ETHICS IN SCIENTIFIC RESEARCH WORK: OVERVIEW OF RESEARCH IN THE FIELD OF CULTURAL HERITAGE

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Abstract: Ethics, defined as a system of principles that distinguishes between right and wrong, serves as an established framework of behavior within a community, playing a pivotal role in scientific research activities. By upholding values such as knowledge, honesty, truth, objectivity, transparency, and a willingness to engage in the exchange of ideas, resources, and results, researchers proactively distance themselves from misconduct in a manner that is clear and transparent. The objective of this work is to shed light on recognized ethical concerns within the extensive field of cultural heritage research. It aims to propose practical solutions in the era of digitization, pinpoint the roles of organizations and institutions responsible for the preservation, revitalization, and promotion of cultural heritage, and offer ethical solutions that are comprehensible and widely acceptable. Cultural heritage serves as a significant catalyst for overall economic development, creating new employment opportunities and increasingly contributing to recognition and a positive image. The current generation carries a legal and ethical responsibility towards future generations, necessitating the minimization of negative effects stemming from the growing number of visitors. Simultaneously, it requires the adequate protection, utilization, and presentation of cultural monuments, spatial-historical entities, archaeological sites, famous locations, and intangible cultural heritage. The rich tapestry of various civilizations, with its authentic and unparalleled cultural-historical and religious heritage, attests to the invaluable integrative function of heritage. Despite the fact that there are no true winners in war, and all parties suffer losses in conflict, the enduring scars of past destruction serve as stark examples of the permanent loss of cultural values. These losses have a compounding impact on economic, political, cultural, and ethical stability and development.

Keywords: ethics, science, research, cultural heritage

1. INTRODUCTION

Ethical standards in scientific research should be rooted in universal values, including responsibility, trust, respect, and the exchange of knowledge, skills, and experiences. This exchange often results in synergistic effects from multidisciplinary and interdisciplinary activities.

To guide researchers in navigating ethical dilemmas, the American Psychological Association (APA) advocates for five key principles of research ethics: open and candid discussions about intellectual property, awareness of multidisciplinary roles, adherence to informed consent rules, respect for confidentiality and privacy, and the use of ethical resources (Smith, 2003).

One of the paramount principles of research ethics involves fostering a culture of education and mentoring, providing ongoing support to junior researchers. It is also essential to promote socially responsible activities and to prevent or mitigate societal harm through research, public education, and advocacy (Resnik, 2020).

The words of Immanuel Kant, a prominent figure in German classical idealist philosophy, resonate with the enduring significance and complexity of this topic. In his work, "Critique of the Practical Mind," Kant stated, "Two things always fill my soul with admiration, more and more deeply the more I think about them: the starry sky above me and the moral laws within me" (Kant, 1979: 5). These words highlight the profound connection between ethical considerations and our understanding of the universe.

2. BASIC CHARACTERISTICS AND RECOGNITION OF GOOD RESEARCH

Scientific work at universities and in general involves basic, applied, and developmental research, while artistic work focuses on artistic projects. The organization and execution of scientific and research work adhere to legal regulations and institutional guidelines.

The primary challenge in scientific research work lies in selecting the right focus and research area, defining research techniques and models, and establishing the practical and scientific significance of the research. When making these choices, several critical considerations come into play. These include:

- Relevance and validity, with a specific emphasis on the practical and scientific justification of the research.
- Familiarity with the existing state of the field, encompassing published books, research, ongoing and completed projects, and works in reputable journals and scientific publications.
- Identification of key institutions, research centers, and prominent companies, which involves conducting a comprehensive and critical review of both theoretical and practical trends in the field.
- Determining the scientific and practical contribution, or how the research will significantly enhance knowledge in the relevant field.
- The ability to establish arguments, reasons, and new ideas based on well-documented, explicit, and original records and facts.
- Proficiency in producing a high-level scientific-research paper that demonstrates interrelated elements of analysis, evaluation, and synthesis, combined with well-articulated elements of critical thinking and conclusion drawing.

To ensure that the characteristics described in the introduction are incorporated into the final preparation of scientific research work, careful attention should be paid to the type, content, and contribution of the work. Consequently, it is essential to consider how to demonstrate the practical and scientific contribution. There are several approaches, including:

- Analyzing existing techniques, models, or theories and their implications for new situations.
- Investigating existing models under conditions involving changes in one or more variables.
- Analyzing the performance of models or theoretical assumptions in the context of new, dynamic societal changes.
- Selecting and analyzing two or more factors to provide a new, useful perspective.
- Researching, analyzing, and assessing the application of theoretical or universally accepted principles in dynamic and complex societies undergoing transitions.
- Validating claims that were previously considered "obvious and well-known" through new research and compelling evidence.
- Analyzing and assessing trends, phenomena, and tendencies.

