



**“AI” between Enhancing and Weakening Research Skills:
An Exploratory Study of the Perspectives of a Sample of Media Professors**

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Abstract:

This research paper explores the relationship of artificial intelligence tools and Algerian researchers' research skills. It, also, focuses on recognizing the most valuable opportunities presented by AI tools, along with the potential risks they pose to research skills. This is particularly relevant in light of the increasing availability of AI tools that can automate various scientific research processes, including data analysis, reference retrieval, translation, and aid in the development of scientific content. These AI powered solutions transcend the limitations of time and language raising fundamental questions about the future of research practice. Through examining the opinions of a sample of researchers from the field of media and communication studies, the paper revealed that artificial intelligence (AI) has facilitated research and provided advanced analytical tools that have developed the research skills of those surveyed. However, it can also weaken and discourage these skills if misused. Therefore, it is crucial that researchers use AI as a supportive tool, not as a replacement for critical thinking and systematic research, and that they carefully scrutinize the outputs obtained from AI.

Keywords: Artificial Intelligence; skills; scientific research; risks; researcher.



1. INTRODUCTION

The in this millennium, artificial intelligence has become one of the most important tools utilised in various sectors, including academic research. It has emerged as a significant manifestation of digital transformation. For many researchers, chatbots, data analysis systems, and machine learning-powered research assistants have become an integral part of their work, whether used to define and refine research problems, analyze findings, or even write and edit scientific papers.

The increasing use of artificial intelligence (AI) tools and applications in academic research has raised several concerns regarding their impact on the abilities of researchers. Specifically, questions have arisen about the development of research questions and hypotheses, the verification of findings, technical academic writing related to AI applications, and the maintenance of traditional scientific competencies grounded in critique and inferential analysis. While AI offers significant opportunities for innovation and the enhancement of research skills, it also raises worries about the potential for over-reliance on these tools in scientific research. This over-reliance could lead to a decline in essential research skills.

Based on the foregoing, we believe this phenomenon necessitates addressing the impact of artificial intelligence (AI) on research skills, considering two dimensions: the opportunities and empowerment it offers for developing scientific research, and the risks it may pose to researchers' research skills. Ultimately, this requires finding solutions or recommendations to ensure that researchers' transition to an AI-enhanced research environment is not merely about using new tools, but also about developing new cognitive and technical skills, along with a precise ethical framework. This is crucial to avoid risks that could lead to a decline in research quality or transform it into a purely automated process lacking critical thinking and innovation.

The use of AI tools in research raises a question about the researcher's relationship to their tools, scientific capabilities, and skills, given the excessive reliance on algorithms. This could threaten the researcher's research skills and transform them from a producer of knowledge into a mere operator of AI tools, potentially impacting the integrity and quality of scientific research.

In this context, this research paper conducts a field analysis of the manifestations and implications of artificial intelligence (AI) in scientific research and its impact on the research skills of Algerian researchers. This is achieved through a survey of a sample of media and communication professors, exploring their perceptions of these tools, how they integrate and utilize them in their research, and their awareness of the risks AI poses to the research skills they have traditionally employed. The central research question is: To what extent does the use of AI contribute to enhancing the research skills of media and communication professors, and what risks might this use pose to the quality and integrity of academic research?

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To strengthen the field study, the following sub-questions were employed:

- 1- What are the essential research skills of media and communication researchers that have been affected by the use of AI, according to the study sample?
- 2- What new research skills have become essential for media and communication researchers to acquire in light of the use of AI?
- 3- What mechanisms can be adopted to maintain and develop the research skills of researchers in the field of media and communication studies in light of their use of artificial intelligence?

Research Objectives:

This study tries to achieve several research objectives:

- To highlight the relationship between the use of artificial intelligence and research skills.
- To identify the essential research skills of media and communication studies researchers that have been affected by the use of artificial intelligence.
- To demonstrate the most important new research skills that media and communication studies researchers must acquire in light of the use of artificial intelligence.
- To investigate the mechanisms that can be adopted to maintain and develop the research skills of media and communication studies researchers in light of their use of artificial intelligence.

