

THE UTILISATION OF THE TECHNICAL CAPABILITIES OF ARTIFICIAL INTELLIGENCE TOOLS IN WRITING MEDIA RESEARCH: A FIELD STUDY ON ADVANTAGES, USES, CHALLENGES AND THE ETHICAL STANDARDS

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Abstract:

This study aims to identify the benefit from using of artificial intelligence tools and applications in writing media research from the perspective of media students as a selected sample for the study, as well as to explore the advantages and challenges associated with this use, particularly in terms of adherence to academic and ethical standards. The study is based on the technological determinism theory to understand the impact of artificial intelligence tools on the performance of students. An electronic survey questionnaire was used by the researcher to collect data from a purposive sample of 150 media students from various academic disciplines in five Arab universities. The results have revealed that 69.3% of the sample regularly use artificial intelligence tools in their research and tools such as ChatGPT and Gemini being the most commonly used. The findings also have indicated that 77.3% of participants believe that artificial intelligence has a positive impact on the quality of media research. However, the majority of participants face challenges regarding adherence to academic and ethical standards, with 63.3% citing these challenges. Based on these results, the study recommends providing training programs for media students, organizing workshops on the ethical standards and academic regulations for employing artificial intelligence in writing research and encouraging students to think critically, analyse and innovate independently.

Keywords: Artificial Intelligence, Media Research, artificial intelligence tools, Technological Determinism Theory

Introduction

The field of digital technologies and information and communication technology has recently witnessed ultra-rapid developments, fundamental transformations, and radical and accelerated changes, thanks to the emergence of artificial intelligence applications that have topped the current scene in the world of modern technologies, which have become a pivotal role in various fields, and these applications and tools have made a qualitative leap in how to carry out tasks, solve problems, and others, making them an integral part of our daily, academic and professional lives.

With the increasing reliance on AI and its applications, many questions have emerged related to the impact of these tools on many sectors, most notably the educational and research process, especially in light of the growing role of these tools in improving performance efficiency, saving time and effort, superior analytical skills, speed in processing data content, and accelerating access to information sources. Organize, analyze, draw conclusions, analyze trends, and others. These growing roles included many research fields, especially media studies and research, which are the focus of this study.

Due to the availability of many of these advantages, as indicated by Abdel Wahab (2023), students in academic institutions have become one of the most prominent groups that have tended to benefit from these developments, as artificial intelligence applications have provided them with innovative means to support the educational process and prepare research.

This study seeks to explore the extent to which media students benefit from the tools of artificial intelligence applications in media scientific research and to identify the reality of their use, with a focus on the purposes they seek to achieve through these tools, the challenges they face, and the impact of this on the quality of their research work.

This study comes within the framework of efforts aimed at a deeper understanding of the role of artificial intelligence and its multiple and renewed applications in supporting the educational and research process in the field of media and communication, while proposing

solutions and standards that contribute to guiding the use of this technology in an ethical and effective manner, in order to enhance its utilization without negatively affecting self-skills or scientific integrity.

Study Problem

In light of the rapid developments witnessed by artificial intelligence technologies, its tools and applications have become increasingly used in various activities and fields of scientific research, especially media research, and these tools have become possible for students and researchers to access information faster, and analyze data more accurately. Scientific research poses many challenges, especially with regard to adherence to academic and ethical standards; there are significant concerns about the increasing reliance on these tools, which may lead to a decline in students' research and analysis skills; and may raise questions about scientific honesty and the originality of research. to produce research that lacks personal creativity and self-effort, which affects the quality and credibility of scientific outputs (Abdullatif, 2022).

Thus, researchers and students face challenges in distinguishing between the legitimate use of AI, which is considered an aid in research, and unethical use that involves copying content or relying on unreliable analytics; this requires a high level of awareness of ethical standards for scientific research, and clear controls for the use of these tools to ensure academic integrity; and In this context, there is a need to develop rigorous ethical guidelines and standards that define how to integrate AI into research preparation processes, without compromising the essence of the educational process or weakening students' research abilities. Since media research is inseparable from the rest of the fields of scientific research that face the challenges of these applications and their accelerated advantages in supporting research production and others, and accordingly, the current study seeks to answer the research question **of what** is the reality of employing artificial intelligence tools in media research by media students, and exploring the advantages provided by this use, and the challenges associated with adhering to ethical and academic standards.

Study Objectives:

This study aims to achieve the main objective of "understanding the reality of the use of AI tools in media research by media students, and to explore the advantages provided by this use, and the challenges associated with adhering to ethical and academic standards";

- Monitoring the rates of the sample members benefiting from media students and artificial intelligence tools in the preparation of media research, and determining the nature of the most commonly used tools.
- Analyzing the motivations for employing the study sample for artificial intelligence applications in the preparation of studies, and determining the purposes for which these tools are employed.
- To determine the effectiveness of the use of artificial intelligence tools on the quality of media research prepared by the sample members of the media students, in terms of organization, accuracy, and creativity.
- Explore the challenges faced by the study sample when using AI tools, especially with regard to adherence to academic and ethical standards.
- Knowing the level of awareness of the sample members about the boundaries between the legitimate and illegal use of artificial intelligence applications in writing research.
- Uncovering the impact of artificial intelligence tools on the research and analysis skills of the researchers, and the extent to which it affects the development of their own research abilities.

- Proposing ethical standards and academic controls that can guide the use of AI tools by selected media scholars in the study sample.

Study Questions:

- 1) What are the rates of employing media students to AI applications in preparing their media research?
- 2) What are the most commonly used AI tools by the subjects in preparing their media research?
- 3) What motivates students to use AI applications in their academic research?
- 4) What are the purposes that the selected sample members seek to achieve through their use of artificial intelligence tools?
- 5) To what extent does the sample's use of AI applications affect the quality of the research they prepare, in terms of organization, accuracy, and creativity?
- 6) What are the challenges faced by media students when using AI applications, especially in terms of adherence to academic and ethical standards?
- 7) What is the level of awareness of the media study sample about the difference between the legitimate and illegal use of artificial intelligence tools in the preparation of academic research?
- 8) How does the use of artificial intelligence applications by media faculty students affect their research and analysis skills?
- 9) Does the media researchers' use of artificial intelligence tools contribute to the development or decline of their self-abilities in scientific research?
- 10) What ethical standards and proposed academic controls can guide the use of AI tools by media students in the preparation of their media research?
- 11) What demographic characteristics of the media students selected in the study sample who use AI applications and tools?

Obligatory Studies:

- ❖ **Hypothesis One:** There is a statistically significant correlation between the rates of media students using artificial intelligence applications and tools in the preparation of their media research and the quality of the research they prepare in terms of organization, accuracy, and creativity.
- ❖ **Hypothesis Two:** There is a statistically significant correlation between the motivations of media students (the study sample) to use artificial intelligence applications in the preparation of their media research and the purposes they seek to achieve through its use.
- ❖ **Hypothesis Three:** There is a statistically significant correlation between the use of artificial intelligence applications by media students (the study sample) in the preparation of their media research and their level of awareness of the boundaries between the legitimate and illegal use of these tools.
- ❖ **Hypothesis Four:** There are statistically significant differences between media students (study sample) according to their demographic characteristics (gender, educational level, age, specialization) in the effect of their use of artificial intelligence applications on their research and analytical skills.

