 167-170; Kulchitskaya et al., 2016; Poluehtova, 2016). This change is caused by a sharp increase in information flows over the past two decades. As a result, there seem to be a variety of information in today's media space, but in fact there is information deficit. The mental perception of texts is changing. Readers are losing the sense of quantity, cohesion and coherence. They are experiencing cognitive decline as well as attention, memory, thinking and imagination deterioration.

Marketing tools are becoming important work tools for modern journalists. Therefore, journalist training programs include classes that give students the financial and economic knowledge and raise their awareness of the market (Vikhrova, 2018).

Use of marketing tools gives the media the following advantages and opportunities: "1) targeting, i.e. coverage of the target audience (in terms of geography, time, theme); 2) tracking system, used for observing users' actions on a website and promote a web page, product and marketing in accordance with the results; 3) flexibility (enabling to start, adjust and stop the advertising campaign immediately); 4) interactivity that gives a consumer the opportunity to interact with the seller and the product, explore and sometimes try the product (for example, demo versions or free first chapter of a book), and, if suitable, purchase it; 5) ability to post a significant amount of data (including graphics, sound, special effects); 6) effectiveness of information dissemination and collection; 7) reduction of transformation costs" (Bagrin, 2019; Bolshakova, 2012).

In the digital era, the functions of information sector specialists are also changing. For example, the specialists are acquiring the qualities of multimedia storytellers or information directors, or mastering the genre of talk shows. Universities and centers that train journalists are forced to catch up with information organizations and adapt to market demands.

There is a problem of developing digital media capacity and competence among young specialists. It is no coincidence that formulations of the universal (basic) competence of the digital economy have been developed and included in the standard of St. Petersburg State University in order to implement the "Digital Economy of the Russian Federation" document in educational programs. For example, the competence for bachelor degree programs is formulated as follows: "Able to understand the nature and importance of information in the development of society, use the basic methods of obtaining and working with information, taking into account modern technologies of the digital economy and information security." And for master degree programs: "Able to use the methods of obtaining and working with information in their work, taking into account modern technologies of the digital economy and information security" (Introduction..., 2020).

The following new courses are being developed: "Digital Culture: Technologies and Security" and "Digital Transformations in the Modern Information Society", "Language of Effective Communication in the Digital Society", "Convergence Technologies of Today's Editorial Staff", "Creating Text for Online Media", as well as forms of presenting education materials to students (Fateeva, 2015).

Journalists (and now also bloggers), in an attempt to gain more popularity and increase the number of views, often give unverified, provocative and even dangerous information. In contrast to this tendency to share pseudo-news with a target audience via certain channels, a counter direction called fact check, was formed (countering to fake news). As a result, new disciplines, which aim at teaching students how to spot fake information, are included in university programs.

Thus, modern journalistic education is "a combination of educational, pedagogical, information technologies based on the approaches of personal activity and competency and

functioning as the main mechanism for educating and upbringing a media professional” (Shesterkina, 2016).

According to E.L. Vartanova, based on the media industry trends, it is necessary to develop three following types of technologies in a modern university: “educational” (that is, technology use in education), “pedagogical” (i.e. technology use in pedagogy) and “information and education technologies”. The technological process involves, in her opinion, “the functioning of all the personal, instrumental and methodological tools that are involved in the educational process of journalists” (Vartanova, 2018).

According to K.R. Nigmatulina, a graduate should have the following skills: knowledge of the digital media market; digital skills; design skills for production of complex digital products; skills in promoting and managing digital media projects; knowledge of communication strategies in digital media, etc. (Nigmatullina, 2018).

The question of journalist competence and skills in the convergence era remains open. However, more and more scientists agree that the model of a multi-skilled universal journalist is not excellent. As rightly pointed out by Baranova, “Multimedia projects, for example, the ones that are popular today, are never created by one person. They are produced by different specialists – reporters, professional photojournalists, designers, editors, and everyone does their own thing” (Baranova, 2017).