Research Methodology:

This study looks at how using artificial intelligence tools affects the research skills of Algerian researchers. To gather information, we conducted interviews as the main method. We interviewed a selected group of professors who teach media and communication studies to ensure they matched the goals of our study.

2. Concepts of Researcher Skills and Artificial Intelligence:

2.1 The Skills of the Scientific Researcher:

Before discussing the skills that researchers should possess, it is necessary to examine the concept of scientific research and its types as follows:

2.1.1 Definition of Scientific Research:

Scientific research is a compound concept consisting of two words (Ben Morsli, 2007, p. 244): "research", which, according to the Larousse scientific encyclopedia, means a set of activities aimed at discovering new knowledge in a scientific field. In Arabic, the word "research" means searching for the unknown in order to understand it. It is also used to denote a love of learning and discovering the unknown aspects of things in the fields of intellectual activity.

The word "scientific" is derived from the term "science," which is related to the French word "science." According to the Larousse encyclopedia, this refers to "well-organized knowledge related to certain categories of events or phenomena." In Arabic, science means knowledge and the expansion of our understanding of things.

From the perspective of the terminology defines scientific research as: “A set of organized



individual efforts undertaken by a person using the scientific method and the rules of the scientific method – in his endeavor to increase his control over his environment, discover its phenomena, and determine the relationships between these phenomena” (Thawkan, 2015, p. 40). It is also defined as “An organized intellectual process undertaken by a person called the researcher to investigate the facts related to a specific issue or problem called the research topic, by following an organized scientific method called the research methodology, to reach solutions appropriate to the problem or results that are valid for generalization to similar problems called the research results” (Sadik, 2014, p. 32).

It is also described as the process of investigating information through proof and precise tracking of its sources and phenomena. This requires examining each variable that impacts the information or is impacted by it. When the information is abstract, it involves exploring the concept in theoretical terms. When the information is concrete, it involves analyzing it in practice, through speech, action, work, and behavior. Additionally, material aspects are explored in laboratories and workshops. Each of these approaches has its own objective measurements and tests. Values are assessed using these methods, and the opinions of researchers and evaluators are also examined and measured. Degrees of speed, movement, extension, stillness, growth, pressure and degrees of cohesion are measured and measured by comparison. Therefore, scientific research requires analysis, analyzing information with information and argument with argument. The researcher does not stop at collecting scattered information, even if it weighs tons. Rather, the information requires analysis so that the researcher can know the variables and the effect of each variable on another variable or other variables. By analyzing the information, the researcher can reach objective results that are not from the construction of his personal ideas, but are the product of the objective analysis of the information that the researcher collected from its human or documentary sources or collected from its fields” (Hussein Aqeel , 2012, p. 6).

2.1.2 Types of Scientific Research:

There are two types of research (Hashem Al-Fatli, 2014, p. 43):

-Quantitative Research: This type of research involves collecting data using quantitative measurement tools such as tests and questionnaires. These tools are developed to ensure validity and reliability and are applied to a sample of individuals’ representative of the original population. The quantitative data is then processed using statistical methods, ultimately leading to results that can be generalized to the original population within a certain degree of confidence.

-Qualitative Research: This type of research relies on studying the phenomenon in its natural environment as a source of data. In other words, it seeks the truth from the people directly involved with the research topic. Words and images, rather than numbers, are used to express the research data. Data collection is carried out through direct observation or in-depth interviews.

2.1.3 Researcher Skills:

Researcher skills are defined as the use of research tools to discover the truth, the ability to critique, the capacity for analysis and deduction, decision-making, and the application of



information to decision-making (Hamad Al-Borki, 2023, p. 49). They are also defined as the use of scientific research tools to deduce, critique, analyze, and make decisions regarding facts. In other words, research skills refer to the ability to accurately define the research problem in order to arrive at results that are linked to the findings of previous studies in the same field, and to interpret, process, and analyze these results. This is achieved through the design of data collection tools and research in scientifically documented information sources (Al-Sarairah, 2025).