Importance of the study:

The importance of the study stems from two main axes, which are as follows:

- a) **The importance of studying the theory** is represented in several points, which are as follows:

Exploring the effectiveness of the use of artificial intelligence tools and tools in developing the research process within the academic field of media, and provides a

scientific framework for studying the effects of artificial intelligence applications on the quality of media research, and contributing to bridging the knowledge gap about the challenges facing students and researchers in the use of modern technology in media scientific research. It also represents a real addition to the scientific library literature associated with the Technological developments, research and academic skills, and help guide future researchers in the field of media towards new areas to study the impact of technology on education and scientific research.

b) Societal or applied importance: The importance is represented in several points, which are as follows:

- Seeking to provide a practical application framework that enhances the use of artificial intelligence tools in the preparation of media research efficiently and with high quality, by measuring their feasibility in the various stages of research, identifying the most appropriate tools, and providing clear advantages and criteria for evaluation, in a way that contributes to supporting researchers and academic and media institutions. The importance of the applied study is embodied in the fact that it opens the door to exploring the extent of the use of artificial intelligence tools in the preparation of scientific research in the field of media and its various stages, which contributes to providing a realistic critical analytical study of the methods of use or not, which supports the existence of a future reference guide for the researcher to know the academic and ethical standards for employing these tools in the achievement of their scientific research. The practical and applied value of this study is crystallized through the provision of viable proposals and recommendations that contribute to raising the efficiency of research and improving the quality of scientific outputs, taking into account academic and ethical controls, and in a way that enhances the credibility and integrity of the possibility of using these tools in the field of media research.

Previous Studies:

The researcher relied on two main axes to organize and analyze the previous studies of this study, which are:

- **The first axis:** Studies that addressed the possibility of benefiting from artificial intelligence and its various applications in the preparation of scientific research and the field of education.
- **The second axis:** Studies that dealt with the use of artificial intelligence tools and its applications in the field of scientific research in media and human studies.

The first theme: Studies that dealt with artificial intelligence and the effectiveness of its tools in scientific research and education:

With regard to the contributions of intelligence and its applications in the fields of scientific research, a study (Mohammed, 2023) showed that artificial intelligence is a prerequisite for keeping pace with scientific and technological changes, as it contributes to enhancing and upgrading education, and is an important factor in improving performance, achieving sustainable development, and academic excellence. Low mental capacity) in the dimensional measurement of the cognitive achievement test, and the role of the application of artificial intelligence Gamma.app in the development of cognitive achievement, e-learning skills, and self-regulation skills, and a study (Ahmed, 2022) emphasized the role of application in training programs for the development of self-learning and participatory learning skills through the most prominent results of the There was a statistically significant difference at the significance level of (0.01) between the average scores of teachers in the pre- and post-application of the self-learning skills test as a whole, in addition to the existence of a statistically significant difference at the significance level of (0.01) between the average scores of teachers in the pre- and post-application of the scale of attitude towards

participatory learning as a whole. Also, a study (Ouyang, Zheng, Jiao, 2022) concluded that AI-based applications have had significant positive effects, as they have contributed to providing high-quality predictions using multiple input variables, and these applications have helped improve students' academic performance, increase the level of interactivity and participation in the online learning environment, and also a study (Younis, Sundarakani, Sundarakani, 2022) showed that the application of artificial intelligence and machine learning has the potential to reduce the bullwhip effect), enhancing the efficiency and responsiveness of the supply chain.

As for the challenges facing the reliance on artificial intelligence and its multiple tools in scientific research and learning, a study (Al-Dajah, 2024) reported that the obstacles to the use of the application ChatGPT in the education process from the point of view of teachers in Jordan obtained a high percentage, and the study (Abdul Qader, 2020) indicated that there are several problems related to In the educational aspects, the educational administration, the teacher, the learner, and the parents, in light of the Corona crisis, including: the limited readiness of teachers and the digital infrastructure, the weak training for teachers and students on the use of modern technologies, and the complete reliance on paper books.

As for how to overcome the challenges of using AI applications in the field of education and scientific research, the results of a study (Ouyang, Zheng, Jiao, 2022) revealed that e-learning uses AI for several functions such as predicting learning status, performance, and satisfaction, as well as providing educational recommendations, conducting automatic assessments, and improving the learning experience, despite the high reliance on AI technologies. However, advanced technologies, such as genetic algorithms and deep learning, are still largely underutilized, as a study (Abdel Qader, 2020) showed that it is possible to employ some intelligence tools in education such as smart education systems, smart content, virtual reality (VR) and augmented reality (AR) technology, "Layer" applications, Aurasma applications, and 4 applications Augmented, and others, in the face of some of these challenges and problems.

Regarding the **extent of the use of artificial intelligence and its applications in scientific research**, a study (Al-Dajah, 2024) concluded that there is an average degree of use of the application ChatGPT by teachers in Jordan in the educational process. Regarding **the trends towards the use of artificial intelligence applications in the field of education and scientific research**, a study (Al-Dajah, 2024) showed that their attitudes towards using the ChatGPT application were positive and high. As for **the areas of use**, the results of a study (Wang, et.al, 2023) reflected the existence of four distinct groups of students, each of which is characterized by a unique way of interacting with AI for language learning, as it shows that a deep approach to AI-powered learning may enhance the benefits of personalized mentorship and strengthen the sense of the human learning community. This study contributes to improving its understanding of its implementation in education and providing recommendations to enhance its interactions between learners and artificial intelligence, with a focus on its visual representation and support in the educational environment. Within specialized areas, researchers can also explore how to implement more collaborative learning strategies between intelligent systems and learners.

As for **the factors that affect how AI is used for scientific research purposes**, the results of a study (Zheng, et.al, 2021) revealed that the sample size, sample level, learning areas, types of organization, roles of artificial intelligence, and the devices used were factors that significantly affect its effectiveness, as a study (Sing Chai, et.al, 2020) showed that the factors represented in: (Knowledge)Trust- **The use of AI tools** is related to behavioral intent, and it was found that students' awareness of the importance of learning AI is the most influential factor in shaping their behavioral intent et.al. Researchers in the field of artificial

intelligence and machine learning place a high level of trust in international and scientific organizations to guide the development and use of AI in the public interest; in contrast, trust in most technology companies has been moderate.

The second axis: employing artificial intelligence tools and applications in scientific research in the field of media and human studies:

The study (Nasser, 2032) monitored the most prominent trends in the research and studies of the employment of artificial intelligence and its tools in the field of public relations and advertising, and the study reached a number of results, most notably the emphasis on the positive impact of artificial intelligence applications and their employment in the field of public relations and advertising studies. Regarding the study (Hajar & Spagh, 2023) on the use of artificial intelligence tools in scientific research in the field of humanities and social research: advantages and limitations, a number of tools were reviewed that a number of researchers believe are useful to them in this field in preparing scientific research in a number of aspects, including: Research and investigation, writing and editing, academic communication, documentation and citation, translation, building measurement tools, data analysis, organizing ideas, organizing time, defining a plan, defining an appropriate methodology, and the study indicated that the tools are important and accurate, but they deal with the commands provided by the researcher. In order to make the best use of these tools, the researcher must provide instructions accurately and carefully, and according to specific phrases, until he reaches the required outputs.

Commenting on previous studies:

The previous studies that have been addressed and their results, recommendations and objectives have been presented, most of which have shown that the applications of artificial intelligence and its various tools have become a decisive factor in enhancing education and scientific research, by improving academic performance and developing e-learning and self-learning skills. among students in the online educational activity, which in turn contributes to improving educational achievement outcomes, such as the study (Wang, et.al, 2023), the study (Al-Dajah, 2024), the study (Zheng, et.al, 2021), and others. It has also been shown through studies that intelligence tools help provide customized educational recommendations and research methods as academic foundations for employing these tools, and thus the observation was the development of awareness and understanding and directing students towards effective interaction with educational content, as a study study (Zheng, et.al, 2021). However, there remains some challenge in implementing effectively, such as a lack of teacher training and digital infrastructure, as well as barriers related to relying on technology without ensuring that the educational environment is ready to accommodate these applications, such as a study (Ouyang, Zheng, Jiao, 2022), and a study (Al-Daja, 2024). It increases the benefits that can be obtained from these technological tools, while the superficial and unstudied use may lead to a noticeable decline in academic standards and ethical controls for the work of these researches, including a study (Nasser, 2032, and (Hajar & Spagh, 2023).