The process of selecting a topic, creating a paper, and gathering information through original primary and secondary research methods (surveys, questionnaires, interviews, conversations, observation, and evaluation) is a complex and demanding undertaking.

2.1. A model of scientific and original research

Higher-level skills were initially introduced by Benjamin Bloom in 1956, where he categorized thinking skills into lower and higher order. Bloom's categorization was later revised by Anderson and Krathvohl in 2000 and 2016. Gershon (2013) provided practical ideas to help develop strategies based on these concepts. This model is built upon the principles of Bloom's Taxonomy and universally accepted academic and professional standards. The hierarchical model defines fundamental criteria for knowledge, skills, and competencies that should be acquired, applied, and realized at different levels of education. For instance, at the secondary level of education (level 3), the fundamental criteria for evaluation include knowledge and understanding of the subject matter, practical application of knowledge, and the ability to analyze and evaluate.

For high-level scientific-research works, the criteria, competences, and skills indicated in the model are as follows:

- I Title and choice of research area, demonstrated theoretically and practically.
- II Knowledge and practical application in real-world scenarios, original primary and secondary research.
- III Mastery of methods, techniques, and complex aspects of quantitative and qualitative analysis.
- IV Systemic, coherent, critical, and logical reflection, conclusion, and evaluation.
- V Proficiency in substantive, theoretical, and logical synthesis of theoretical and practical content, incorporating all pertinent and valid results from original research.

In the following model, the lines on the left side of the chart connect all the criteria, skills, and competencies that should be applied throughout the creation and writing of the paper. Several key premises should be noted. First, if a work is selected without a clear focus, lacking a strong title, imprecise, irrelevant, or invalid research questions and hypotheses, without a well-defined research sample and research methods and techniques, it will have a negative impact that will affect all other criteria for evaluating the validity of the work, as indicated by the red lines.

Scheme 1. Model of scientific and original research

SCIENTIFIC RESEARCH MODEL AND ORIGINALITY OF RESEARCH CRITERIA, SKILLS AND COMPETENCIES PhD II NOWLEDGE a) ·literature review **IMPLEMENTATION** analysis of practical solution ORIGINALITY OF RESEARCH ·analysis (quantitative, qualitative & mixed research Ш BLOOM TAXNONOMY ANALYSIS •SWOT-TOWS •PESTEL •5 FORCE MODEL IV •trends •value chain •advantages •disadvantages **EVALUATION** •points opinion •assessment •critical •relevant •valid •reliable V •PhD objectivs & research •theory and practice •literature review & research ·recommendations and conclusion ETHICAL & MORAL STANDARDS •ethical form •honesty •references •sustainability •equality •tolerance ACADEMIC & EVIDENCE, PROOFS & FACTS •analysis •observation •experiment •relevant and valid information STANDARDS

I Title selection, defining objectives and goals, focus, research questions, hipoteses, definition of research, methods & techniques.

PRESENT

- II Knowledge, applications and original research. Knowledge and understanding of the field of research, consists of::
 - a) literature review,
 - b) analysis of practice, and

PAST

- c) defining and doing original research.
- III Analysis and use of at least three methods.
- IV Evaluation, personal and critical opinion.
- V Synthesis and preparation of a PhD thesis with an integrative and logical approach by connecting all parts of the work into a consistent and logical discrtation.

FUTURE

Source: Ivanović, M., Penjišević, A. (2023). Metodologija naučno-istraživačkog rada sa osnovama ststistike i obradom podatka u IBM SPSS-u. Sremski Karlovci: Centar "Akademac", 293.

Secondly, if one possesses limited knowledge solely derived from a brief and modest review of the literature, lacking an in-depth analysis of practical aspects, it is unrealistic to expect high-quality work yielding scientific and practical outcomes. The critical connection and impact of this criterion becomes evident in the light of criterion II, encompassing activities a, b, and c. Activity c, focusing on the originality of research, stands as the fundamental and most vital characteristic of sound scientific research papers and doctoral theses.

Thirdly, the phases of analysis and evaluation, represented in the model as III and IV, carry immense importance and should encompass every facet and section of the work.

Fourthly, the skill of synthesis plays a unifying role, linking all segments and aspects of the work into a coherent and logical whole. Consequently, if any of the mentioned criteria are disregarded or undervalued, the attainment of a high-quality work becomes unattainable.

The model presented for producing scientific papers is intended to contribute to the enhancement of paper quality and standards, with a particular emphasis on elevating the originality of research. It can be effectively utilized as a standardized model for raising the level of scientific and research work within higher education institutions, professional organizations, and research institutes. The principal aim of this model is to facilitate comprehension of the requirements, complexities, and, most importantly, to instill the fundamental criteria for assessing scientific research works from the outset.