Opinions vary regarding the skills a scientific researcher should possess. Some focus on three key skills (Fahd Bin & Saati, 2014, pp. 45-46):

A. Technical Skills: These skills are related to the researcher's scientific specialization, enabling them to perform effectively and easily utilize available tools within that specialization. These skills include the following (author, 2025):

- The ability to formulate research questions.
- Identifying independent and dependent variables.
- Collecting and analyzing data using appropriate statistical methods.
- The ability to read and understand previous research in the same field.
- Using research to support new conclusions and findings.

B. Interpersonal Skills: This refers to the ability to interact effectively and humanely with individuals and groups. These skills are among the most frequently used when communicating with the study population and collecting data, whether through direct observation, interviews, or questionnaires. Acquiring these skills is considered more challenging for researchers than acquiring technical skills. Furthermore, interpersonal skills are closely linked to the researcher's personality and general and specific behaviors.

C. Intellectual Skills: These are the inherent abilities that a researcher must possess, enabling them to accurately define the problem under study, its nature, causes, and consequences.

D. Managerial Skills: These skills relate to the researcher's ability to conduct and complete scientific research efficiently and effectively under constant conditions and changes. Among the most important of these skills are analysis, planning, coordination, and decision-making.

2.2 Artificial Intelligence

2.2.1 The Concept of Artificial Intelligence:

Modern technology revolution gave rise to the science of artificial intelligence, or AI for short. It is described as a science that seeks to comprehend the nature of human natural intelligence, develop computer programs that can mimic human mental capacities, particularly the capacity to learn, reason, and react, and implant these capacities in inanimate objects, such as machinery and equipment, so that they can carry out tasks and functions akin to those of humans independently and without the need for human intervention (Awadni & Tuhf, 2020, p. 8).

Artificial intelligence is also defined as the simulation of human intelligence and



understanding its nature through the creation of computer programs capable of mimicking intelligent human behavior (Jubail & Lakhdari, 2023, p. 345). It is also defined as a set of technologies and systems that enable machines to perform tasks requiring thinking and analysis similar to human intelligence (Mukhtar Mahmoud, 2020, p. 183).

Researcher Kurzweil defines it as "the art of creating machines capable of performing tasks that require intelligence when performed by humans" (Zwatin, 2022, p. 142). Researcher Ian Rich, on the other hand, sees artificial intelligence as the science that explores how to make computers perform tasks that humans do in a less efficient way (Bouchkoura & Marwa, 2023, p. 84). From the above, it can be said that artificial intelligence (AI) refers to those technological systems that rely on mimicking the human mind, enabling them to perform some human tasks with accuracy and speed. It is also referred to as intelligence that humans create or implant in machines or computers, or intelligence that originates from humans and is then transferred to machines or computers.

2.2.2 Uses of Artificial Intelligence in Scientific Research: Advantages and Challenges.

First - Areas of Application of Artificial Intelligence in Scientific Research:

The benefits of AI tools and applications, which researchers rely on in the field of scientific research, are numerous and can be identified as follows (Mohamed El-Kebir, Maher, & Hijazi Yassin, 2023, pp. 63-66):

- **Writing and Paraphrasing:** These are applications used for writing articles or paraphrasing texts. This is done by entering keywords for the topic, and then these applications extract and write articles about the topic, or rather, about the keywords entered by the researcher. Some of the most famous of these applications are Rytr and Kattab Essay Bot.

- **Researching References:** These are tools used to find and access scientific material. One of the most widely used is Google Scholar, a search engine that focuses on websites affiliated with scientific centers. It presents the best studies that have garnered the attention of researchers and offers multiple search options. It also sends notifications regarding additional data related to the researcher's area of interest or the topic being researched. Furthermore, it allows you to create a library on Google Scholar and provides citation options according to internationally recognized standards.

- **Searching Within Files:** These tools include Text Generation, Talk to Books, and Data Search. They offer researchers various options, such as searching within files, texts, and paragraphs using keywords.

- **Mind maps, diagrams, presentations, and indicators:** These applications allow researchers to translate and simplify their ideas and research into images, mind maps, diagrams, and presentations, such as Microsoft PowerPoint, Context Minds, and Mindyaps.com.

- **Linguistic and spell-checking:** Several AI applications support linguistic and spell-checking for texts, including Arabic. Some of the most popular include Heming Way, Moda OiO, and Grammarly.