Therefore, the present study sought to understand the reality of employing artificial intelligence applications and tools in the preparation of media research, and to explore the characteristics and advantages provided by this use, and the challenges associated with adhering to ethical and academic standards, as it explored the impact of artificial intelligence on the quality of media research and ethical and technical awareness, which shapes the way media students deal With modern research tools, academic and ethical standards are needed to clarify the limits of the use of these techniques.

Study Terms:

Artificial Intelligence:

Artificial intelligence (Artificial Inteligenct) is classified as one of the branches of computer science, one of the main pillars of the technology industry in the current era. Artificial intelligence is defined as the attempt to embody human intelligence to produce machines, software, and applications with capabilities that simulate and even surpass humanity. It has been able to perform complex tasks in dealing with hypotheses simultaneously with accuracy and high speed, and the ability to solve problems in a way comparable to the human method, and it also aims to simulate human thought, style, and innovation. (Ashraf Faleh, Amjad Omar 2022)

Artificial Intelligence Tools and Applications:

These are smart programs and applications based on advanced algorithms of artificial intelligence, which help users solve real-world problems, and these tools are specialized and oriented towards customized functions. Hajar, S., 2023).

In this study, we mean the applications and tools of artificial intelligence procedurally: we mean the tools and applications made available by artificial intelligence technology that can be used and employed in the preparation of scientific research in the media.

Media Research:

It is defined as: scientific research that aims at systematic verification of a media topic, issue, phenomenon, or problem to uncover and develop facts related to media or communication aspects. The objectives of media research are not particularly different from the objectives of scientific research. (Al-Mashhadani, 2017)

Procedurally, media research in this study is intended to address various issues in society and is addressed and addressed in various media such as radio and television, journalism and electronic publishing, digital media, public relations and advertising, mass communication, and at all levels of study (bachelor's, diploma, master's, and doctorate).

Knowledge Framework of the Study: (Artificial Intelligence):

Artificial Intelligence (AI) is an interdisciplinary field that aims to develop systems that can mimic human intelligence;it includes a range of technologies such as machine learning, computer vision, and computer vision, enabling machines to perform tasks that require thought and analysis (Russell & Norvig, 2022). Its roots date back to the mid-twentieth century, when the term "artificial intelligence" was first used at the Dartmouth Conference in 1956; since then , research in this field has evolved significantly, from developing simple algorithms to creating complex systems capable of learning and adapting; advances in big data computing have contributed to the acceleration of the growth of artificial intelligence and made it embedded in many modern applications (Goodfellow, Bengio, & Courville, 2016).

The importance of AI is evident in its ability to improve efficiency and increase productivity across various sectors;it can process vast amounts of data faster and more accurately than human capabilities, facilitating accurate information-based decision-making; and it is an effective tool for processing data and information, helping organizations better understand trends and behaviors (Mitchell, 1997);**AI is used in many areas, including:**

- **Healthcare:** Processing medical data and providing accurate diagnosis.
- **E-commerce:** Improve the user experience with personalized recommendations.
- **Manufacturing:** Increasing efficiency and improving production.
- **Transportation:** Development of self-driving cars and improvement of public transport systems.

- **Education:** Tailoring the educational experience of students based on their needs (Burkov, 2019).

As for the applications of artificial intelligence in education and scientific research:

In the field of education, it is used to personalize the learning experience of students by addressing individual learning styles and providing educational content tailored to the needs of each student; AI systems are used to develop smart tests that can accurately assess the level of students (Domingos, 2012).

In scientific research, AI enhances researchers' ability to analyze and process a large number of data quickly and efficiently; these AI-powered systems can detect patterns and relationships that may be unclear to researchers, contributing to the speed of the scientific discovery process (Russell & Norvig, 2022).

The advantages and disadvantages of artificial intelligence were as follows:

- **First: The features** included the following:
 1. **Increased efficiency:** The ability to process data quickly and accurately.
 2. **Improved Decision Making:** Providing accurate analytics that help make decisions based on reliable data.
 3. **Personalization of experiences:** The ability to customize content and services based on the needs of individuals (Goodfellow et al., 2016).
- **Second: Defects:** These included the following:
 1. **Job loss:** Automation may reduce the need for human labor in some areas.
 2. **Ethical concerns:** AI technologies raise questions about privacy and security.
 3. **Bias:** Systems supported by intelligence technologies may include the results of the data used to train them (Mitchell, 1997).

Theoretical framework of the study:

(Theory of Technological Determinism):

It is a theory that explains how technology affects the development of societies and cultures. The concept of technological determinism is attributed to many thinkers, most notably Marshall McLuhan, who considered that technological means determine the nature of social interaction and how values are formed Cultural (McLuhan, 1964, p. 7).

The roots of the theory of technological determinism go back to the early twentieth century, when thinkers began to systematically study the relationship between technology and society; the American economist and social scientist Thorsten Veblen is considered one of the pioneers in this field, as he pointed out that technological developments affect social and economic values (Veblen, 1899); Thus, these ideas have evolved over time to include the impact of technology on all aspects of human life.

The theory states that technology is the primary factor that determines how societies develop. Technology is seen as an independent force that influences social, political, and economic dimensions. According to this theory, any technological advancement necessarily leads to social and cultural changes.(Smith, Marx, 1994).

The theory shows how the media are not just tools for the transmission of information, but are factors that influence how ideas and values are formed in societies;McLuhan asserts that "the medium is the message", which means that the nature of the medium used for communication plays a crucial role in shaping social and cultural consciousness (McLuhan, 1964); therefore, the development of modern media has radically changed the way individuals interact with each other and with information.

Despite the significant effects of this theory, it faces many criticisms, with some critics arguing that it exaggerates the role of technology and overlooks other social and cultural factors that also affect social development (Bimber, 1990);critics point out that

societies are not only passive recipients of technology, but can also shape and direct their uses in accordance with their needs.

Technological determinism is an important framework for understanding the relationship between technology and society; despite its criticisms, it provides valuable insights into how technological innovations affect social values and cultural behaviors; understanding these dynamics helps researchers and decision-makers to deal with the challenges posed by recent technological developments (Postman, 1992).

Therefore, the theory of technological determinism can be employed in this study to understand the impact of the applications and tools of artificial intelligence on the performance of media students in the preparation of their research, as the theory assumes that technological development imposes direct effects on individuals and societies. Thus, the impact of artificial intelligence on the quality of media research and their ethical awareness can be seen as part of this ongoing technological impact, which shapes the way students and researchers in the field of media deal with these modern research tools, and calls for the need to set academic and ethical standards that clarify the limits of the use of these technologies.

Methodological framework of the study:

❖ **Type and Methodology of the Study:** The current study is classified among the descriptive studies that rely on the quantitative analytical survey method, which is concerned with the study of things that already exist at the time of conducting the study, in a specific place and time, in a way that helps to understand or make judgments about them. Methods of employing and using artificial intelligence tools in the preparation of media research within the framework of academic and ethical controls.