Recent surveys of respondents from 60 journalism schools from 25 European countries, which are members of the European Journalism Training Association (EJTA), revealed a clear trend in the professional mindset of journalists, identified as a return to basics. N. Drock, the head of the EJTA Journalism Professional Competencies Project, explains this phenomenon as journalists’ longing for information reliability, social responsibility, analytical skills and a sense of importance of information, related to Transparency and Navigation.

4. Results

The results of this study were similar to those of other surveys where journalists claim that they stick to the principles of “being reliable employees, being able to select verified information, work efficiently and proactively, work under time pressure, separate the main and secondary facts, explain and interpret the selected information, being aware of current events, being ready to accept criticism and take responsibility for their materials, have freelance skills” (Kolomiets, 2019).

Webinars and video seminars are gaining popularity, which shows people’s interest in interactive learning, especially during quarantine period. The coronavirus pandemic, which has spread across almost the whole world, has caused a surge in learning how to use technologies and programs for working remotely. Students and teachers have been actively using new interactive platforms for real-time communication and collaboration. The information service market already offers more than a hundred information platforms that give teachers the opportunity to conduct video conferences, round table discussions, meetings, briefings, consultations, chat games, surveys and questionnaires. Free programs and apps for organizing online meetings are available on any operating system - PC, Mac, Linux, iOS and Android. Live streaming service is available on such resources as YouTube. MegaFon telecom operator offers packages for video conferences and webinars. Google has opened free access to Hangouts Meet video conferencing. Meetings between professors and students are also organized on other platforms: *Apache OpenMeetings*, *BigBlueButton*, *ClickMeeting*, *JITSI MEET*, *MONECLE*. During the pandemic, professors and teachers have been promptly mastering multifunctional tools for online education, demonstration and discussion of media content. It is important that in the process of communicating, the participants of the meetings are overcoming psychological barriers in managing the audience and their emotions.

It is essential to note that professional media education is becoming more purposeful and meaningful.

5. Conclusion

Modern information and telecommunication technologies have led to unprecedented globalization of journalism and caused a significant change in the information staff training.

Media education is developing in accordance with the media industry. Universities are restructuring their work with students in order to teach them how to work in the digital era. With new technologies and gadgets, it is now possible to create an interactive (journalistic) model of

media education that uses business and role-playing games, group discussions, design and modeling. This direction of training has proved its efficiency.

However, along with obvious advantages, these trends cause many problems and contradictions that have manifested themselves over the past decade.

The issue of a multi-skilled, versatile journalist remains debatable. In today's labor market, there is a demand in various specialists whose profession is to collect and interpret information. However, some professors and scientists support training of multi-skilled specialists.

At the same time, the professional community understands that in the pursuit of innovative trends and audience interest satisfaction, one still must not forget about the basic professional qualifications that have been developed over decades and have proved their efficiency.

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References

Amzin et al., 2016 – Amzin, A., Galustyan, A., Gatov, V. et al. How new media changed journalism. 2012-2016 (2016). Yekaterinburg: Yekaterinburg University of the Humanities, 2016. 304 p.

Bagrin, 2019 – Bagrin, Yu. (2019). The Internet as a new marketing channel. [Electronic resource]. URL: <https://works.doklad.ru/view/9p3ogdAS-KQ.html>

Baran, Davis, 2012 – Baran, S.J., Davis, D.K. (2012). Mass communication theory: Foundations, ferment, and future. Boston, MA: Wadsworth.

Baranova, 2017 – Baranova, E.A. (2017). New journalistic competencies in the context of media convergence: myths and reality. *Vestnik RUDN. Series: Literary Studies*.

Bolshakova, 2012 – Bolshakova, Y.S. (2012). Internet as a marketing tool. *Modern scientific research and innovation*, 10. [Electronic resource]. URL: <http://web.snauka.ru/issues/2012/10/18176>

Bondarenko, Azizov, 2014 – Bondarenko, V.A., Azizov, V.V. (2014). Social media marketing: issues of relevance of application. *Concept*, 17. [Electronic resource]. URL: <https://cyberleninka.ru/article/v/social-media-marketing-voprosy-aktualnosti-primeneniya>

Chelysheva, 2006 – Chelysheva, I.V. (2006). Theory and history of media education in Russia. Taganrog, 206 p.