- **Machine translation services:** AI applications provide translation for both words and texts

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and support most of the world's languages. Some of the most popular include Translator Universal Speech, Memoq, and Word fast.

- **File merging and formatting tools:** These applications offer services that help convert various file formats, including merging, converting, editing, and splitting.

- **Statistical data analysis:** These applications enable statistical data analysis. Microsoft Excel and SPSS are among the most popular.

- **Reference management tools:** These applications facilitate the researcher's work by organizing and structuring references and sources according to their preferences. This can be done by author, research topic, publisher, or year. They also facilitate searching within a reference or source. Mendeley, EndNote, and Zotero are among the most popular applications.

- **Citation checking:** These applications check citation rates, documentation, and proofreading. They also help in selecting the appropriate journal for publication based on the research field. Furthermore, they provide statistics and rankings of scientific journals to help researchers choose the most suitable one for their studies.

Secondly, the advantages of using artificial intelligence tools in scientific research:

Due to its many features that increase productivity and quality, artificial intelligence systems are already a crucial component of academic writing and research processes. The following are the most prominent advantages these tools offer to scientific research (Elsevier, 2023):

1. Accelerating the research process and data analysis: By facilitating the analysis of massive amounts of data quickly and accurately, tools such as SPSS contribute to faster quantitative and statistical data analysis than traditional methods, saving time and effort.

2. Improving the quality of academic writing: Tools such as Grammarly and Pro-Writing-AI help researchers correct linguistic and grammatical errors. These tools also provide suggestions for improving style and identifying long or complex sentences that may affect the reader's understanding of the text.

3. Organizing and managing references: Programs such as Zotero, Mendeley, and EndNote facilitate the organization of scientific references and the automatic creation of bibliographies.

4. Plagiarism Detection: AI provides tools like Turnitin and Ithenticate that are used to detect plagiarism in academic work.

5. Simplifying Academic Document Formatting: Tools like Latex and Overleaf are used for writing academic papers that require precise and complex formatting, such as research papers and theses.

6. Summarizing Texts and Extracting Main Ideas: Tools like Scholar ship Scispace help researchers quickly summarize scientific articles, enabling them to grasp the main content of hundreds of research papers in a short time.

7. Supporting Researcher Collaboration: Tools like Mendeley and Refworks facilitate the



sharing of reference libraries and notes among research teams, enhancing collaboration and saving time.

Thirdly - Challenges of Using Artificial Intelligence in Scientific Research:

The use of artificial intelligence in scientific research raises several challenges, the most important of which are:

- The problem of data bias and lack of transparency: AI algorithms may be biased if trained on unbalanced data, leading to inaccurate or subjective results. Furthermore, we sometimes cannot explain the mechanisms of AI systems and the results they produce, raising concerns about relying on them for sensitive research decisions.
- AI may make errors in interpreting data, leading to inaccurate conclusions and interpretations that are not related to the context of the information provided.
- Often, researchers replace a comprehensive and in-depth reading of the information obtained from AI with a quick and superficial analysis derived from AI algorithms. This necessitates caution in relying excessively on AI-generated content, which can lead to incomplete and inaccurate interpretations.
- Artificial intelligence may negatively impact the creativity and innovation of researchers, diminishing their interpretive abilities and eroding their critical scientific spirit.
- Search engines powered by artificial intelligence may utilize nonexistent bibliographic sources or produce biased and inaccurate results, jeopardizing scientific writing. Studies have shown that 70% of references in AI-generated works are inaccurate, and these works are often similar, increasing the rate of plagiarism in scientific research.

3. Artificial Intelligence and Researchers' Research Skills: Advantages and Disadvantages (Field Study)

The foregoing demonstrates that one of the repercussions of using artificial intelligence in scientific research is its potential impact on the creativity and innovation of researchers. While this application can develop these research capabilities and skills, it can also weaken them. This is what we aim to explore in this study. Therefore, we adopted the following methodological procedures:

3.1 Study Methodology and Tools:

- **Study Methodology:** The study used the survey, which allows for the collection of factual information depicting the social reality over a specific period. This information are analyzed and interpreted, leading to conclusions (Qandilji, 2008, p. 100). This approach does not merely describe the problem under study but attempts to understand it in terms of its constituent factors and the relationships between them as they exist in reality, ultimately formulating solutions in the form of recommendations and proposals put forward by the researcher.

