

# Problems of Using Artificial Intelligence in Scientific Research: Challenges and Innovative Applied Solutions

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## Abstract

*This study aims to monitor the challenges and identify the problems facing Arab researchers in the use of artificial intelligence technologies in scientific research.*

*The study relies on the survey method through a field survey of Arab researchers with the aim of identifying the reasons that led to the phenomenon. The study community consisted of Arab researchers, and the study sample consisted of 400 Arab researchers.*

*The results of the study concluded that the majority of the study sample of Arab researchers do not use artificial intelligence techniques in scientific research. As for the users of Arab researchers, the greatest use of artificial intelligence techniques was by researchers in the field of humanities and social sciences, and decreased significantly in applied sciences.*

*The results of the study hypothesis test reached the validity of the hypothesis that states: "There are statistically significant differences between the countries to which Arab researchers belong and the reliance on artificial intelligence techniques in preparing scientific research for the benefit of the Gulf Cooperation Council countries."*

*In light of these results, the study proposes the following: Training Arab researchers on the uses of artificial intelligence tools in scientific research.*

*Raising awareness among researchers of the ethics of using artificial intelligence in scientific research through workshops, specialized training, and the development of new smart technologies programmed in Arabic to serve the objectives of scientific research.*

*Based on the results and proposals reached by the study, it was activated by creating a personal bot in Arabic for Arab researchers as a personal assistant to be used in scientific research, in addition to launching an academic platform for training and education on the steps of scientific research using artificial intelligence techniques.*

*This study aims to monitor the challenges and identify the issues facing Arab researchers in the use of artificial intelligence techniques in scientific research.*

*The study relies on a survey approach through a field survey of Arab researchers with the aim of identifying the reasons that led to the occurrence of the phenomenon. The study community consisted of Arab researchers, and the study sample consisted of 400 respondents from Arab researchers.*

*The results of the study concluded that the majority of Arab researchers in the study sample did not use artificial intelligence techniques in scientific research. As for the users among Arab researchers, the greatest use of artificial*

*intelligence techniques was by researchers in the field of humanities and social sciences, and it was significantly reduced in applied sciences.*

*The results of testing the hypothesis of the study revealed the validity of the hypothesis which states: "There are statistically significant differences between the countries to which Arab researchers belong and the reliance on artificial intelligence techniques in preparing scientific research for the benefit of the Gulf Cooperation Council countries."*

*In light of these results, the study suggests the following: Training Arab researchers on the uses of artificial intelligence tools in scientific research.*

*Developing researchers' awareness of the ethics of using artificial intelligence in scientific research through workshops and specialized training, and developing new smart technologies programmed in the Arabic language to serve the goals of scientific research.*

*Based on the findings and proposals of the study, it was activated by creating a personal bot in the Arabic language for Arab researchers as a personal assistant to use in scientific research, in addition to launching an academic platform for training and education on the steps of scientific research using artificial intelligence techniques.*

**Keywords:** Artificial Intelligence, Scientific Research, Arab Researchers, Arab Academic Platform

### Preamble

Artificial intelligence technologies are considered in the current era as one of the daily life necessities that individuals care about to facilitate matters related to their daily lives. They also help those working in the business sector to quickly complete their work with higher efficiency than human efficiency. They also help those working in various fields to solve some of their daily problems that arise according to the nature of the work.

Artificial intelligence has become used in many practical fields such as engineering design, surgical operations, and laboratory diagnostics. Even in the marketing fields, it has greatly excelled as a result of the measurements it makes in analyzing markets and identifying targets.

It has also become a major tool in many international communities to assist academic and research workers in completing their research.

Artificial Intelligence (AI) is a computer science based on the simulation of human intelligence, so that it can perform the tasks and functions performed by humans through the design and development of intelligent systems and the programming of machines such as robots and interactive bots that simulate humans with sound and image [1].

Artificial intelligence technologies are witnessing rapid and successive developments, accompanied by a major development in the field of publishing and documenting digital information, which has provided an advanced digital environment in the fields of scientific research. Artificial intelligence technologies provide unprecedented capabilities to improve the efficiency of scientific production, develop innovative solutions to problems, and accelerate the pace of scientific discoveries, in addition to saving time and effort. The result of data analysis also provides a superior ability to predict the future.

