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ASSESSMENT OF WAR EFFECTS ON THE PUBLISHING ACTIVITY AND SCIENTIFIC INTERESTS OF UKRAINIAN SCHOLARS

Abstract

This paper highlights war effects on publication activities and scientific interests of Ukrainian researchers. Moreover, it presents the moods and motives of Ukrainian scientists regarding their scientific activity and the publication of their results in academic journals. The research method was a survey (Google Forms) distributed through Facebook professional groups "Ukrainian Scientists Worldwide," "Ukrainian cuisine of scientific publications," "Scientific Conferences and Publications," and "Higher School and Science of Ukraine: Disintegration or Blossoming?" 690 Ukrainian scientists took part in the survey. Only 35.7% of the respondents stated that the war did not affect their research process. Results from respondents demonstrated that 27.7% of the respondents changed their scientific interests because of full-scale Russian aggression. Furthermore, scientists have psychological problems due to the loss of home, relatives, and relocation. The survey showed that motivation for publishing scientific articles varies from informing colleagues of their scientific results, scientific interest to motives distant from scientific values – "fulfillment of the requirements of the institution where I work," "I do not want to be fired," etc. 20.0% of the respondents noted that they had not got any motivation for scientific activity and publishing. At the same time, most scientists consider state security, debunking the propaganda of the Russian Federation, economic development, military medicine, ecology, education, social sphere, and agriculture to be the leading research areas. They also see the need to raise public awareness of the role of science and synchronize current multidisciplinary scientific research.

Keywords

war, publishing activity, scientific community, academic journal, scientific cooperation, motivation

INTRODUCTION

Since the beginning of the full-scale military aggression of the Russian Federation, many Ukrainian scientists have been forced to leave their places of permanent residence. The occupants have destroyed and damaged scientific and educational institutions and equipment, negatively affecting state funding of scientific projects and cooperation between researchers. As a result of the attacks, many research materials are destroyed, such as stored gametes and embryos (Aydin et al., 2022). In addition, the war affected scientists' psychological state, scientific interests, and opportunities for conducting scientific activities. However, despite this, Ukrainian scientists protect the scientific front: most conduct research, establish international scientific cooperation, participate in educational projects, and engage in other types of volunteering. Next to the army and diplomacy, science can be called the third force in confronting hybrid and military threats from the Russian Federation. This is because the battle is not just in the arena of war and military strategy but between worldviews and Russia's myths of greatness, spiritual superiority over the west, victory over fascism, a narrative of three brothers, and the speculation on the existence of Slavic Orthodox civilization (Sukhorolskyi, 2022).



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In the context of Russia's military aggression and the invaluable importance of science for the post-war reconstruction of Ukraine, it is imperative to understand the psychological state, moods, professional and personal problems of scientists, their proposals, and opportunities. Furthermore, it is vital to provide them with appropriate psychological and financial support, prevent the loss of human capital, and ensure the most effective interaction between science, state, and society.

1. LITERATURE REVIEW

Previous scientific papers are devoted to studying the regional issues of conducting the research and publishing the results of scientific activity, motives for scientific research, and specifics of conducting scientific activities in crises, particularly in war conditions. Moreover, they investigated how to overcome psychological problems associated with the influence of stress factors, the reaction of the world scientific community to Russia's military aggression, etc.

Major global events often leave a dramatic impact on research. For example, engineering and physics flourished During the Second World War; virology developed during pandemics (Gibney, 2020). The urgency of the global events is also uniting researchers from different countries and disciplines.

Borgato and Phili (2022) studied the migrations of scientists from Europe to Russia in the eighteenth and nineteenth centuries, and from Russia to Europe in the twentieth century, exiles from Italy before the Italian Risorgimento, migrations inside Europe, the escape of scientists from Nazi-fascist countries, and the effects of scientific migration.

Maryl et al. (2022) provided insights into the impact of the Russian-Ukrainian war on scientific activity and highlighted the needs of Ukrainian scientists at home and abroad. Finally, Stoika et al. (2022) gathered short comments from Ukrainian scientists, who were willing to share their thoughts on this volatile and emotionally charged situation.