- **Research Tools:** To fully understand the subject, we adopted the interview as the primary tool for conducting the field study. The interview guide was designed to include the following questions:

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First: How is artificial intelligence used in the scientific research process in the field of media and communication?

Second: Do you believe that the use of artificial intelligence has any effects on the research skills of researchers in the field of media and communication studies?

Third: What are the most prominent positive effects that can result from the use of artificial intelligence on the research skills of researchers specializing in media and communication studies?

Fourth: In your opinion, what are the most significant negative repercussions of using artificial intelligence tools on the research skills of researchers specializing in media and communication studies?

Fifth: What new research skills have become essential for researchers in the field of media and communication studies to acquire in light of their use of artificial intelligence tools?

Sixth: How can the risks of artificial intelligence on the research skills of researchers specializing in media and communication studies be mitigated? As explained in the questions formulated above, open-ended questions were adopted in the interview guide. These are questions not predetermined by the researcher with specific answers or choices, allowing the respondent the freedom to answer in their own words and according to their own ideas.

- Research Population and Study Sample:

Professors of media and communication sciences from the University of “Khemis Miliana” and the “University of Blida 2” made up the research population in our study. The sample selected for the field study was a "purposive sample," which is a sample that the researcher purposefully chooses. In order to ensure that the results are scientifically acceptable based on factual or logical factors, this objective is founded on scientific considerations, such as the existence of acceptable or logical evidence confirming that this sample represents the population. We chose a sample of academics with expertise in media and communication who prepare and conduct scientific research using artificial intelligence tools. There were ten (10) responders. The interview questions were sent to them electronically via Messenger, and their responses were received through the same application.

3.2 Analysis and Interpretation of Results:

There are several uses for artificial intelligence (AI) tools in media and communication studies research, according to the replies. AI is mostly used to investigate novel research directions and assist in improving research titles and papers. It is also used for translating texts and scientific papers, as well as for creating research instruments like questionnaires and interview questions. AI is also used to review earlier studies and help with searching for reference.

This result indicates that the media and communication studies professors who comprised our research sample use AI as an aid in the preliminary stages of research, not as a replacement for the researcher. Its use is limited to assisting in formulating research problems and determining titles,



tasks that require broad cognitive flexibility. This reflects an awareness among researchers of the role of AI as a tool for broadening horizons, not as a definitive source of knowledge.

The respondents' answers also highlight their reliance on artificial intelligence (AI) for translation and literature review, reflecting its role as a tool to address a crucial scientific need. However, this reliance also raises concerns about the potential for weakening engagement with original texts and the scientific quality of the translations themselves.

Our analysis of the responses revealed that AI usage has not yet reached the stages of critical analysis or theoretical interpretation. This may indicate methodological reservations or a lack of the necessary technical skills to employ AI at deeper levels of research.

Secondly, regarding the impact of AI on the research skills of media and communication researchers, the respondents confirmed that its use has both positive and negative repercussions. While it may contribute to developing and enhancing these skills in line with the new technologies offered by AI tools, it may also negatively affect them, leading to formulaic approaches and diminishing their quality and efficiency.

The findings show that researchers have a certain level of cognitive maturity and understanding of the potential risks and significance of artificial intelligence (AI). This implies a certain comprehension of the cognitive worth and application of AI tools. They warned against the standardization of AI use and the deterioration of scientific quality, but because they are a part of this dynamic, they should employ self-monitoring tools and ongoing training in addition to AI. The discrepancy between theoretical understanding and practical application is called into question.

Thirdly, the most prominent positive effects that can result from using AI on the research skills of researchers in the field of media and communication studies, according to the responses obtained from the participants, are:

1- Automating the stages of preparing the scientific research to be conducted, starting with exploring a research topic or problem and defining its title, then assisting in formulating the problem and determining the methodological steps that can be adopted to study it, such as providing models of a suitable plan for the study topic, appropriate hypotheses, and suitable methodology and tools, in addition to providing solutions and interpretations.