There are some applications that help researchers in the field of scientific research, such as ChatGPT and Gemini, for example. Their functions are determined by collecting, summarizing and analyzing amounts of information, extracting important data and results, and saving researchers a lot of time and effort. He assists in scientific writing, translation, citation management, and writing the research proposal [2].

The benefits range from simplifying, saving time, eliminating bias and automating repetitive tasks [3].

Despite the many positives of artificial intelligence in the fields of scientific research, some challenges and negatives may arise from its unguided use, including:

- **Research bias:** Although the data it provides is sometimes accurate, there is often bias in the information according to the nature of the application training.
- Responsibility and inability to verify the accuracy of data and information.
- Lack of accurate documentation of results and transparency in presenting results.
- Failure to protect the privacy of research, studies and information.
- Commercial and informal use of information and data.

Intellectual property rights cannot be protected by artificial intelligence, but the responsibility for that lies with the researcher himself. The use of artificial intelligence in research methods can negatively affect the results and sometimes lead the researcher to draw unrealistic and incorrect conclusions [4].

The ethics of scientific research using artificial intelligence cannot be distinguished from the ethical issues related to other digital and non-digital technologies. This can also apply to the ethics of scientific research using this new technology [5].

Artificial intelligence tools also represent advanced technological techniques that Arab researchers must learn and benefit from.

However, the use of AI in scientific research, especially in Arab countries, still faces many difficulties [6].

### Previous Studies

The study sought to measure the degree of impact of the success of content provided by artificial intelligence applications, compared to content provided by humans) [1, 7]. The study relied on the experimental method, and on a sample of (229) individuals. The results revealed that the tourism marketing materials created by ChatGPT were characterized by attractiveness, and textual and linguistic fluency, and the study sample was unable to distinguish between the content presented in both cases.

The study targeted Evaluating the efficiency of using artificial intelligence applications and identifying challenges in Bangladesh [8]. The study was applied to (120) of staff in institutions. The most important results were as follows: There is a high level of engagement in using these applications, and this has an impact on decision-making efficiency, business quality, and improved work outcomes. Challenges included low data quality, lack of infrastructure, and poor staff experience using smart technologies.

The study sought to monitor the trends of academics and educational media specialists towards employing the artificial intelligence program (ChatGPT) in producing scientific content and research [1]. The study was applied to (300) individuals, and the questionnaire tool and focus groups were used within the framework of the sample survey method. The most important results were the presence of statistically significant differences between academics and educational media specialists in using the ChatGPT application to produce educational media content. The phrase "inaccuracy of the information issued by the application" came in first place in terms of the challenges of using that application, and the difficulties of using the application in producing educational content by specialists and academics.

Recommended the need to pay attention to artificial intelligence in multiple fields, and artificial intelligence has many advantages, namely its ability to accurately analyze and confront issues and provide appropriate information, depending on the situation, to achieve results at a high level of efficiency [7]. These systems also contribute to facilitating the decision-making process and saving the time needed for dialogue and discussion on many issues.

A study conducted by Basant Attia on media communicators in Egypt concluded that there are limits to the capabilities of artificial intelligence in the media field, especially in the field of news, but it is capable of playing a better role in the field of news analysis, investigation and inquiry [8].

The study [ ]((Generative AI in Academic, Dec 2023, p 3-7) concluded that one of the most important features of artificial intelligence that it provides to researchers is a comprehensive research summary of the most important results of previous research and makes them available to all researchers, and accuracy with high speed in completing scientific research including analysis and practical experiments with human interaction, through the stages of using artificial intelligence, which begin with presenting the

research idea, implementation, scientific publication, scientific writing of the research, formulating scientific hypotheses for the research, translating the research, and most importantly extracting the results and comparing them with previous studies, but sometimes the results are not real and their accuracy cannot be verified.

In addition to raising the level of researchers' performance in terms of coding, analysis and infographic creation, which reduces time and human effort in an unprecedented way.

The study aimed to reveal the reality of using artificial intelligence, mechanisms for developing scientific research, and the challenges facing female students of the College of Education at King Saud University in developing their research skills [10]. The study concluded that artificial intelligence interacts poorly with research questions objectively, there is little reliance on artificial intelligence in the simultaneous translation necessary for scientific research, there is little prevention of scientific plagiarism, and there is little provision of research material in the Arabic language.

### Comment on Previous Studies

Previous studies represented a great scientific balance that led to the identification of some important elements and ideas that are relied upon in the current study. By reviewing previous studies, the following becomes clear: Previous studies used a variety of tools and samples, focusing on the questionnaire tool in most studies, while current studies differed in tools, as they used artificial intelligence techniques in preparing the questionnaire.