3. RESEARCH ETHICS

Research ethics encompasses a complex framework of values, standards, and institutional guidelines that serve to shape and regulate the entirety of scientific activities. The adoption of professional ethical codes is aimed at preserving the dignity of both the institution and the profession, preventing physical and moral harm, nurturing responsibility in ethical research, minimizing risks, elevating the standards of scientific and research work, enhancing the practical applicability and usefulness of research, and, most importantly, elevating the quality and

originality of research (Ivanović & Penjišević, 2018). It is imperative that these ethical standards are universally applied to all members of the scientific community without exception. Ethical norms, while typically broader and less formal than legal regulations governing certain behaviors, should not be conflated with the law. Indeed, a specific activity may be legal but still considered unethical, or vice versa. As a response to the growing recognition of the ethical, legal, and societal impacts of artificial intelligence and robotics, a new generation of ethical standards in these fields is emerging.

The fundamental standards of research ethics are rooted in the overarching moral principles of society (Walton, 2013). Murtić (2021: 401-402) highlights that ethical principles can be established at the level of particular organizations, institutions, or professions. They are generally categorized into three universal domains: those concerning research subjects or participants, scientists and researchers, and the organizations or funds that finance research. Murtić underscores the importance of ethical considerations, particularly in high-risk scientific research related to humans, animals, and military technology.

4. ETHICAL STANDARDS

The ethical form should be universal for all universities, that is, scientific research institutions, because it is the only way to control quality in all phases and at all levels. Namely, scientific-research institutions can only defend their standards in this way and thereby position themselves in the scientific-research field.

The ethics form as a form, in addition to general questions, about the name of the research, basic data about the main researcher, it is necessary to contain details of the project: from the length of the study, the type of project (whether it is a student project or not and if so, for which level of study), what is the main research question and goal, then what is the scientific justification for the research and why the research itself would be significant. It is especially important to review and evaluate previous research. The ethical framework should be universally applicable to all universities and scientific research institutions as it represents the sole means to ensure quality control across all phases and at all levels. It is through the establishment of such ethical standards that scientific research institutions can safeguard their integrity and establish themselves within the scientific research community. The ethical framework, in addition to addressing general inquiries, should encompass specific details regarding the research project. These details should include the project's duration, its classification (such as whether it is a student project and, if so, the level of study it pertains to), the primary research question and objective, the scientific rationale justifying the research, and the reasons why the research itself holds significance. Furthermore, a critical evaluation of prior research in the field is of utmost importance.

When defining the research tasks, hypotheses, or research questions, it is essential to outline the data collection method (e.g., surveys, recordings, measurements, counts, etc.), define the research sample, specify the methods for sample selection, and describe how observation units will participate in the study. It's crucial to ensure the sample size is representative as the number of observation units must be precise. Additionally, the methods of data analysis (whether statistical or otherwise) that will be employed to compare data and draw conclusions in line with research objectives should be documented. The time and location of the research, as well as the names of individuals involved in the research, must be clearly stated. Any research may give rise to ethical concerns, so it is prudent to have predefined steps to address them.

Details about the research participants (observation units) should be provided, including total number, gender, age, education, work experience, professional and work position, and social status if the research involves individuals. This information is vital to determine if research participants fall into specific categories, such as those under 16 years old, individuals with learning disabilities, persons who are unconscious or seriously ill, those in the terminal stage of a disease, individuals with dementia, prisoners, young offenders, persons with diminished legal capacity, healthy volunteers, with justifications for their inclusion in the research. The document should also explain how potential participants will be identified, approached, and included in the research.

Regarding participant data, electronic addresses, phone numbers, and company names should be recorded and stored securely. This is essential for data verification purposes, especially if requested by the institution responsible for upholding ethical standards. Data verifiability is critical for ensuring research originality and accuracy, and steps to ensure data verifiability should be detailed.

If the data collection method is, for example, a survey, it is important to mention encryption of survey sheets and the process for checking all observations, whether manually or using software. Details about where and with whom the data will be stored, as well as the duration of data storage (in months or years), should be included.

The document should also specify whether the research will involve activities such as reviewing medical records by individuals outside the healthcare service or within the service without regular access, electronic data transmission via magnetic or optical media, email or computer networks, data sharing with other organizations, data export outside the European Union, use of personal information like addresses, postal codes, faxes, emails, or phone

numbers, publication of direct statements from respondents, publication of data that might allow participant identification, use of audio and video recording devices, and storage of personal data on electronic files, CT, MR, or X-ray images, health service information systems, personal or other computers, university computers, private company computers, and laptop computers.