2- Highlighting recent research: The use of artificial intelligence can develop researchers' skills in exploring new, previously unforeseen research topics that are also related to their research specialization.

3- Accelerating the literature review process.

These findings illustrate that artificial intelligence (AI) has transformed the idea of "research efficiency." Researchers are no longer required to spend extensive time reviewing existing literature or developing research questions from scratch. Instead, they can use the time saved for deeper theoretical exploration and analysis. This shift also encourages researchers to explore unconventional perspectives, which is essential in fields like media and communication studies, where changes occur frequently. However, a key concern remains: Are these new insights the result

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of meaningful engagement with AI tools, or are they simply reflections of the pre-existing data on which the algorithms are trained? Over-reliance on AI for database analysis risks reducing scientific research to the mere reproduction of existing knowledge found within the dataset.

Fourthly, regarding the potential negative impacts of using artificial intelligence on the research skills of researchers in the field of media and communication studies, the respondents' answers indicated that the repercussions of this use may entail risks and drawbacks affecting the quality and nature of researchers' research skills to varying degrees. These risks may take one of the following forms:

1- Decline of Traditional Research Skills: The decline of the traditional research skills appears in:

- A decline in researchers' willingness to manually search for information and references through traditional methods, such as visiting libraries or browsing academic databases online.
- A decrease in researchers' creative abilities in formulating research questions and hypotheses and interpreting results, as artificial intelligence enables researchers to easily generate and formulate these tools, potentially leading them to produce research similar to other studies.
- Artificial intelligence hinders researchers' ability to explore new research topics, as many researchers now rely on it for this purpose.
- Using artificial intelligence in translation gradually diminishes researchers' translation skills.
- Weakening of Academic Writing Skills: As AI-powered content generation tools develop for crafting academic papers and scientific works, the threat of researchers losing their ability to write scientifically in a systematic way increases.

2. Research Laziness:

- A decline in researchers' desire to delve into certain research topics due to the readily available and readily available models of topics provided by AI.
- A loss of independent research skills among researchers due to their reliance on AI tools at various stages of scientific research, from selecting and formulating the research problem and developing hypotheses and the study plan, to interpreting and analyzing the results.
- Habituation to ready-made and quick answers may lead researchers to neglect the ethics of scientific research, such as accuracy and objectivity.
- Weakened Ability to Produce Knowledge: The ease of using AI may lead to a decline in researchers' ability to propose new ideas and hypotheses, transforming them from "producers of knowledge" to mere "consumers" of it.

3- Decline in Analytical and Critical Thinking Skills:

Researchers may develop an overreliance on readily available information provided by artificial intelligence tools. This dependency can gradually erode their capacity for critical analysis of the data presented by AI, resulting in their acceptance of responses that appear adequate without



engaging in deeper examination or critique. Consequently, this pattern may yield studies that largely replicate existing literature rather than encourage innovative thinking or thorough exploration. Additionally, this trend contributes to a diminution in the ability to assess sources and establish the credibility and accuracy of information obtained from AI systems, leading to the acceptance of source recommendations without sufficient evaluation.

All of the above weaken the ability to connect the obtained results using AI and eliminate the need for human review. The findings clearly demonstrate researchers' concerns about the risks associated with the overuse of artificial intelligence tools in scientific research. The erosion of essential skills (such as writing, translation, and drafting) not only threatens the quality of individual output but also weakens the ability of the next generation of researchers to build original knowledge.

Furthermore, a kind of research laziness may emerge among researchers, which is not merely individual negligence but a systemic phenomenon resulting from the design of AI tools themselves, which facilitate everything, even thinking.

The decline in critical thinking is the most dangerous aspect, as it transforms the researcher from a "producer" to a "consumer," and deprives them of the ability to distinguish between accurate information and digital illusion ("hallucination"). Worryingly, some of these effects—such as the loss of the ability to formulate original hypotheses—may be irreversible if not addressed early through clear educational and professional policies.