Karamushka et al. (2022) studied peculiarities of the mental health of the personnel of scientific organizations in the conditions of the Russian-Ukrainian war. In general, the staff of scientific organizations has some problems with the severity of mental health in the conditions of war.

In wartime the positive orientation of scientific personnel's mental health decreases because of constant safety threats. Moreover, they are facing the destruction of the usual way of life, the ruination of educational and scientific infrastructure, the restriction of emotional contact with family members, colleagues, and friends, and worries for them, etc. (Karamushka et al., 2022). The impact of the war on the emotional well-being of Ukrainian university personnel has also been investigated (Kurapov et al., 2022).

It was proved that the possibility for Ukrainian scientists to conduct research in the laboratories of partner institutions abroad is significant and will enhance the international presence of Ukrainian science. International publications are expected to increase the readability and quotability of papers written by Ukrainian scientists. Diversification of funding tools, freedom in the management of scientific activity, and the scientist's personal responsibility for their research results will lead to a more significant internationalization of Ukrainian science (Zayachkivska et al., 2022).

Scientists from Ukraine have called for a complete boycott of the Russian academic community, including banning Russians from being authors or reviewers in international academic journals, as well as discontinuation all funding and international collaboration with Russian institutions. An open letter, signed by over 6,000 scientists from Ukraine and worldwide, also calls on the scientific community to institute academic sanctions, including blocking access to scientific databases and materials and banning Russian scientists from conferences (Chumachenko, 2022). The world scientific community, including the editors of academic journals, is unanimous in condemning Russian military aggression. Universities, scientific institutions, and academic journals worldwide are reviewing their links with Russian scientists (Wise, 2022). On March 4, 2022, the European

Commission suspended cooperation with Russian institutions involved in EU-funded research and innovation projects (EC, 2022). Governments have stopped educational and research cooperation with Russian institutions. The EU has ceased all grants of Horizon Europe funding to Russia and stopped all existing payments of Horizon 2020 funding. The German Research Foundation has frozen all collaboration with Russian Federation, and the European Council for Nuclear Research has prohibited access to the majority of its programs for Russian scientists (Plackett, 2022).

Many institutions and organizations offer support, funding, scholarship, and work for scientists who crossed the borders after February 24, 2022 (Pulverer, 2022; Gaind & Else, 2022). Some organizations have initiated short-term scholarship and grant programs, for example, EMBO, Volkswagen Stiftung, Max Planck Society, and others. These help Ukrainian scientists stay connected to research and integrate into the European research cooperation (Zayachkivska et al., 2022). A new form of support is offering work in business incubators. The criteria for support include focusing on areas of high importance for recovering Ukraine after the war (Qureshi et al., 2022).

The European Association of Science Editors (EASE) issued the statement in support of its Ukrainian members and all peoples of Ukraine. Their members are absolutely opposed to the invasion and aggression brought up to Ukraine by the Russian Federation. Additionally, the organization has offered complimentary membership to EASE and access to all its resources until the end of 2023. It encourages all its members, colleagues, and scientists to advocate peace in Ukraine (Nicholas, 2022). Moreover, Petersen and Verkhratsky (2022) state that “the only way to achieve peace is to exert maximal pressure on opinion forming groups inside Russia and that this can only happen when these groups realize their status in the international community is threatened.”

Meanwhile, one also observes the support of the Russians who are affected by the sanctions. The issue of banning publication in international academic journals by Russian scientists is still controversial (Nazarovets & Teixeira da

Silva, 2022). For example, the editorial office of the BMJ medical journal discusses ways to support Ukrainian scientists while keeping in contact with Russian scientists. The journal continues to consider papers for publication from Russian authors and institutions. The editorial team states that science and health have the potential to bring people together to improve understanding and cooperation. Therefore, they stand “with health professionals, scientists, and civil society, not with dictators” and check submissions from Russian researchers and institutions on propaganda content with extra scrutiny (Abbasi, 2022).