Previous studies have emphasized the importance of using artificial intelligence applications in scientific research.

Most studies have indicated that there are challenges to using artificial intelligence applications, and they differed relatively depending on the type of application, although the most prominent of these is data privacy.

This Study Differed from Previous Studies in Several Points:

- **First:** An applied study where the results of the study, which were extracted from the questionnaire conducted on Arab researchers, were used to create a specialized platform to train Arab researchers on artificial intelligence techniques in scientific research.
- **Second:** A personal bot in Arabic has been created for Arab researchers to use as a personal assistant in scientific research and training on the steps of scientific research using artificial intelligence techniques.

### Study Problem

Despite the capabilities that artificial intelligence provides to researchers in the fields of scientific research, and despite its many benefits, the uses of artificial intelligence technologies in the field of scientific research are still limited among Arab researchers, as shown by the survey study conducted on a sample of Arab researchers through an electronic survey conducted in April 2024 on a sample of 40 researchers in different specializations, which showed that 78% of the respondents do not have the ability to use artificial intelligence technologies in their research due to their lack of knowledge of them, and 87% of users,

representing 22%, confirmed their fear of using them due to the inaccuracy of the data. Therefore, the study poses the following main question:

- To what extent do Arab researchers rely on the uses of artificial intelligence in scientific research?
- The study assumes
- There are statistically significant differences between the countries to which Arab researchers belong and the reliance on artificial intelligence techniques in preparing scientific research.

### The Importance of the Study

The importance of this study lies in presenting applied solutions that help Arab researchers overcome the obstacles they face when using artificial intelligence techniques in scientific research, based on the field study's results.

### Study Objective

The current study aims to monitor the challenges and identify the problems facing Arab researchers in using artificial intelligence technologies in scientific research.

### Study Methodological Procedures

#### Study Method

This study is considered one of the descriptive studies that explore the phenomenon.

It relies on the survey method through a field survey of Arab researchers to identify the reasons that led to the phenomenon and reach conclusions and summaries of what can be done to change the circumstances and factors surrounding the phenomenon in a positive direction. The researcher benefits from this approach in studying the relationship between the study variables and each other to interpret the results and reach practical proposals [11].

### Study Tools

The study is based on:

- Survey tool
- Artificial Intelligence Technologies (Chat GPT) and Gemini

### Study Community

The study community included Arab researchers and faculty members at Arab universities and research centers.

### Study Sample

The study sample included 400 Arab researchers in research centers and Arab universities. Table No. (1) shows the characteristics of the sample.

The following is a discussion of the study results:

**Table 1: Distribution of the study sample according to demographic variables**

Variable		K	%
Gender	Female	208	%52.0
		192	%48.0
Age	20-25 years	16	%4.0
	26 - 35 years	70	%17.5
	36 - 45 years	141	%35.3
	46 - 55 years	120	%30.0
	55 years and above	53	%13.3
The university you belong to	Egypt	235	%58.8
	GCC countries	98	%24.5
	Levant	41	%10.3
	Mesopotamia	21	%5.3
	The Maghreb region	5	%1.3
Scientific specialization	Humanities	151	%37.8
	Social Sciences	85	%21.3
	Engineering Sciences	52	%13.0
	Medical Sciences	22	%5.5
	Software	20	%5.0
Total		400	

### Study Limitations

- **Human Limits:** This study was applied to a sample of 400 Arab researchers.
- **Geographical Boundaries:** The scope and limitations of the study were in the following countries
  - Egypt (included several public and private universities)
  - GCC countries (UAE - Saudi Arabia - Qatar - Bahrain - Kuwait - Sultanate of Oman)
  - Mesopotamia (Iraq)
  - Levant (Lebanon - Syria - Jordan - Palestine)

- Maghreb countries (Algeria - Morocco - Tunisia) and researchers in Libya did not respond
- **Time limits:** The field study was conducted from the beginning of April 2024 to the middle of May 2024.

### Operational Definitions

Artificial Intelligence: In this study, it refers to artificial intelligence applications used in scientific research services.