❖ **Study Tools:** The researcher used a survey tool based on the analysis form to collect data, as the questionnaire is one of the methods used to collect data directly from the selected sample, by directing a set of unidentified questions, in order to identify certain facts, the researchers' views and attitudes, or the motives and influences that push them to benefit from artificial intelligence technologies in scientific research. In order to verify the validity of this tool in collecting the study data, the researcher **tested the validity of the measures of the study form**, where the researcher relied on the apparent honesty to measure the validity of the data collection tool and to find out if the tool measures what it should measure, through the careful examination of each item/question and ensuring that the items are sound in terms of content and wording, so that it measures the aspects to be measured within the framework of the topic Basic. The stability test **was performed** by conducting an alpha stability coefficient for the themes of the questionnaire sheet and for the entire newspaper as follows:

Table (1) shows the values of the stability coefficients of "alpha" for the themes of the questionnaire newspaper and its total score

Alpha coefficient (Stability Factor)	Axis
0.837	Reasons and Motivations for Using AI Applications in Their Research Preparation
0.830	Purposes that the sample members seek to achieve through their use of artificial intelligence tools
0.764	The Impact of Utilizing Artificial Intelligence Applications on Research Quality in Terms of Organization, Accuracy and Creativity
0.902	Challenges you face as a researcher when using AI applications, especially in terms of adhering to academic and ethical standards

0.893	The Impact of Using Artificial Intelligence Applications on Research and Analytical Skills
0.719	Your use of AI applications contributes to the development or decline of your own abilities in scientific research
89.1%	Full Questionnaire Sheet

Therefore, the self-truthfulness coefficient (consistency) of the questionnaire sheet was calculated by employing the following equation:

$$= \text{Self-Truthfulness Coefficient} = \sqrt{\text{معامل الثبات}} = \sqrt{0.8910.944} = (94.4\%).$$

Thus, the stability ratio was approximately (89.1%), which the researcher considered an appropriate level of stability, as the ratio shown indicates an acceptable level of stability in the general form of the data collected using the questionnaire sheet.

Study Population: The study population consists of a number of media students at all levels (Bachelor's, Diploma, Master's, and PhD. who use artificial intelligence applications and tools of various types and levels). In the number of (5) media colleges at the University of Sharjah and Al Ain University in the United Arab Emirates. In the time period from June 2024 to June 2025.

❖ **Study Sample:** It consisted of a deliberate sample of (150 individuals) of media students who use AI research tools of different types, educational levels, ages and specializations, and this sample was deliberately selected, based on certain specifications required by the nature of the study (Allam, 2012). There are a number of justifications on the basis of which the study sample was selected, which are:

- **First:** The sample of students of media faculties was selected as the most exposed to the artificial intelligence tools used in their research
- **Second:** The sample was selected to include learners in various disciplines and teams to achieve comprehensive representation for them in different educational stages.
- **Third:** A sample of students from different academic levels was identified to study the impact of these factors on the use of artificial intelligence tools.
- **Fourth:** The sample was deliberately selected based on the media students' use of artificial intelligence applications and tools in preparing, preparing and writing their media research.

The study sample was distributed in terms of the demographic characteristics of the respondents as shown in the following table:

Table (2) shows the characteristics of the study sample (n=150)

%	as	Basic Data	
30.7	46	male	genre
69.3	104	Female	
100	150	Total	
2.7	4	diploma	Educational Level
86.0	129	academic	
11.3	17	Post University	
100	150	Total	
66.7	100	to 25 18	lifetime
33.3	50	From 26 of 35	
100	150	Total	
58.7	88	Electronic Press and Publishing	Specialization
17.3	26	Radio and television	

8.7	13	Digital Media	
7.3	11	Public Relations	
8	12	Mass communication	
100	150	Total	

The results of Table (2) show the distribution of the characteristics of the study sample, which includes (150) individuals, where the basic data were presented that reveal the detailed composition of the sample, **in terms of gender**, the results revealed that the percentage of females in the sample reached 69.3%, while the percentage of males was 30.7%, and this distribution indicates a greater representation of females in the sample, which confirms a significant increase in the rates of enrollment in institutions. Higher education and scientific research, especially in media disciplines, which reflects the community's support for this category in the academic and media fields. **As for the educational level**, the results showed that 86% of the sample members hold university qualifications, while 11.3% hold post-university qualifications and only 2.7% hold diploma qualifications, and this distribution reflects that the sample represents a high educational category, which indicates the focus on university and post-university education in the field of media. The apparent increase in the percentage of holders of university degrees reflects the general trend towards academic education specialized in media, which requires an advanced level of education in fields such as journalism, digital media and its various applications.

On the other hand, the **results of the age-related sample showed** that 66.7% of the individuals are between the ages of 18 and 25, while the percentage of individuals between the ages of 26 and 35 reached 33.3%, and this distribution reflects that the sample consists mainly of the youth, which indicates the great interest of this group in media studies and its developments, and emphasizes their desire to follow media developments and engage in the fields of media new technologies, especially artificial intelligence, highlighting the effective role of this category in this most advanced field at the moment.

As for academic majors, the results showed that the largest percentage in the sample (58.7%) were students of journalism and electronic and digital publishing, followed by 17.3% of radio and television, 8.7% of digital media, and 7.3% of public relations, while the percentage of mass communication majored 8%. Electronics and new digital communication technologies due to their connection to the design and production aspects of electronic content in some universities, which reflects the growing interest in these disciplines within the framework of the development of artificial intelligence applications in this field, with most educational institutions adopting these modern disciplines that suit the contemporary media work market.

Statistical Data Processing:

a) **Descriptive Measures:** These included the following:

- ❖ Simple repetitions and percentages. Arithmetic average. Standard deviation, which determines the extent to which the readings are far or close from their arithmetic mean. The relative weight calculated from the equation: (arithmetic mean x 100) ÷ the maximum score of the statement.

b) **Statistical tests:** These tests included the following:

- ❖ Independent-Samples T-Test.
- ❖ K2 (Chi square) is a test of statement independence and is used to study the significance of differences between groups of nominal variables.
- ❖ Oneway Analysis of Variance (ANOVA)

c) **Correlation coefficients:** These coefficients include the Pearson Correlation Coefficient.

The researcher relied on the statistical analysis program (SPSS) in the analytical aspect of the data of the field study, and the level of significance adopted in the current study in all tests of hypotheses, correlation relationships and regression coefficient is to accept the results

of the statistical tests at a confidence level of (95%) or more, i.e. at a significance level of 0.05 or less.

Conclusions:

First: Detailed results of the field study:

Table (3) shows the extent to which the study sample members use artificial intelligence applications and tools in preparing their media research.

%	as	Range of Use
69.3	104	All the time
30.7	46	Once in a while
100	150	Total

The results of Table (3) reflect the extent to which the study sample uses artificial intelligence applications and tools in the preparation of their media research, and according to the results, 69.3% of the respondents reported that they use these tools regularly, while 30.7% reported using them occasionally, and these results reflect the great and growing interest in this technology In the media field, where the vast majority of participants demonstrate their continued reliance on these tools in their academic and media work.

This widespread use of artificial intelligence can be explained by the increasing reliance on technology in both academic and media fields; the available tools are becoming more effective in accelerating and facilitating the process of preparing research, providing data, and analyzing content, making them indispensable tools for media researchers; and these technologies provide various capabilities such as linguistic analysis, predicting future trends, and improving the accuracy of research, which contributes to raising the quality of media research.

On the other hand, 30.7% of the respondents use these tools irregularly or occasionally, showing that there may be some barriers to the full use of these technologies, and this may be related to limited technical knowledge or lack of training in the use of AI tools, which makes some learners tend to use them only when needed; This disparity in use reflects the need for training and awareness programs to raise awareness of the importance of these tools and facilitate their integration into the research process more systematically. The results of this table differed from the results of a study (Tariq Mamdouh Al-Dajah, 2024), whose results concluded that there is an average degree of teachers in Jordan using artificial intelligence ChatGPT in the educational and learning process.