The publication motives of scientists were studied by Blind et al. (2022). They divided them into “Gold” (financial rewards), “Ribbon” (reputational/career rewards), and “Puzzle” (intrinsic satisfaction). Blind et al. (2018) introduced intrinsic and extrinsic motives of researchers’ activities, taking into account self-determination theory. Extrinsically motivated behavior could become intrinsically motivated due to internalizing its values and regulations.

Mryglod et al. (2021) investigated the collaborative nature, geographic landscape, and some peculiarities of Ukrainian economic research citation statistics. In addition, they highlighted the importance of supporting initiatives aimed at open scholarly metadata enrichment and provided information that can be used to support the decision-making for research management. Finally, the direct impact of war events on Ukrainian scientists was studied within the framework of the Ukrainian Science Reload project (UAScience.Reload, 2022).

In order to assess war effects on the publishing activity and scientific interests of Ukrainian scientists and compare it with the results of previous scientific research, this study aims to investigate:

- how the war affected the publication activities and scientific interests of Ukrainian researchers; and
- moods and motives of Ukrainian scientists regarding their scientific activity and the publication of their results in academic journals.

2. METHODS

A questionnaire survey (Google Form) was distributed in June-July 2022 on the pages of Facebook groups “Ukrainian Scientists Worldwide”¹, “Ukrainian cuisine of scientific publications”², “Scientific Conferences and Publications”³, “Higher School and Science of Ukraine: Disintegration or Blossoming?”⁴. The survey was piloted in the Department of Publishing and Editing and The Department of Dynamics, Machine Strength, and Material Resistance of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” (25 researchers). The questionnaire included 14 closed-ended and 10 open-ended items. The results of the survey were analyzed on August 1-15, 2022.

Overall, 690 scientists completed the survey. 37.4% of the respondents were 36-45 years old, 33.0% were 46-59 years old, 20.0% – 26-35 years old, 9.6% – 60 years and older. 64.8% of the respondents are PhDs, 20.4% – Doctors of Sciences, 11.3% – postgraduate students, 3.5% – researchers without scientific degrees, but not postgraduate students. 57.2% were scientific and pedagogical workers at the universities, 23.8% worked in the research institutions of the National Academy of Sciences of Ukraine, and 12.5% were practitioners with a scientific degree. 6.5% of respondents were engaged in conducting scientific research only as part of their postgraduate education. 34.1% of the respondents were male, 65.3% were female, and 0.6% did not answer. The questionnaire was filled by the representatives of the following scientific fields: engineering (10.4%), medicine (9.4%), physics and mathematics (9.0%), economics (7.8%), philology (7.2%), ecology (6.6%), pedagogy (6.4%), biology (6.1%), IT (5.9%), jurisprudence (5.6%), philosophy (4.5%), politology (3.9%), sociology (3.6%), social communication (3.5%), agricultural sciences (2.9%), history (2.8%), chemistry (2.4%), and public management (2.0%).

3. RESULTS

The survey began with questions about age, gender, position, scientific field, and change of residence of Ukrainian scientists after February 24, 2022. This was followed by questions about the impact of the war on scientific research, the motivation to publish scientific papers, scientific interests and their change, the need for academic support, financial conditions for publishing articles, and the change in publishing opportunities after the start of martial law. Most of these questions provided multiple-choice options and respondents’ comments.

40.9% of the respondents were in the territory controlled by Ukraine and did not change their place of residence due to the full-scale aggression of the Russian Federation. 19.4% moved within the borders of Ukraine but have already returned, particularly to the de-occupied territory; 16.4% left Ukraine after February 24 and have not returned; 12.9% moved and still live in safer places in Ukraine. Finally, 9.4% left Ukraine after February 24 and have already returned; 1.0% live in the temporarily occupied territory.

577 (83.6%) of the 690 respondents are now in Ukraine, of which the largest number (33.2%) are in Kyiv and the region, 15.2% – in Lviv region, 13.3% – in Dnipropetrovsk region, 8.4% – in Kharkiv region, 8.2% – in Poltava region. Of the 113 surveyed scientists who are still outside Ukraine, the majority are in Germany (27.3%), Poland (21.2%), the Netherlands (13.5%), Austria (13.1%), Israel (9.4%), and the USA (7.2%).