Danilina, Deinekin, 2014 – Danilina, M.V., Deinekin, T.V. (2014). Tools of Internet marketing and its significance in the modern economy. *The online journal of the sociology of Sciences*.

Drok, 2011 – Drok, N. (2011). Change of professional competencies in journalistic education. *MediaScope*, 3. [Electronic resource]. URL: <http://www.mediascope.ru/node/859>

Fateeva, 2011 – Fateeva, I.A. (2015). New technological formats of media educational projects. *Bulletin of Chelyabinsk State University*, 5 (360). Philology. Art criticism. Vol. 94: 41-45.

Fedorov, 2008 – Fedorov, A.V. (2008) On Media Education. Moscow: ICOS UNESCO "Information for All", 2008. 156 c.

Fedorov, 2015 – Fedorov, A. (2015). Comparative Analysis of Students' Media Competences Levels. *European Researcher. Series A.*, 97 (8): 539-559.

Fedorov, Levitskaya, 2020 – Fedorov A.V., Levitskaya A.A. (2020). Russia: theoretical studies in the field of media education. *Problems of training multimedia directors: XII All-Russian Scientific and Practical Conference*, April 24, St.Peterburg, 104 p.

Gasanov, 2017 – Gasanov, N.A. (2017). Interactive media: the institutional character of and function. St.Petersburg: St.Petersburg State University press, 240 p.

Goodman, Steyn, 2017 – Goodman, R.S., Steyn, E. (Eds.) (2017). Global journalism education in the 21st century: Challenges and innovations. Austin: Knight Center for Journalism in the Americas, University of Texas at Austin.

Introduction..., 2020 – Introduction to Data Science. St.Petersburg State University Online Course. [Electronic resource]. URL: online.spbu.ru/vvedenie_v_nauku_o_dannyx_data_science

Jandrić, 2019 – Jandrić, P. et. al. Postdigital dialogue: *Postdigital Science and Education*, 1, 163-189.

Joseph, 2008 – Joseph, B. Journalism education, in: Wahl-Jorgensen, K.E. (2008). *The handbook of journalism studies*. London: Routledge.

Kokhanova, 2017 – Kokhanova, L. A. (2017). Modern journalistic text in the context of media convergence: theoretical aspect. *Bulletin of the South Ural State University. Series: Linguistics*, 2: 5-11.

Kolomiets, 2019 – Kolomiets, V.P. Conceptualization of media communication. *MediaScope*, 4. DOI: 10.30547/mediascope.4.2019.2

Media..., 2019. – *Media Consumption in Russia-2019* (2019). Trends in the monetization of content on the Internet. [Electronic resource]. URL: <https://media.rbc.ru/media/reports/mediaconsumption-russia-2019.pdf>.

Meijer, 2013 – Meijer, I.C. (2013). Valuable journalism: A search for quality from the vantage point of the user. *Journalism*, 14 (6): 754–770.

Misonzhnikov, 2017 – Misonzhnikov, B.Ya.(2017). Multimedia systems in journalism: hermeneutic aspect. *Zab GU*, 4: 174-176.

Neti, 2011 – Neti, S. (2011). Social media and its role in marketing. *Int. J. Enterp. Comput. Bus.* 2011, Syst. 1: 13-29.

Nigmatullina, 2018 – Nigmatullina, K.R. (2018) New logic for training journalists for the digital environment. *Multimedia Journalism: Conference*. Minsk, March 1-2: 202-205.

Olshansky, 2017 – Olshansky, D. (2017). SMM-promotion as an effective tool of Internet marketing. *Science and Innovation*, 9 (175): 59-63

O'Sullivan, Carr, 2018 – O'Sullivan, P.B, Carr, C.T. (2018). Masspersonal communication: a model bridging the mass-interpersonal divide. *New Media & Society* 20 (3): 1161-1180. DOI: 10.1177/1461444816686104

Pasti et al., 2012 – Pasti, S., Chernysh, M.F., Svitich, L.G. (2012). The Russian journalists and their profession. In Weaver, D.H., Willnat, L. (Eds.). *The global journalist in the 21st Century*. New York: Routledge.