Table (4) shows the number of times the respondents used the study sample of artificial intelligence tools in the preparation of each media research it conducts

%	as	Number of times
36.7	55	Take advantage of it only in the early stages
53.3	80	Benefit from them in the key stages of preparation and organization
10	15	I benefit from it at all stages
100	150	Total

The results of Table 4 reveal the number of times (the study sample) used AI tools during the preparation of their media research; according to the results, 53.3% of the respondents employed AI tools in the main stages, while 36.7% only benefited from these tools in the early stages of the research, while 10% of the respondents reported that they used the tools at all stages These findings suggest that most learners tend to take advantage of the potential of AI tools in the stages that require organizing ideas and developing content,

such as paraphrasing and organizing research, as these tools are particularly useful in data classification, idea organization, and wording quality; this trend can be explained by the great benefit these tools offer in accelerating and enriching the advanced stages of research preparation, such as sourcing, summarizing, and data analysis. On the other hand, the use of AI in the early stages only (36.7%) indicates that some learners are limited to using these tools in the initial information collection and research processes, while relying on traditional methods in the later stages, and this trend may be due to a reluctance to use modern technology fully, or due to a belief that AI cannot accurately encompass all aspects of academic research in the advanced stages. Those who benefit from AI tools at all research stages 10%, demonstrating greater integration of these tools in the research preparation process comprehensively, reflecting an advanced level of knowledge of AI and its integrated use to enhance academic efficiency and quality. Despite ethical caveats and academic controls.

Table (5) shows the artificial intelligence tools used by the sample members mainly in the preparation of their media research.

%	as	Artificial Intelligence Tools
53.3	80	Content generation tools such as (ChatGPT – Gemini)
51.3	77	Search and text analysis tools such as Google Scholar
45.3	68	Infographic design tools like Canva
36.7	55	Proofreading and grammar tools such as (Grammarly)
150		Total

The results of Table 5 show that 53.3% of them use content generation tools such as ChatGPT – Gemini, indicating that the majority of learners prefer to use these tools that contribute to speeding up the process of writing and generating text effectively. These tools provide valuable help in organizing ideas and formulating content quickly, which helps them save time and achieve. For 51.3% of respondents who rely on search and text analysis tools such as Google Scholar, it is important to have reliable scientific sources to support academic research, as these tools provide them with access to rich scientific articles and studies, ensuring the credibility of the information they use in their research, enhancing the quality of media research and making it more accurate and objective. For 45.3% of the learners (the study sample) who use infographic design tools such as Canva, this reflects their growing interest in presenting content visually, as the use of these tools enhances the ability to present data and information in a simplified and engaging manner, which contributes to facilitating the process of understanding for the recipients and makes the research more effective. Graphic and infographic design adds a new dimension to academic research, where the learner is shown. The ability to integrate multimedia into the presentation of their media message, while 36.7% of the study sample used proofreading and grammar tools such as Grammarly, reflecting their great interest in the quality of the wording according to academic writing standards. These tools help correct linguistic and grammatical errors, which raises the level of professionalism in writing research and enhances the accuracy of the language. The sample members are also keen to present their research at the highest level of linguistic and grammatical quality to avoid mistakes that may negatively affect their scientific research.

Table (6) shows the reasons and motives that drive the study sample to use artificial intelligence applications in the preparation of their research.

Relative Weight	Standard deviation	Average	exhibitions		neutral		I agree		Ferry
			%	as	%	as	%	as	
94.3	0.38	2.83	0	0	17.3	26	82.7	124	I use AI applications because they facilitate the analysis of complex data in my media research.
91.7	0.48	2.75	2.0	3	21.3	32	76.7	115	AI applications provide me with tools that help me understand media topics more deeply.
91.3	0.47	2.74	1.3	2	23.3	35	75.3	113	I find that AI applications save me time and effort while collecting data for my research topic.
90.3	0.485	2.71	1.3	2	26.7	40	72.0	108	I find that using AI applications increases my ability to innovate and be creative in my media research.
90.3	0.454	2.71	0	0	28.7	43	71.3	107	I feel that AI applications contribute to improving the academic efficiency of my media research.
89.3	0.496	2.68	1.3	2	29.3	44	69.3	104	AI applications help me improve the quality of my media research through the smart recommendations they provide.
87.7	0.484	2.63	0	0	36.7	55	63.3	95	I find that the applications of artificial

									intelligence contribute to the organization of my thoughts and the quality of my media research.
83	0.565	2.49	3.3	5	44.0	66	52.7	79	AI applications help me access diverse sources of information that support my research.
81	0.727	2.43	14.0	21	29.3	44	56.7	85	I use AI apps because they give me the ability to validate the information and sources I use in my research.
76.3	0.619	2.29	8.7	13	53.3	80	38.0	57	I believe that using AI tools enhances the accuracy of my findings in my media research.

The results of Table (6) present the reasons and motivations that drive researchers to use AI applications in the preparation of their media research, and they clearly indicate the many benefits that these applications offer in various aspects of academic research, the most influential reason is that they facilitate researchers to analyze complex data in their media research, as this phrase recorded the highest relative weight of 94.3, which is a proof of the importance of these tools in dealing with large and complex data that requires advanced techniques to analyze and draw conclusions from it, which enhances the ability of researchers to manage data accurately and effectively, followed by the motivation that emphasizes helping researchers understand media topics more deeply, which received a relative weight of 91.7; AI not only facilitates data collection and analysis, but also improves researchers' ability to interact with media topics more holistically and in depth; in terms of time and effort, 91.3 percent of respondents reported that they found it to save them time and effort while collecting data for their research topics. This reflects the important role of these tools in speeding up research and information mining processes, allowing researchers to devote themselves to analyzing results and developing ideas. Instead of spending time collecting data; on the other hand, 90.3 of the sample confirmed that using AI tools increases their ability to innovate and be creative in their media research; this result indicates that AI not only helps improve the technical or organizational performance of research, but also enhances the ability to present new and creative ideas, which contributes to enriching academic content; 90.3 also reported that This result indicates that AI not only facilitates research procedures, but also enhances the level and quality of academic research, which reflects positively on the overall study outcomes; in addition, 89.3 indicated that these applications help them improve the quality of their media research through the smart recommendations they provide, and this result reflects the effective role 87.7 of the respondents indicated that AI applications contribute to organizing their ideas and speeding

up the writing process in their media research, and this indicates the importance of AI in helping researchers organize their ideas logically and in an orderly manner, which makes it easier for them to convert ideas into written content faster and more smoothly; As for searching for diverse sources, 83 of the respondents stated that these applications help them to access a variety of sources of information that support their research, reflecting the ability of these tools to expand the scope of research and access multiple sources that may be difficult to access through traditional methods. Giving them the ability to validate the information and sources they use in their research, indicating their role in achieving the accuracy and credibility of academic research; 76.3 percent of the respondents believed that the use of intelligence applications enhances the accuracy of their findings in their media research; and Overall, these results are in line with the increasing development of the use of artificial intelligence in academic research, as these applications provide a set of effective tools that contribute to improving the quality and efficiency of media research, and enhance the accuracy of results and innovation in the research process.

Table (7) shows all the reasons and motivations that drive the researchers to use artificial intelligence applications in the preparation of their research.

%	as	All the causes and motives
26	39	medium
74	111	High
100	150	Total

The results of this table (7) show that 74% of the respondents believe that the overall reasons and motivations for using AI applications in their research are "high", while 26% of them believe that these reasons are "moderate", and this result indicates that most of the respondents consider that the use of AI applications contributes significantly to improving their performance in scientific research. This is in line with the results of Table 6, which showed that the most prominent reasons for using AI are facilitating complex data analysis (94.3%), providing tools to understand media topics more deeply (91.7%), and saving time and effort during data collection (91.3%), which emphasize the importance of these applications in accelerating and improving the quality of research. This result can be explained in light of the fact that most of the study sample is effectively aware of the great benefits provided by AI tools, especially in terms of saving time and effort, and achieving a high level of accuracy and innovation in their media research, as shown in Table (6), which emphasized the ability of AI to enhance the level of academic efficiency and improve the quality of research.