117 scientists could prepare at least one article while abroad. 59.1% of them indicated Ukrainian universities or scientific institutions in their affiliation because they worked remotely; 22.6% wrote dual affiliation (Ukrainian and institutions where they found employment abroad); 12.9% indicated only foreign institutions because it was determined by the contract; 5.4% identified themselves as “independent researchers.”

1 <https://www.facebook.com/groups/314070194112>

2 <https://www.facebook.com/groups/449029836041923>

3 <https://www.facebook.com/groups/590310794414367>

4 <https://www.facebook.com/groups/261451893969652>

85.5% of the 577 surveyed scientists who are currently in Ukraine continue to conduct research. At the same time, 64.2% conduct it, as before, in the same institution or university; 8.6% combine scientific activity and military service (volunteering); 6.9% continue to work where they used to, and also got new opportunities for scientific activity; 3.8% work only thanks to grants; 2.0% do not have time to combine educational and scientific work. However, 15.5% have stopped scientific activity, in particular, due to job loss (5.8%); service in the Armed Forces of Ukraine (4.7%); volunteering (2.8%); by family circumstances (2.2%). About half of those who have stopped scientific activity after the full-scale aggression of Russia does not plan to return to the scientific sphere in the future, and 21.9% of the entire contingent of respondents are ready to consider the possibility of additional earnings outside the scientific field.

35.7% of the respondents state that the war did not affect the process of their research, 58.3% (402 respondents) claim that the war prevented them from completing previous scientific research. Only 5.0% noted that they were able to completely overcome this influence. 47.8% of the respondents stated that Russia’s military aggression affected the choice of academic journals to publish their research results.

Responding to the question “How exactly did the war prevent you from conducting scientific re-

search?”, the respondents provided the following answer options (the respondents could choose several answers and (or) add their own option): psychological discomfort, inability to plan anything (42.6%), lack of funding (40.0%), previous research has lost its relevance (19.7%), change of scientific connections (18.4%), difficulties with collecting samples for experimental research (14.8%), the amount of educational and methodological work in the higher education institution has increased (14.3%), relocation (14.1%), family problems caused by the war, including the inability of children to attend kindergartens and schools, care for injured relatives and other family members who needs care (10.7%), won grants are not funded (9.3%), reading rooms in archival institutions are closed (7.8%), volunteering (4.6%), analysis of received data is complicated (4.2%), service in the Armed Forces (3.9%), logistics for transport is disrupted transfer of material to foreign colleagues (3.8%), destroyed laboratories, materials and equipment (3.5%), equipment setup suspended due to the danger of bombings (1.9%) (Figure 1).

To the question “What is your motivation for publishing scientific articles in war conditions?” the following answers were received (respondents could choose several options and (or) add their own): to inform colleagues of their scientific results (67.3%), scientific interest (56.4%), fulfillment of the requirements of the institution where I work (48.7%), inform the world about the events in Ukraine (42.4%),



Figure 1. Answers to the question “How exactly did the war prevent you from conducting scientific research?”



Figure 2. Motivation for publishing scientific articles in war conditions

career advancement (35.6%), to be quoted (30.4%), new acquaintances, establishing co-authorship networks (20.0%), not to be fired (17.3%), scientific work became a consolation during the war (11.2%). They also noted the debunking of imperial mythmaking (7.1%). At the same time, 20.0% of respondents noted that they had lost motivation to prepare scientific publications (Figure 2).

To the question “What forms of academic and social support do you need?” the respondents answered as follows (they could choose several answers and (or) offer their own): mini-grants (59.1%), assistance in participating in international projects (53.0%), access to scientometric databases and full-text articles (31.3%), virtual mobility (29.6%), linguistic and stylistic editing of English-language articles (18.9%), social support, care for children and other family members (14.2%), mentoring (12.2%), seminars (9.6%), large grants (6.3%). Only 8.7% of respondents do not need any academic support (Figure 3).