Pavlushkina, 2018 – Pavlushkina, N.A. (2018). Attention management in digital media: advantages and risks. *Multimedia journalism: collection. scientific proceedings*. Minsk: Belarus State University, 352 p.

Schepilova et al., 2019 – Schepilova, G.G., Kruglova, L.A., Litvintsev, A.E. (2019). Video content on the Internet: classroom preferences. *Bulletin of Voronezh State University. Series Philology. Journalism*, 4: 134-138.

Scott, 2009 – Scott, D.M. (2009). The New rules of marketing and pr: how to use news releases, blogs, podcasting, viral marketing and online media to reach buyers directly. New York: Wiley, 447 p.

Shesterkina, 2016 – Shesterkina, L.P. (2016) Modern journalistic education: updating the technological component. [Electronic resource]. URL: <http://www.mediascope.ru/taxonomy/term/183?page=1>

Social..., 2018 – Social networks in Russia, 2018. Figures and trends, autumn 2018. [Electronic resource]. URL: <https://br-analytics.ru/blog/socseti-v-rossii-osen-2018>.

Tulupov, 2019 – Tulupov, V.V. (2019). Journalism and journalistic education in modern conditions. *Voronezh State Univeristy. Series Philology. Journalism*, 1: 160-169.

Urazova, 2011 – Urazova, S. L. (2011). Convergence as a factor in the viability of the media in the digital environment. Theoretical aspect. *Bulletin of the Nizhny Novgorod University*, 5: 287-293.

Van der Haak et al., 2012 – Van der Haak, Parks, Castell. (2012). The future of journalism: networked journalism. Moscow: 2923-2938.

Vartanova et al., 2017 – Vartanova, E.L., Vyrkovsky, A.V., Makeenko, M.I., Smirnov, S.S. (2017). Russian media industry: a digital future. Moscow: MediaMir, 160 p.

Vartanova, 2019 – Vartanova E.L. (2019). From the theory of journalism to the theory of media. Dynamics of media research in modern Russia. Dynamics of media research in modern Russia. Moscow: Moscow State University, 208 p.

Vartanova, Tamas, 2018 – Vartanova E.L., Tamas P. (Eds.). (2018). Scientific report on the project "Russian media as an industry for the production and distribution of digital content". [Electronic resource]. URL: <https://pandia.ru/text/82/045/24687>

Vikhrova 2018 – Vikhrova, O.Yu. (2018). Professional training of a journalist as a mediator of financial and economic knowledge. *MediaScope*, 4.

[Vypryazkin, 2019](#) – *Vypryazhkin I.A.* (2019). The Power of social media: features of the communication of person tradersetters. In A.S. Smolyarova, A.N. Marchenko (Eds.). *Media in the Modern World. Young Researchers: Proceedings of the 18th International Conference of Students, Undergraduates and Graduate students* (March 6–7, 2019). St. Petersburg: St. Petersburg State University: 410-412.

[Yakovleva, Fomina, 2020](#) – *Yakovleva, T.V., Fomina, D.A.* (2020). Transformation of the work of a journalist in the context of digitalization: research results. *Journalism in 2019: creativity, profession, industry. Materials of the International scientific-practical conference*. Moscow: 205-206.

[Yaroslavtseva, 2016](#) – *Yaroslavtseva A.E.* Opportunities for the development of media companies. *The information potential of society and the resources of the media system: Scientific and practical conference "Journalism in 2015"*. Moscow: MediaMir: 27.

[Zamkov et al., 2017](#) – *Zamkov, A.V., Krashennnikova, M.A., Lukina, M.M., Tsynaryova, N.A.* (2017). Robotic journalism: from scientific discourse to journalistic education. *MediaScope*, 2.

[Zlobina, Zavrzhina, 2015](#) – *Zlobina N.V., Zavrzhina K.V.* (2015). Social media marketing: modern trends and prospects. *Scientific and technical statements of the St. Petersburg State Polytechnic University. Economic sciences*, 6 (233): 166-172.