Table (8) shows the goals and objectives that media students seek to achieve through their use of artificial intelligence tools in media research.

Relative Weight	Standard deviation	Average	exhibitions		neutral		I agree		Ferry
			%	as	%	as	%	as	
93	0.411	2.79	0	0	21.3	32	78.7	118	I leverage AI tools to enhance my ability to organize ideas and information in my media research.
91.7	0.436	2.75	0	0	25.3	38	74.7	112	I aim to speed up the research preparation process by leveraging AI tools.
89	0.471	2.67	0	0	32.7	49	67.3	101	I aim to improve

									communication between ideas and by topics in research AI tools leveraging.
88.7	0.475	2.66	0	0	34.0	51	66.0	99	Use AI tools to improve the accuracy and quality of my research content.
88.3	0.478	2.65	0	0	34.7	52	65.3	98	Use AI tools to generate new and innovative ideas in media research.
87.3	0.539	2.62	2.7	4	32.7	49	64.7	97	Use AI tools to provide more accurate analytics on the media topics I'm researching.
87	0.515	2.61	1.3	2	36.0	54	62.7	94	I aim to improve the efficiency of data collection through the use of AI tools.
87	0.542	2.61	2.7	4	34.0	51	63.3	95	I aim to leverage AI to conduct research of a robust and consistent academic .nature
85	0.609	2.55	6.0	9	33.3	50	60.7	91	Use AI tools to better analyze results and reach more accurate conclusions.
79.7	0.565	2.39	4.0	6	53.3	80	42.7	64	I aim to leverage AI tools to expand the range of sources and references I use in my research.

The results of this table(8) indicate that the sample members seek to achieve a set of goals through their use of AI tools in the preparation of their media research, the most prominent of which is to enhance their ability to organize ideas and information in their media research, as the phrase "Use AI tools to enhance my ability to organize ideas and information in my media research" received the highest relative weight of 93; This indicates that organizing information and ideas is one of the most important uses that researchers rely on to achieve organized and documented academic research, which makes it easier for them to formulate the research in a logical and coherent way; in the next place, the phrase "I aim to speed up the process of preparing the research by making use of artificial intelligence tools" received a relative weight of 91.7, and this shows the importance of time in preparing research, as the researcher wishes to. The sample also seeks to improve communication between ideas and topics within the research by taking advantage of artificial intelligence, which is reflected in the relative weight of 89, which indicates the desire of the sample

members to make a logical and smooth sequence between the parts of the research, and as for improving the accuracy and quality of the research content, the result showed that 88.7 of the respondents. In addition, 88.3 of the respondents indicated that they use AI to generate new and innovative ideas in their research, reflecting the value of these tools in promoting creativity and originality in media research; and in terms of more accurate analytics, 87.3 of the respondents. 87 of the respondents also indicated their goal of improving the efficiency of data collection by leveraging AI, highlighting the importance of these tools in accelerating and improving the collection of data needed to build research. In terms of better analysis of results, 85 respondents showed interest in using these tools to obtain more accurate conclusions; in the context of expanding the scope of sources and references, the results showed that 79.7 percent of respondents sought to leverage AI to expand the range of sources and references they use in their research. In general, these are the purposes that the sample members seek to achieve by employing intelligence tools to improve many important aspects of media research, starting from organizing ideas to the accuracy of analyses and the quality of references, which is equivalent to the results obtained in Table (6), where the most prominent motivations for benefiting from artificial intelligence were related to facilitating information organization and data analysis, which enhances their ability to provide high-quality scientific research.

Table (9) shows the total objectives that the members of the study sample seek to achieve through their use of artificial intelligence tools

%	as	Total Purposes
32	48	medium
68	102	High
100	150	Total

The results of Table 9 show that 68% of media students aim to achieve "high" goals by employing AI tools in preparing their media research, while 32% aim to achieve "medium" goals, and this result indicates that the majority of respondents focus on high-value goals when using these tools, reflecting a strong interest in achieving substantial improvements in the quality and efficiency of media research. For example, 68% of the respondents who consider their objectives to be "high" agree with the results of Table 8, where they expressed their desire to achieve goals such as improving the organization of ideas and information (93%), speeding up the research preparation process (91.7%), and improving the accuracy and quality of the research content (88.7%); In contrast, 32% of the sample who consider their goals to be "average" indicate that they seek to improve less important aspects but still affect the quality of research, such as improving the efficiency of data collection (87%) and expanding the range of sources and references (79.7%), goals that can be considered "medium" for media students. Compared to the high goals they are seeking. Overall, the results indicate that the study sample members have strong aspirations to achieve substantial improvements in their media research by leveraging artificial intelligence tools, which is in line with the goals identified in Table 8, reflecting their importance in enhancing the quality of academic research and the ability to achieve more accurate and innovative results.

Table (10) shows the impact of the researchers' use of artificial intelligence tools on the quality of the research they prepare, in terms of organization, accuracy and creativity

Relative Weight	Standard deviation	Average	exhibitions		neutral		I agree		Ferry
			%	as	%	as	%	as	
93	0.406	2.79	0	0	20.7	31	79.3	119	AI tools help me organize the overall structure of my research more clearly.
91.3	0.44	2.74	0	0	26.0	39	74.0	111	Contributes to improving the quality of writing and academic expression in my media research.
90.7	0.479	2.72	1.3	2	25.3	38	73.3	110	AI tools enhance the media researcher's ability to come up with innovative and new ideas.
89	0.471	2.67	0	0	32.7	49	67.3	101	It helps me add more depth and detailed analysis of the content in the search.
87.7	0.485	2.63	0	0	37.3	56	62.7	94	I believe that AI tools enhance the level of creativity in presenting and analyzing data in media research.
87.3	0.487	2.62	0	0	38.0	57	62.0	93	It helps me to better organize ideas and content in media research.
87.3	0.609	2.62	6.7	10	24.7	37	68.7	103	It increases the accuracy of the information and data I include in the search.
82.7	0.552	2.48	2.7	4	46.7	70	50.7	76	The use of AI tools contributes to improving the coordination and organization of references and sources in media research.
81.7	0.526	2.45	1.3	2	52.0	78	46.7	70	I believe that AI increases the accuracy of the conclusions I come to in research.
76.3	0.586	2.29	6.7	10	57.3	86	36.0	54	I believe that AI helps me avoid methodological errors in media research.

The results of Table 10 review the extent to which AI tools are used to enhance the quality of media research prepared by the sample members, as the high relative weights reflect the positive impact of these tools on various aspects of the research process. The results also showed that the use of these tools effectively contributes to improving the quality of academic writing with a relative weight of 91.3, as it supports researchers in drafting texts with high accuracy that meets academic standards and reduces language errors; in addition, it enhances the ability of media research to present new and innovative ideas with a relative weight of 90.7, reflecting the ability of artificial intelligence to support creativity and develop new insights in the field of media; The importance of AI tools in enhancing the depth and detailed analysis of content has been highlighted with a relative weight of 89, which confirms their role in improving the quality of analysis and deepening research understanding;

Moreover, the relative weight of 87.7 shows that they contribute significantly to raising the level of creativity, whether by presenting data in innovative ways or by analyzing it in a new and impactful way, **and in terms of organizing ideas and content**, the results showed a relative weight of 87.3, highlighting the ability of AI tools to achieve logical coherence between search elements. These tools also contribute to increasing the accuracy of the data and information contained in the research, which appeared with a relative weight of (87.3), which reflects their importance in providing accurate and reliable content, **and in terms of the coordination and organization of references**, the phrase related to this aspect achieved a relative weight of 82.7, which confirms its role in simplifying and standardizing the process of academic documentation. The results also showed that these tools help enhance the accuracy of the researcher's conclusions with relative weight 81.7, as it contributes to providing powerful analytical tools that raise the level of credibility; Finally, the results showed a relative weight of 76.3 for the role of AI in reducing methodological errors, reflecting its effectiveness in improving researchers' adherence to academic methodological standards; based on these relative weights, it is clear that AI tools are a key tool to improve the quality of media research, whether at the level of organization, accuracy, or creativity, making them an indispensable part of the modern research process.