The respondents gave different answers to the question “What are the financial conditions for publishing articles during wartime?": I still try to publish articles in free foreign international journals (26.7%), I used to pay for publications, but now I am looking for opportunities to be published for free (21.9%), I publish articles for money mostly in Ukrainian academic journals (16.4%), I publish articles for free in Ukrainian academic journals, including international ones (11.2%), I publish articles for money in Ukrainian and foreign academic journals (8.2%), I have stopped publishing (15.6%) (Figure 4). At the same time, only 6.3% of the scientists who pay for publications use the financial support of their institutions, grantors, and sponsors. 47 scientists (6.8% of the respondents) additionally noted that they refused to publish in foreign journals due to restrictions on money transfers from Ukraine.

To the question “What is your opinion of the requirements for publications by employers and the Ministry of Education and Science of Ukraine?”

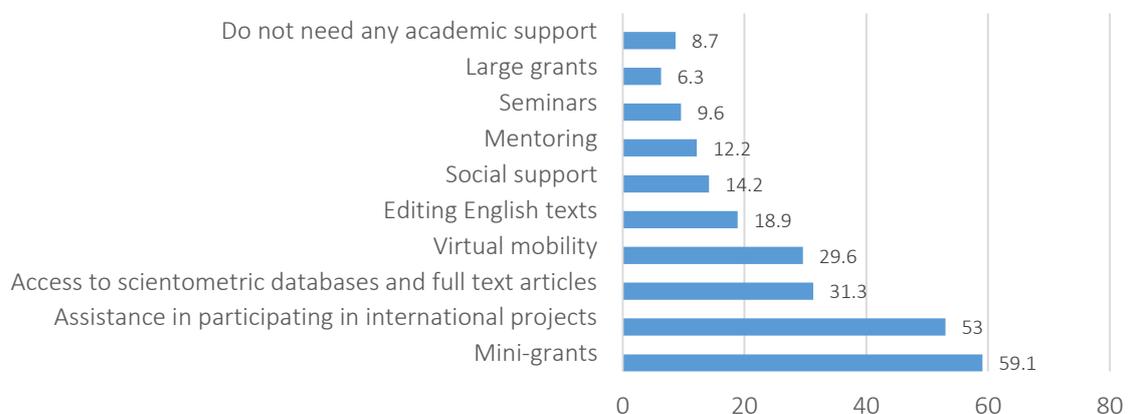


Figure 3. Answers to the question “What forms of academic and social support do you need?”



Figure 4. Answers to the question “What are the financial conditions for publishing articles during wartime?”

Are corrections necessary in the conditions of martial law?” the answers were distributed as follows: no need to change (19.5%); not to require publications in journals indexed in Scopus and (or) Web of Science Core Collection (18.0%); revise the requirements by reducing the number of publications and shifting the emphasis to their quality, raise the requirements for articles to the European level (16.6%); publication requirements should be removed from those who have many students (9.6%); in the conditions of martial law, it is not possible to demand any publication activity (“firstly, this is creative work, not everyone is able to perform it nowadays due to psychological and other reasons; secondly, during the time of salary reduction, “voluntary” vacations at one’s own expense, the requirement to publish is bullying”) (8.1%); corrections in the conditions of martial law are needed only in those institutions that were left without an objective opportunity to conduct research (experimental equipment on which measurements were being carried out was destroyed; if the work was carried out in collaboration with the Russians, etc.) (7.8%); there should be no requirements, except of high-quality research results (6.9%); increase the mobility of researchers, create conditions for participation in business trips for male scientists, and only then strengthen the requirements (5.7%); correct the requirements only for those scientists who still live on the occupied territories (4.0%); allow the use of Russian-language sources (3.8%).

27.7% of the respondents changed their scientific interests because of full-scale Russian aggression. In particular, there is an intensification of research in the field of state security, the development of the military-industrial complex, nanomaterials and technologies, development of protective construc-

tions, composite materials for medical and military purposes, and the provision of medical aid in war conditions. Nuclear, food security, solving of environmental and migration problems, restoration and reclamation of soil are also critical. In the information field, the emphasis shifted to information security and digitization of all spheres of life. In psychology, research on the effects of stress caused by war and aspects of psychological rehabilitation of soldiers, family members of the dead, wounded, displaced persons, victims of violence among the civilian population who were or still are under occupation, and prisoners of war have intensified.