What is also rarely discussed in practice is the financing and sponsorship of the research itself, all with the aim of preserving the objectivity and impartiality of the research process. If the research process is realized with the help of external funding, it is necessary to provide details about the organization or organizations, as well as the amount of money provided and the duration of the funding. It is important to have knowledge and confirmation that the external financier has agreed to play the role of sponsor based on the proposal on conducting research. If the sponsor is not the university/institution itself, it must be specified in detail, the name of the organization, contact, amount of money, duration of sponsorship.

Ethical deviation in scientific research can significantly harm direct users, as well as all related parties. Therefore, it is a constant task of researchers to gain and maintain people's trust in the quality and integrity of research during research activities (Haque et al., 2022).

5. ETHICS OF CULTURAL HERITAGE

Frequently, questions arise regarding the morality and appropriateness of utilizing artistic styles that are distinct to a culture to which the creator does not belong. These inquiries delve into the relationship between cultural heritage and group identity, as well as whether there exists a universal cultural heritage to which all cultures are connected. These inquiries directly pertain to the ethical dimensions of cultural heritage.

On one hand, there exists a inclination to perceive cultural heritage as a universal asset, while on the other hand, there is a push for culturally specific rights and constraints that acknowledge the distinctive needs of particular cultural groups (The Stanford Encyclopedia of Philosophy, 2018). Cultural heritage is a concept rooted in the past, yet it is equally intertwined with the present and the future.

Ethics pertains to what is considered acceptable and unacceptable behavior within a specific group or community, taking into account not only the legal aspects but also the human and cultural perspectives. In this context, UNESCO has adopted the 12th ethical principles for the protection of intangible cultural heritage as a complement to the Convention on the Protection of Intangible Heritage. These principles should serve as a foundation for the development of specialized ethical codes and tools adapted to local and sector-specific contexts.

These principles identify the primary role of communities, groups, and individuals in preserving and evaluating the value of their own intangible cultural heritage. Transparency, mutual respect, and appreciation should be the guiding principles in interactions between states and communities. The decision also emphasizes the importance of providing access to instruments, objects, artifacts, cultural and natural spaces, and places of memory necessary for the expression of intangible cultural heritage, even in situations of armed conflict.

One of the principles underscores that those who create intangible cultural heritage should benefit from the protection of both moral and material interests arising from such heritage, particularly concerning its use, research, documentation, promotion, or adaptation by members of communities or others. In multicultural environments, it is crucial to emphasize respect for cultural diversity and the identity of communities and individuals. Authenticity and exclusivity should not hinder the protection of intangible cultural heritage (UNESCO, 2015).

The Code of Ethics of the International Council of Museums (ICOM), a non-governmental and non-profit organization founded under the auspices of UNESCO, stipulates that "no item or specimen should be acquired through purchase, gift, exchange, or bequest if the acquiring museum is not satisfied with the existing proof of ownership. Proof of ownership in the country does not necessarily require a title deed" (ICOM, 2007: 3). In addition to the ongoing issue of artifact ownership, scientists and researchers also grapple with the complex matter of possessing the cultural heritage of other countries, communities, and individuals, considering their uniqueness and authenticity.

The use of new technologies has given rise to various ethical challenges, including sustainability and digital preservation, the role of commercial and corporate interests in the design, development, and promotion of certain products, professional and community engagement in the public digital sphere, equal access to technology and content, and a broad spectrum of sociopolitical questions (Colley, S., 2015).

Ethics should be explicitly integrated into the critical examination of heritage tourism, making the improvement of ethical approaches a central, rather than peripheral, concern in development. The benefit of this ethical approach lies in its ability to provide an analytical framework that not only reveals how heritage tourism operates but also suggests that its ethics should be rooted in politics, and its politics should be grounded in ethics (Watson, 2015). In this context, Sančanin (2019) asserts that the integration of cultural and historical heritage with high-quality

interpretation provides a competitive advantage to tourist destinations in the increasingly demanding tourism market, fostering recognition and authenticity.

CONCLUSION

The complex and timeless inspiring issue of the ethics of cultural heritage represents an advancement of previous theoretical and practical scientific research efforts, emphasizing the importance of taking a broader approach to topics from the past, while also considering concurrent activites that impact both the present and the future. The paper unequivocally underscores the necessity of establishing and adhering to professional and ethical standards based on appropriate competencies. Valuable cultural-historical heritage, with its enduring presence throughout time, serves as a testament to ethical constancy. When examined in the context of the present, it can offer sustainable ethical perspectives on the process of globalization, ultimately providing more socially acceptable strategies and policies on a broader scale. Complex and, at times, contradictory viewpoints and arguments about the significance of ethics in scientific and research work, particularly within the realm of cultural heritage, should be viewed within a dynamic and evolving spacetime continuum. Even under such circumstances, the values and ethical principles should remain impervious to attempts at relativization and challenge.

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