Fifthly, to develop or even maintain the research skills of researchers in light of the use of artificial intelligence, a set of guidelines must be followed according to the suggestions of the respondents, which are:

- The need to adopt the idea that artificial intelligence (AI) should be used as an aid, not a replacement, in research and analysis in scientific research in general.
- Employing AI tools for initial discovery in scientific research, while ensuring they are subject to human verification and review.
- The necessity of scrutinizing references and information obtained from AI and not accepting their validity at face value.
- Developing training programs for students and researchers on the optimal use of AI tools in scientific research and enhancing their research skills using AI software.
- Ensuring frequent human review of outputs obtained from AI.

These suggestions present a practical and well-rounded strategy demonstrating a new definition of our relationship with AI rather than rejecting or accepting it without reservation. Additionally, they emphasize that AI should be seen as a "aid, not a replacement," which is an essential idea that must be incorporated into academic culture. The importance of the human role as protector of the quality of knowledge will also be restored by the need for regular human verification and examination of sources. The training program plan is also very important since without institutional certification, researchers will remain in a condition of defensive or haphazard use. This highlights the need for updated curricula that integrate traditional research skills with

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skills for critically engaging with artificial intelligence.

Findings: The paper arrived at a set of general findings for this study based on the previous analysis of the responses in an attempt to answer the central problem and sub-questions.

1- It has been shown that researchers' transition to an AI-enhanced research environment may lead to the erosion of some of their fundamental research skills, such as scientific writing, translation, and the formulation of various aspects of scientific research, such as the problem statement and hypotheses. This poses a threat to the quality of individual research and scientific output for any researcher and weakens the ability of the new generation of researchers to build original knowledge. However, the decline in critical thinking is the most serious consequence, as it transforms the researcher from a "producer" to a "consumer," depriving them of the ability to distinguish between accurate information and digital illusions. Furthermore, researchers may develop a kind of research laziness that is not merely individual procrastination, but rather a systemic phenomenon resulting from the design of AI tools themselves, which facilitate everything, even thinking.

2- New research skills that researchers must acquire or even develop in light of AI use include the ability to evaluate the results provided by AI tools and use critical thinking to interpret them. This means ensuring frequent human review of the outputs obtained from AI. In addition, it is essential to enhance the ability to select AI tools appropriate to the nature of the research and avoid blind reliance on them. It is crucial to understand that AI is merely a tool to assist the researcher and a catalyst for generating new research ideas, not a replacement for the researcher's creative and systematic thinking.

4. CONCLUSION

Artificial intelligence has significantly transformed the research landscape, bringing both positive and negative implications. Some researchers view AI tools as promising opportunities that enhance the quality of research outputs and improve the efficiency and skills of researchers, making them invaluable aids. However, others are concerned about the negative impact of AI on essential research skills, particularly analytical and critical thinking. The excessive use of AI may lead to a reliance that discourages the development of key abilities, such as formulating research problems, building hypotheses, designing appropriate research tools, and interpreting and analyzing results. This reliance could result in the production of formulaic scientific research that lacks depth, critical analysis, and creativity. On the one hand, it facilitates research and provides advanced analytical tools. On the other hand, it can weaken fundamental skills if misused. Therefore, it is crucial that researchers use artificial intelligence as a supportive tool, not as a replacement for critical thinking and systematic research, and that they ensure thorough review of the outputs obtained from AI.

Recommendations:

A number of recommendations can be made in light of the previous analysis, findings of the



field study and effects of AI on researchers' skills:

- Planning training sessions to teach researchers command engineering, algorithms, and artificial intelligence.

- Stressing that AI tools are "research assistants," not "researchers" themselves, the researcher's position as a "critical supervisor" is strengthened.

- In order to combat plagiarism and safeguard intellectual property, institutions should establish ethical frameworks for the use of AI and research ethics.

- To maintain credibility and enable reviewers to fairly assess the work, researchers should be obliged to openly disclose the scope and nature of artificial intelligence techniques employed at any point in the study process (from data collection to analysis or formulation).

- Media and communication departments (as the study sample) should review their curricula, particularly research methodology courses, to include chapters on the role of artificial intelligence, its ethical application, and the methodological challenges it presents.

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