In the legal field, research is being conducted on Ukrainian diplomacy, strengthening sanctions pressure on the aggressor, and collecting evidence of war crimes committed by the Russian army. In the social sphere, it is about control over charitable donations and financing the needs of the population and territorial communities. In the economic field, the experience of the states regarding the post-war recovery of the economy is being studied. In pedagogy, they are investigating the possibilities of ensuring the quality of the educational process in martial law conditions. In the historical sphere, scientists attract more radical concepts unacceptable in the public space earlier. For example, the war is called a war, not an anti-terrorist operation or a joint force operation. Scientists also work on decolonizing the symbolic space, involving colleagues in the preservation of cultural heritage and the digitization of art artifacts, drawing the attention of the world scientific community to the need to preserve Ukrainian culture and identity.

In response to the question “How did the war affect the review procedure for your publications?”, 64.2% of respondents who submitted articles after February

24, 2022, indicated that they did not notice any impact. The rest noted that some journals accept and review articles faster with the beginning of full-scale Russian aggression. It has become easier to publish in free foreign journals; reviewers have become more loyal than before (26.7%). However, the rest of the interviewees (9.1%) indicated that editors began considering their articles longer.

Answering the question “Did you manage to discover new publishing opportunities since February 24?”, 29.2% of respondents answered in the affirmative. In particular, it is an invitation to publish in open access journals that have removed the fee for authors from Ukraine; more loyal attitude of editors to authors from Ukraine during consideration of articles; payment for publications by western partners. There are new prospects for cooperation with foreign colleagues; special issues for Ukrainian authors; free editing; work in western scientific institutions that increases the individual level of research skills and, accordingly, opens up new publishing opportunities.

To the question “What kind of support do you need now?” the answers were distributed as follows (respondents could choose several answer options and (or) add their own): support of the international scientific community to end the war (93.5%), financial (70.4%), psychological (54.1%), resumption the work of the National Research Fund of Ukraine (31.7%), assistance in writing grant projects (24.2%), canceling restrictions on crossing the state border by men of conscription age (“such policy takes away opportunities for continuing scientific research of those few scientific groups of Ukraine working at the international level, undermines international ties and causes misunderstanding among foreign colleagues”) (22.0%), information about the possibilities of free publications (14.1%). Only 79 (11.5%) respondents do not need any support. Meanwhile, 14.2% of the respondents want to change their activity to a more profitable one and “not engage in something that is of absolutely no interest to anyone in this country.”

4. DISCUSSION

The study findings are preliminary and limited to data collected at one point of time in the war. The results are mostly in line with a survey conducted at the end of spring 2022 as part of the Ukrainian

Science Reload project. Its initiative group included representatives of Ukrainian and foreign universities, public organizations, the National Research Fund of Ukraine, and the National Erasmus+ Office in Ukraine & HERE team. 83.7% of the respondents (a total of 2,173 scientists were interviewed) noted that their financial situation had worsened compared to the pre-war period. However, 81.1% of the respondents at the same time continued to receive wages. To the question “Is it possible to engage in scientific activity to the same extent as in pre-war times?” less than a third of respondents answered “yes.” Almost 30% of the scientists who worked on specific projects noted that their project was stopped because of the war. This is primarily due to the deprivation of funding from the National Research Fund, which made it impossible to finance previous projects (although, paradoxically, including those aimed at security) and to start financing new projects. Among the reasons for the impossibility of carrying out the scientific activity, scientists noted the following: I do not feel safe, and that prevents me from working; the specificity of my work involves presence in the workplace, and I do not have such an opportunity; technical reasons: troubles with Internet and communication, black-out, etc.; lack of interest, apathy. Among the most pronounced needs of Ukrainian scientists related to scientific activity, the following were noted: scientific projects that can start in the nearest prospects; access to scientific literature; communications with team/colleagues; mobility programs for scientists; access to information and data, access to equipment for conducting scientific research, laboratories; licensed software necessary for conducting scientific research. At the same time, 74.5% of the scientists were ready on a volunteer basis to join the implementation of projects, the purpose of which is strengthening the defense capability and/or reconstruction of Ukraine (UAScience.Reload, 2022).