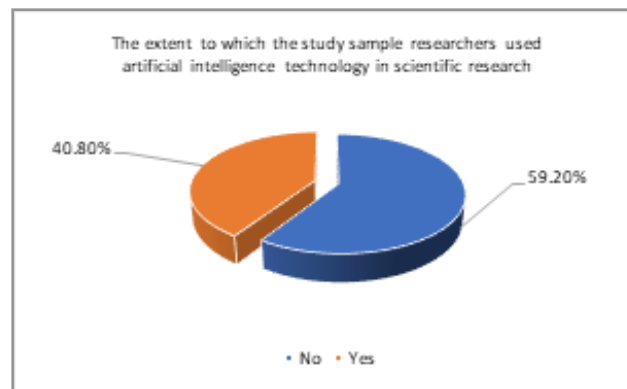
- **Arab Researchers:** In this study, they are meant to be Arab researchers and faculty members working in Arab research centers and universities, and they are referred to in this study as Arab researchers.
- **Arabic Academic Platform:** It is an application that works with artificial intelligence technologies and provides educational and training services in Arabic for Arab researchers.

### Discussion of Results

Distribution of the Study Sample According to the Extent of Use of Artificial Intelligence Techniques in Scientific Research.

The results showed that 59.2% of the total study sample of researchers and faculty members do not use AI techniques in their scientific research, while 40.8% of the total study sample confirmed that they use AI techniques in scientific research.

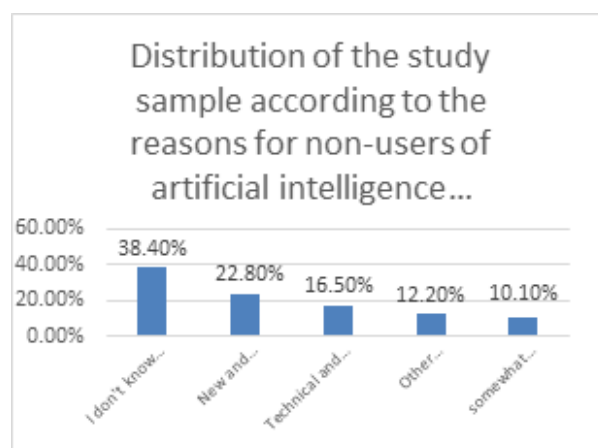
The relatively high rate of non-use of artificial intelligence technologies among Arab researchers shows that they are still relatively behind in adapting new technology in the fields of scientific research.



**Figure 1:** Distribution of the study sample according to the extent of use of artificial intelligence technology in scientific research

### Distribution of the Study Sample According to the Reasons for Non-Users of Artificial Intelligence Technologies in Scientific Research

The results showed that 0.38% of the total study sample did not know the artificial intelligence technology, while 0.12% of the total study sample stated that (not available in accurate Arabic) the data was inaccurate, and that I did not know the language of artificial intelligence.



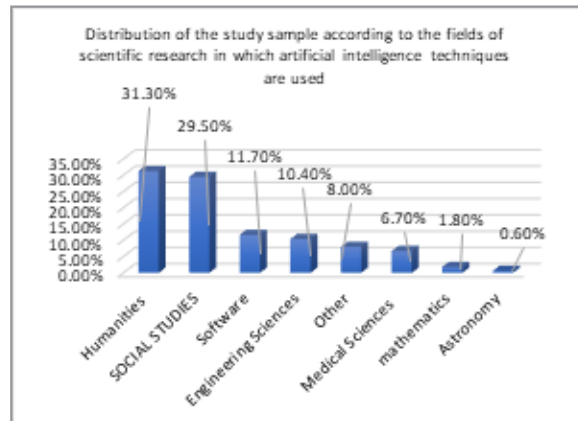
**Figure 2:** Distribution of the study sample according to the reasons for not using artificial intelligence technology in scientific research

It is noted from the previous data that researchers' lack of knowledge of artificial intelligence techniques and its uses in scientific research came in first place in terms of reasons for non-use. As the media richness theory indicates,

the public accepts a medium with a common language. Language in this context means the ease of understanding, dealing with, and using the medium. It also means the medium that facilitates the communication process between the user and the medium due to its ease, simplicity, and clear common meaning [10].

**Distribution of the Study Sample According to the Fields of Scientific Research in which Artificial Intelligence Techniques are Used by Arab Researchers (n = 163 Respondents)**

31.3% of the total study sample indicated its use in the field of humanities, followed by social sciences at 29.5%, software at 11.7% of the total study sample, followed by engineering sciences at 10.4% of the total study sample, while the following specializations were medical sciences at 6.7%, mathematics at 1.6%, and finally astronomy at 6%, respectively. 8% of the total study sample mentioned other specializations, including (physical education and applied arts).