Table (11) shows the total effect of the research sample of artificial intelligence tools on the quality of the research they prepare, in terms of organization, accuracy and creativity

%	as	Total Impact
22.7	34	medium
77.3	116	High
100	150	Total

The results of this table(11) show that the overall impact of the use of AI tools on the quality of media research prepared by media scholars (the study sample) was significantly high, with a high impact rate of 77.3%, while the average rate was 22.7%, and these results reflect the effectiveness of these tools in improving research in terms of organization, accuracy, and creativity, which enhances their value as an essential tool in the research process. When these results are linked to Table 10, it is clear that the impact of AI tools is clearly manifested in contributing to the organization of the overall structure of research (relative weight 93), improving the quality of academic writing 91.3, and promoting creativity in ideas and analysis (87.7 and 90.7 respectively); Not only is it useful at the level of individual statements, but it also has an overall impact on overall research efficiency, reflecting a strong positive interaction between researchers and these tools.

Table (12) shows the challenges faced by the researchers when using artificial intelligence tools, especially with regard to adherence to academic controls and ethical standards

Relative Weight	Standard deviation	Average	exhibitions		neutral		I agree		Ferry
			%	as	%	as	%	as	
87	0.566	2.61	4.0	6	31.3	47	64.7	97	I believe that the excessive use of AI leads to a decline in the ability to think critically academically.
85.3	0.537	2.56	2.0	3	40.0	60	58.0	87	I find it hard to make sure that AI doesn't help plagiarize or mimic previous ideas

									or research.
85	0.526	2.55	1.3	2	42.7	64	56.0	84	I'm not sure that AI adheres to ethical standards when presenting information and data.
83	0.632	2.49	7.3	11	36.7	55	56.0	84	I am concerned that the use of AI may violate ethical standards regarding navigating sources and references.
79.7	0.644	2.39	8.7	13	43.3	65	48.0	72	I am concerned about the use of AI in a non-transparent or ambiguous way in academic data collection.
79.3	0.682	2.38	11.3	17	39.3	59	49.3	74	I believe that some AI tools may encourage unethical academic behavior such as direct content transmission.
79.0	0.607	2.37	6.7	10	50.0	75	43.3	65	I have a hard time making sure that the information provided by some AI tools is accurate by academic standards.
79.0	0.484	2.37	0	0	63.3	95	36.7	55	Sometimes I have a hard time making sure that AI tools don't infringe on the intellectual property rights of sources.
78.3	0.591	2.35	6.0	9	53.3	80	40.7	61	I am having challenges in verifying the sources and references that AI suggests in terms of their credibility.
75.7	0.704	2.27	14.7	22	43.3	65	42.0	63	I find it difficult to balance the use of AI tools with respecting academic honesty standards

The results of Table 12 reveal that the sample members face a range of challenges associated with AI tools, particularly with regard to adherence to academic disciplines and

ethical standards, the most prominent of which is the concern that the use of these tools may lead to a decline in academic critical thinking ability, which received a high relative weight of 87, reflecting a deep awareness of the importance of critical thinking as an essential part of the academic process. Among other challenges, learners find it difficult to ascertain that AI does not help to imitate or plagiarize previous ideas or research 85.3, with concern that AI adheres to ethical standards when providing information 85; and they also express concern that ethical standards related to navigating sources and references 83 indicate a legitimate concern about the transparency of the tools used; Concern about ambiguity in academic data collection received a relative weight of 79.7, while the results showed that some tools may encourage unethical academic behavior such as direct transmission of content 79.3; on the other hand, learners (the study sample) face challenges in verifying the accuracy of information provided by AI in accordance with academic controls 79, as well as difficulties in ensuring that the intellectual property rights of sources are not infringed 79; The credibility of the sources and references proposed by AI is a significant challenge with a relative weight of 78.3, in addition to the difficulty of balancing the use of these tools with respect to academic honesty standards 75.7, and these results reflect a growing awareness of the importance of adhering to ethical and academic standards when leveraging AI tools and applications in media research.

Table (13) illustrates the overall challenges facing media students when using artificial intelligence applications, especially with regard to adherence to academic standards and ethical controls.

%	as	Total Challenges
7.3	11	low
29.3	44	medium
63.3	95	High
100	150	Total

The results of Table 13 reflect that the majority of respondents (63.3%) believe that the challenges they face when using AI applications, especially in terms of adherence to academic and ethical standards, are at a high level; While 29.3% of the sample indicated that the challenges they face are at an average level, only 7.3% considered these challenges to be low, highlighting the importance of paying attention to AI ethics issues when using it in academic research. When we link these results to the results of Table 12, we find that the detailed challenges highlighted in Table 12, such as concern about the decline in academic critical thinking, difficulty in verifying the accuracy of information, and fear of infringement of intellectual property rights, justify the high level of overall challenges observed in Table 13. The high relative weights that appeared in Table 12 for most of the statements clearly reflect the great concern of the sample towards these issues, which supports the high percentage (63.3%) This indicates that there is a direct correlation between the qualitative challenges measured in Table 12 and the overall high level of challenges mentioned in Table 13. The results of this table were also in agreement with the results of a study (Tariq Mamdouh Al-Dajah, 2024), which stated that the obstacles to using the artificial intelligence application ChatGPT in the educational process from the point of view of teachers in Jordan were high.

Table (14) shows how the researchers benefit from the applications of artificial intelligence in developing their research and analytical skills

Relative Weight	Standard deviation	Average	exhibitions		neutral		I agree		Ferry
			%	as	%	as	%	as	
91.7	0.433	2.75	0	0	24.7	37	75.3	113	I feel that the use of AI has helped me increase the effectiveness of my way of organizing information and ideas.
89	0.473	2.67	0	0	33.3	50	66.7	100	I find that AI enhances my ability to analyze and organize data better.
88.3	0.48	2.65	0	0	35.3	53	64.7	97	I believe that AI helps me expand the scope of research and add new angles to analyze topics.
87	0.49	2.61	0	0	39.3	59	60.7	91	Through the use of AI, I am able to provide deeper and more diverse analyses in my research.
86.3	0.519	2.59	1.3	2	38.0	57	60.7	91	The use of AI tools contributes to improving the quality of critical analysis in academic research.
86	0.495	2.58	0	0	42.0	63	58.0	87	Using AI allows me to process large amounts of data more efficiently.
84.3	0.501	2.53	0	0	46.7	70	53.3	80	AI helps me improve my ability to gather information faster and more accurately.
79	0.484	2.37	0	0	63.3	95	36.7	55	I believe that AI has contributed to the development of my research skills by providing accurate and effective analytical tools.
78.3	0.507	2.35	1.3	2	62.0	93	36.7	55	I believe that AI enhances my ability to think critically and the ability to process information systematically.