According to the survey, 58.3% of the respondents state that the war prevented them from carrying out activities at the level that was possible before February 24, and only 5.0% noted that the war did not affect the scope of their scientific activity. The respondents were hindered primarily by psychological discomfort, inability to plan anything, lack of funding, change of scientific connections, difficulties with collecting samples for experimental research, volunteering and service in the Armed Forces, destroyed laboratories, materials, and equipment.

These findings also confirm a previous survey on the Russian-Ukrainian war impact on university personnel (Kurapov et al., 2022). The most of the respondents reported depression (84.3%), exhaustion (86.7%), loneliness (51.8%), nervousness (84.4%) and anger (76.9%), and negative effects of war associated with mental health, fear, stress, burnout, etc. In addition, respondents emphasized the loss of employment, lack of financial stability, post-migration stress, and other war-induced factors.

In general, the staff of educational and scientific organizations has a number of problems with the severity of mental health in the conditions of war (high level of such negative mental states as rigidity, ag-

gressiveness, anxiety, and frustration (Karamushka et al., 2022).

To some extent, the results contradict Blind et al. (2022) because they confirm that scientific publishing in Ukraine is mainly driven by career rewards but not intrinsic satisfaction. Meanwhile, for some scientists, the war opened new publishing opportunities. This survey demonstrates “better research performance”: having more chances of being a coauthor with foreign scientists and publishing more papers in well-established western academic journals (Zhao et al., 2020); a more loyal attitude of editors to authors from Ukraine; and payment for publications by western partners.

CONCLUSION

Full-scale Russian military aggression substantially affected the publication activities and scientific interests of Ukrainian researchers, influenced the moods and motives of Ukrainian scientists regarding conducting scientific activity and publishing their results in academic journals.

Among the main factors that hindered scientific activity, scientists named psychological discomfort, lack of funding, change of scientific connections, difficulties with collecting samples for experimental research, etc. At the same time, the interest of international institutions to Ukrainian science has increased. About a third of the respondents discovered new publishing opportunities, such as an invitation to publish in open access journals; a more loyal attitude of editors; payment for publications by western partners; new avenues for cooperation with foreign colleagues; special issues for Ukrainian authors; providing free editing.

27.7% of the respondents changed their scientific interests, focusing on state security, the development of the military-industrial complex, protective constructions, composite materials for medical and military purposes, the provision of medical aid in war conditions, nuclear, food security, solving of environmental and migration problems, restoration and reclamation of soil, information security and digitization of all spheres of life, psychological rehabilitation, collection of evidence of war crimes committed by the Russian army, post-war economic recovery, etc. But publishing motives of the interviewees vary from informing of their scientific results, scientific interest, and “contribute to victory” to the only wish not to lose their job. Meanwhile, according to the survey, 15.5% of the respondents have stopped scientific activity, and half of them does not plan to continue research in the future.

The post-war reconstruction of the country, its economic development under the conditions of a constant war threat, and the achievement of structural renewal and systemic modernization of the national economy are directly related to the state policy of supporting science and innovation; stimulation of scientific and technical developments; implementation of successful practices in the field of formation of innovative human potential, scientific and technological support of structural restructuring and development of the economy in conditions of military threat. In the current conditions, it is vital to prevent the loss of Ukraine’s scientific potential, establish new scientific ties with the international scientific community, and the most effective interaction between Ukrainian scientists, state, international partners, and Ukrainian society in order to work together for victory.

AUTHOR CONTRIBUTIONS

Conceptualization: Svitlana Fiialka.
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 Formal analysis: Svitlana Fiialka.
 Funding acquisition: Svitlana Fiialka.
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