**Figure 3:** Distribution of the study sample according to the scientific research fields in which artificial intelligence techniques are used

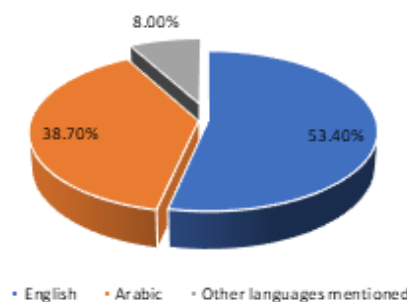
It is noted from the results that researchers in the field of humanities are among the researchers who use artificial intelligence techniques the most in their research. This result draws attention to the fact that researchers in the fields of medical and engineering sciences and in the field of computer science and programming are among the Arab researchers who use artificial intelligence techniques the least in their scientific research, which reflects the possibility that they are not aware of their use in scientific research, given that this use is subject to what is called command engineering in artificial intelligence techniques, which requires specialized training of users on it.

**Distribution of the Study Sample According to the Language Used by the Respondents Study Sample for Artificial Intelligence Techniques in Scientific Research (n = 163 Respondents)**

English came in first place with 53.40% of the total study sample, followed by Arabic with 38.60%, and then in last place other languages with 8.00% such as French and German.

This result seems natural since the main programming of artificial intelligence technologies is in English and artificial intelligence technologies are used to translate from and into Arabic. Therefore, the translated scientific texts are not as accurate as the original text as it is in its main language, which makes many Arab researchers reluctant to use artificial intelligence technologies.

The language used by the study sample respondents for artificial intelligence techniques in scientific research



**Figure 4:** Distribution of the study sample according to the language used by the respondents Study sample for artificial intelligence techniques in scientific research

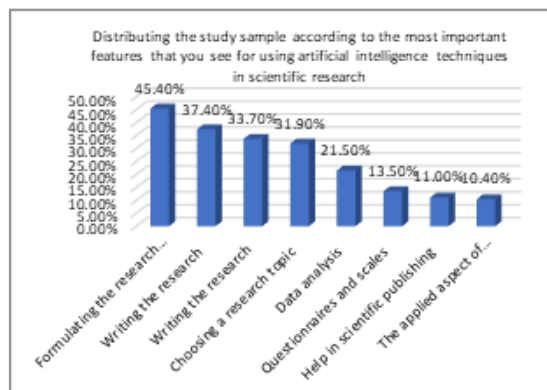
**Distribution of the Study Sample According to the Most Important Advantages that you See for Using Artificial Intelligence Techniques in Scientific Research (N = 163 Respondents) (The Respondent was Selected for More than One Answer)**

The advantages seen by the study sample that uses artificial intelligence techniques in scientific research varied, as 45.40% indicated assistance in formulating the research problem, while the applied aspect of the research came in at 5.10% of the total study sample.

It is noted from the previous data that the largest percentage of researchers rely on artificial intelligence techniques in choosing and formulating the research problem because this step is one of the most important steps in scientific research, especially in

choosing a new research topic that has not been studied previously and formulating the problem in a precise scientific manner. This step takes a period of time of no less than two months and effort in limiting previous studies in academic libraries, which is what artificial intelligence does through research applications in less than an hour as a result of a quick search in algorithms and ensuring the novelty of the research topic.

It is also noted from the data that the lowest rate of use was in the practical aspects due to the ability of smart technologies in formulating and applying the questionnaire, but the application areas for practical studies require laboratories and workshops equipped with these technologies, which is not available in most Arab countries.



**Figure 5:** According to the most important advantages that you see for using artificial intelligence techniques in scientific research (N = 163 respondents) (the respondent was selected for more than one answer)

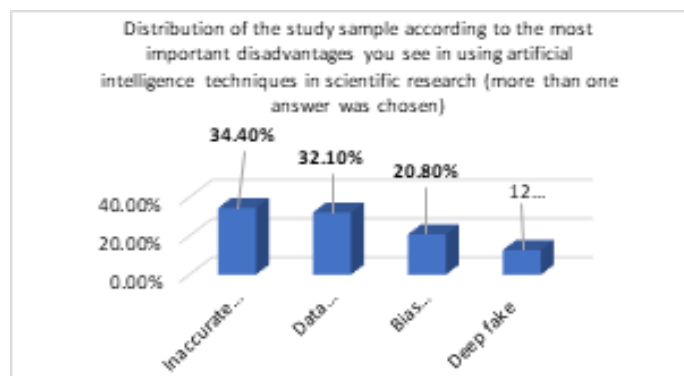
**Distribution of the Study Sample According to the Disadvantages of Using Artificial Intelligence Techniques in Scientific Research from the Point of View of Arab Researchers (N = 163 Respondents) (More than One Answer was Chosen)**

The study sample indicated that there are some defects resulting from the use of artificial intelligence techniques in scientific research, including inaccurate scientific formulation, at a rate of 34.40% of the total study sample, while 12.70% of the total study sample indicated that one of the most important defects is deep forgery.

It is noted from the previous data that one of the shortcomings facing researchers in using smart technologies is the lack of ac-

curacy in scientific formulation. This is due, from the researchers' point of view, to the fact that the translation carried out by smart technologies, especially in scientific content, is mostly inaccurate due to it not being the main language for programming these technologies, as we mentioned previously.

It is noted that one of the serious drawbacks of using this technology is what is called deep forgery, which means that the information is incorrect and that it is information created by artificial intelligence, because sometimes these technologies are affected by what is called artificial intelligence hallucination.

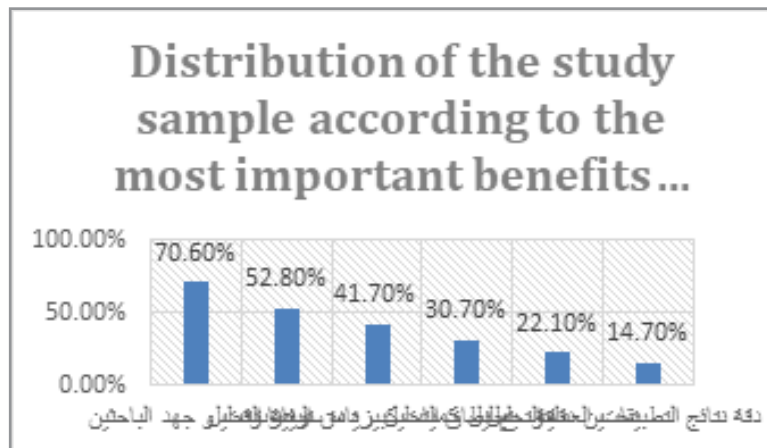


**Figure 6:** Distribution of the study sample according to the disadvantages you see in using artificial intelligence techniques in scientific research

**Distribution of the Study Sample According to the Benefits Provided by the Use of Artificial Intelligence for Scientific Research from the Point of View of the Study Sample (N = 163 Respondents) (More than One Answer was Chosen)**

70.60% of the total study sample indicated that the most important benefits provided by the use of artificial intelligence for scientific research are saving researchers' time and effort, while 14.7% of the total study sample indicated that the benefits are the accuracy of the results of practical applications.

It is noted from these results that the element of speed in performing scientific research came in first place, given that the methodological and research procedures carried out by the researcher require years, while artificial intelligence can shorten them to a few days, provided that researchers are able to use these technologies and closely monitor the stages of scientific research and control these technologies so that they do not go beyond the framework of scientific research ethics and to avoid problems that may arise from this unguided use.

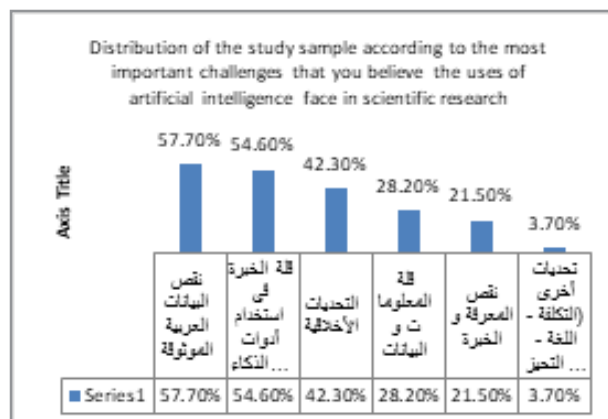


**Figure 7:** Distribution of the study sample according to the most important benefits provided by the use of artificial intelligence for scientific research from the point of view of the study sample (N = 163 respondents)

**Distribution of the Study Sample According to the Challenges of Using Artificial Intelligence in Scientific Research Among Arab Researchers (N = 163 Respondents) (The Respondent was Tested for More than One Answer)**

57.7% of the total study sample indicated that the challenges they face when using artificial intelligence in scientific research were the lack of reliable Arabic data, while 3.7% of the total study sample mentioned cost, language, bias, and unreliability of results.

It is noted from the previous data that there is a lack of data and research in the Arabic language, which was one of the biggest challenges facing researchers. It is noted that a percentage exceeding half of the sample confirmed their lack of experience and knowledge of the uses of these technologies, and that their use is limited to translation because it is the easiest and most popular in use. The researchers also pointed out the ethical challenges, which are challenges that can completely destroy scientific research.



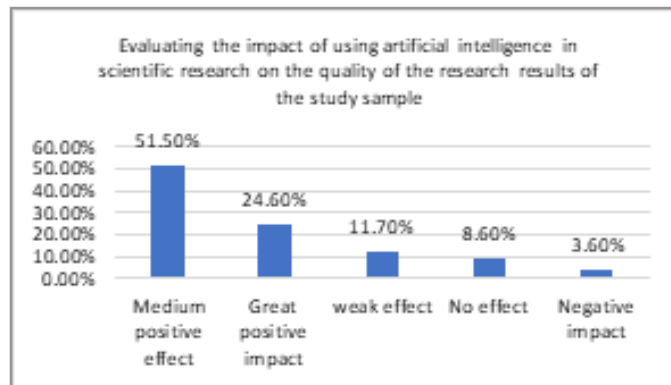
**Figure 8:** Distribution of the study sample according to the challenges of using artificial intelligence in scientific research (N = 163 respondents)



**Distribution of the Study Sample According to the Evaluation of the Impact of the Uses of Artificial Intelligence in Scientific Research on the Quality of your Research Results (N = 163 Respondents)**

51.50% of the study sample indicated that the uses of artificial intelligence in scientific research have a moderately positive impact, while 3.60% of the study sample indicated that the uses of artificial intelligence in scientific research have a negative impact.

Note that the opinion of Arab researchers on the uses of artificial intelligence technologies in scientific research was mostly negative. This result reflects that Arab researchers are still not sufficiently aware of the importance of artificial intelligence and its uses in scientific research and what this use can provide in terms of unlimited additions to Arab researchers, which requires specialized training for researchers on these technologies to take into account the causes of global technological development and maximum scientific benefit from these technologies in developing scientific research.



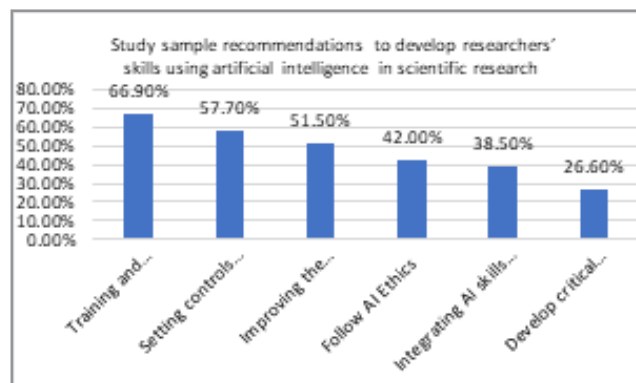
**Figure 9:** Distribution of the study sample according to the evaluation of the impact of the uses of artificial intelligence in scientific research on the quality of your research results

**Study Sample Proposals to Develop Researchers' Skills in Using Artificial Intelligence in Scientific Research**

The study sample's proposals came from Arab researchers to develop skills for using artificial intelligence in scientific research. 66.90% of the study sample suggested subjecting Arab research-

ers to training and encouraging researchers to use artificial intelligence tools safely in scientific research.

51.50% of the total study sample also suggested improving the quality of documented Arabic data on artificial intelligence techniques.



**Figure: 10**

**Study Assignment Test**

There are statistically significant differences between the countries to which Arab researchers belong and the reliance on artificial intelligence techniques in preparing scientific research.

ANOVA test was used to measure the differences between the countries to which the Arab researchers belong regarding their reliance on artificial intelligence techniques in preparing scientific research. Table No. (2) displays the results of this test.

To test the significance of the difference between the averages of the countries to which the Arab researchers belong, the one-way

**Table 2: shows the analysis of variance to show the extent of agreement and difference between the averages of the countries to which Arab researchers belong regarding reliance on artificial intelligence techniques in preparing scientific research.**

Dimension	Countries to which Arab researchers belong	Average	Standard deviation	F value	Sig.
Relying on artificial intelligence techniques in preparing scientific research	Egypt	1.3915	.48913	2.733	.029*
	GCC countries	1.5714	.50709		
	Levant	1.2439	.43477		
	Mesopotamia	1.2000	.44721		
	The Maghreb region	1.4898	.50247		

\*Denotes the significance of the F-test at a significance level of 0.05.

From the previous table we can conclude the following:

There are statistically significant differences between the averages of the countries to which Arab researchers belong regarding their reliance on artificial intelligence technologies in preparing scientific research, as the level of significance is less than 0.05. We conclude from this that there is a difference between the averages of the countries to which Arab researchers belong regarding their reliance on artificial intelligence technologies in preparing scientific research.

This result proves the validity of the hypothesis assumed by the study, which states: "There are statistically significant differences between Arab researchers and reliance on artificial intelligence techniques in preparing scientific research in favor of the GCC countries."

### The Most Important Results of the Study

- The study reached a set of important results, the most important of which are the following:
- More than half of the study sample do not use artificial intelligence techniques in scientific research due to lack of knowledge of the language and techniques of artificial intelligence.
- The highest use of AI technologies by Arab researchers was in the fields of humanities and social sciences, while the lowest use rate was in applied sciences.
- The highest use of AI techniques by researchers was in English-language research.
- The majority of researchers rely on artificial intelligence techniques in selecting and formulating the research problem as well as in selecting the research topic.
- The biggest drawbacks that researchers face in using smart technologies are the inaccuracy of scientific formulation and deep forgery, which means the information is incorrect.
- Researchers stated that one of the advantages of smart technologies in scientific research is the unprecedented speed in producing scientific research.
- The opinion of Arab researchers on the use of artificial intelligence technologies in scientific research was mostly negative.
- The majority of researchers in the study sample suggested that Arab researchers be trained and encouraged to use artificial intelligence tools safely in scientific research.
- The results of the study hypothesis test concluded that there were statistically significant differences between Arab researchers and reliance on artificial intelligence techniques in preparing scientific research in favor of the GCC countries.

### Study Proposals

- Based on the results of the study, the study's suggestions are as follows:
- Training Arab researchers on the uses of artificial intelligence tools in scientific research.
- Raising awareness among researchers about the ethics of using artificial intelligence in scientific research through workshops and specialized training
- Developing new smart technologies programmed in Arabic to serve scientific research objectives.
- It was completed by Arab universities and research centers within the framework of global competitions.
- Adoption of the Arab Impact Factor in the research of Arab researchers and in the Arab classification of universities
- Approval of research published in classified Arab journals in the promotions of faculty members and researchers.
- Raising the skills of Arab researchers in scientific publishing in Arab databases using artificial intelligence techniques
- Establishing Arab academic platforms to document Arab research. Based on the results of the study, the AI Professor platform and an interactive bot were created to assist researchers as follows:
- <https://ostazai.com>

### Professor AI Platform

- The Professor AI platform aims to enable Arab researchers to make the most of artificial intelligence tools in scientific research.
- This platform offers a variety of specialized courses in the use of artificial intelligence in scientific research, covering the latest technologies and tools in artificial intelligence, with introductory videos explaining the content of each course in a simplified and easy-to-understand way. In addition, we provide you with detailed instructions on how to enroll in the courses, making it easier for you to join and benefit from the educational content.
- The platform includes a group of the best trainers and experts in the field of artificial intelligence, who will provide practical and theoretical training on the most important programs and applications used in scientific research. You will also find details about the number of hours each course lasts, which will help you plan your time optimally.
- With AI Professor, you will discover how AI technologies can revolutionize your scientific research and open up new horizons of knowledge and creativity.

## Interactive Bot (My Teacher)

Specially designed to help researchers and students use artificial intelligence tools and programs in scientific research.

My Teacher Bot is distinguished by his outstanding ability to customize and train himself according to the research topic, which makes him an indispensable partner in preparing and implementing all steps of scientific research.

With My Teacher Bot, researchers can benefit from ongoing support and careful guidance at every stage of the research, from data collection and analysis to report writing and drawing conclusions. This bot has an easy-to-use and flexible interface that allows you to interact with it easily and effectively, ensuring the highest levels of efficiency and accuracy in research work.

My Teacher Bot is the perfect partner in your scientific research journey.

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