75.7	0.53	2.27	4.0	6	64.7	97	31.3	47	AI helps me improve my skills in searching for reliable sources and references.
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The results of Table (14) indicate a clear and positive effect of the use of artificial intelligence on the development of research and analysis skills among media students, with the effect related to increasing the effectiveness of organizing information and ideas with a relative weight of 91.7, which reflects its importance as a tool to improve the methodology of thinking and organizing content, and enhancing the ability to analyze and organize data came in second place with 89 percent, indicating that artificial intelligence plays a pivotal role in improving the quality of analytical processing. In terms of expanding the scope of research and adding new analytical angles, it obtained a relative weight of 88.3, which highlights the role of intelligence in enabling researchers to explore new horizons in the studied topics, and the use of artificial intelligence tools to provide deeper and diverse analyses gained a relative weight of 87, which indicates an increase in the level of creativity and analytical depth in media research; Improving the quality of critical analysis had a clear share with a relative weight of 86.3, followed by the efficient processing of large amounts of data by 86%, reflecting the value of intelligence in dealing with research complexities; in terms of improving information collection, it received a weight of 84.3, which shows the vital role of AI and its tools in supporting researchers to access information quickly and accurately, and finally, its impact in developing research skills in general by providing effective analytical tools, it scored 79, while promoting critical thinking and information processing was systematic by 78.3, and improving the skills of searching for reliable sources by 75.7; these results show how AI enhances research and analytical skills, and provides innovative tools to improve scientific research.

Table (15) shows the total benefit of the sample members from artificial intelligence tools in developing their research and analytical skills

%	as	How to Influence
22	33	medium
78	117	High
100	150	Total

The results of Table (15) show that the impact of employing artificial intelligence on the research and analysis skills of the media students was at a high level of 78%, while the remaining 22% was within the intermediate level, which clearly reflects the great and positive impact of these applications in enhancing the research and analytical capabilities of the researchers.

When comparing these results with the details of Table 14, it is shown that the factors that mainly influence the achievement of the high level of impact include the effective organization of information and ideas, which achieved a relative weight of 91.7, the improvement of the quality of critical analysis by 86.3, in addition to providing deeper and more diverse analyses by 87 percent. Therefore, it can be said that the details in Table 14 illustrate the qualitative areas that contributed to raising the level of overall impact shown by Table 15, which enhances the integrated understanding of the role of artificial intelligence in developing the research and analysis skills of media students. The results of this table were also in agreement with the results of a **study (Fatima Salahuddin Refaat Mohamed, 2023)**, whose results showed that artificial intelligence is a prerequisite for keeping pace with scientific and technological changes, as it contributes to enhancing and upgrading education, and is an important factor in improving performance, and thus achieving academic excellence. The results of this table also agreed with the results of **the study (Fan Ouyang,**

Luyi Zheng, Pengcheng Jiao, 2022), whose results concluded that AI-based applications had noticeable positive effects, as they contributed to providing high-quality predictions using multiple input variables, and these applications also helped improve students' academic performance, and increased levels of interaction and participation in online learning environments.

Table (16) shows the extent to which artificial intelligence tools contribute to the development or decline of their own abilities in scientific research

Relative Weight	Standard deviation	Average	exhibitions		neutral		I agree		Ferry
			%	as	%	as	%	as	
86	0.594	2.58	5.3	8	31.3	47	63.3	95	I feel that my reliance on AI reduces my ability to think independently in research preparation.
84.3	0.501	2.53	0	0	47.3	71	52.7	79	Artificial intelligence contributes to my ability to find creative solutions to scientific research problems.
84.3	0.527	2.53	1.3	2	44.7	67	54.0	81	Artificial intelligence applications contribute to increasing my confidence in my ability to conduct high-quality scientific research.
82.7	0.501	2.48	0	0	52.0	78	48.0	72	AI helps me develop my ability to write research in a more organized and clear way.
79.7	0.588	2.39	5.3	8	50.7	76	44.0	66	Using AI enhances my skills in auditing and verifying information in research.
79.7	0.741	2.39	15.3	23	30.0	45	54.7	82	I see AI as weakening my self-skills in setting up scientific research independently.
78	0.529	2.34	2.7	4	60.7	91	36.7	55	The use of artificial intelligence has

									significantly improved my skills in scientific research.
77.7	0.527	2.33	2.7	4	61.3	92	36.0	54	I feel that AI is helping me develop my own skills in criticism and analysis.
75.7	0.692	2.27	14.0	21	45.3	68	40.7	61	The use of artificial intelligence impairs my ability to do self-analysis and research without help.
70.3	0.716	2.11	20.7	31	48.0	72	31.3	47	I rely so heavily on AI that I feel my self-skills in data collection and analysis are diminishing.

The results of Table (16) show that there is a dual effect on the extent to which the respondents benefit from AI tools and their self-abilities in scientific research, as some statements showed a positive effect while others showed potential negative aspects: the phrase "I feel that my reliance on AI reduces my ability to think independently in the preparation of research" came with a high relative weight of 86, which reflects a great concern among the sample members about the impact of excessive dependence on the other hand, the participants considered that artificial intelligence contributes to enhancing their ability to find creative solutions to scientific research problems by 84.3 percent, which is an indication of the positive role of these applications in supporting creative thinking. "Scientific, high-quality" also reported a positive impact with a similar relative weight of 84.3, indicating that AI contributes to building self-confidence in research performance, while the phrase "AI helps me develop my ability to write research in a more organized and clear way" achieved a relative weight of 82.7, reflecting a tangible benefit in improving the quality of writing and research organization. On the other hand, some statements showed concerns about the impact of AI on self-skills, such as "I see AI impairing my self-skills in preparing scientific research independently" which received a relative weight of 79.7, and the phrase "The use of AI impairs my ability to conduct self-analysis and research without assistance" scored 75.7, indicating that users are aware of the dangers of over-reliance on these technologies; Finally, the phrase "I rely so heavily on AI that I feel my self-skills in data collection and analysis decline" came in with a relative weight of 70.3, which reflects less anxiety compared to other terms, but remains an indication of the need to balance the use of AI with self-development.

Table No. (17) shows the total contribution of the sample members' use of artificial intelligence tools in developing or declining their self-abilities in scientific research

%	as	Total Usage Contribution
66	99	medium
34	51	High
100	150	Total

The data in Table 17 show that 66% of the participants feel a moderate effect of these applications on their self-abilities, while 34% of the study sample believe that the use of artificial intelligence has contributed significantly to the development of their self-abilities in scientific research, and these results indicate that artificial intelligence has significantly contributed to improving some aspects of scientific research, but its effect is still limited to an average range for the majority of participants; This also reflects that the use of AI is still considered an aid and not a wholly alternative in improving self-skills in scientific research.

When the results of this table are linked to the results of Table 16, it is clear that the study sample has a dual impression towards the use and use of AI. On the one hand, the results of Table 16 showed that the participants felt that AI has contributed to enhancing their abilities to prepare research in a more organized and clear manner, and increasing their confidence in their ability to conduct high-quality scientific research. On the other hand, they expressed concern about the impact of over-accreditation. This discrepancy in the results between the two tables shows that AI has a positive impact on some academic aspects such as organization and analysis, but it may cause a decline in some Basic self-skills such as critical thinking and independent analysis if overly reliant.

Table (18) shows the ethical standards and academic controls that you believe are necessary to guide the researchers' use of AI tools in the preparation of media research.

%	as	Ethical Standards and Academic Disciplines
62	93	Commit to documenting sources that were relied upon when using AI tools.
59.3	89	Ensure that AI is only used as tools to help and not as a substitute for the researcher's personal effort.
54.7	82	Be careful not to use intelligence tools for academic cheating or circumvention.
53.3	80	Validate the information provided by AI tools.
50.7	76	Avoid using AI tools on sensitive topics that require scientific accuracy and honesty.
50	75	Following the policies of the university or college related to the use of artificial intelligence in research.
49.3	74	Ensure that AI-generated content is not copied without adding personal analysis or interpretation.
40	60	Consider maintaining academic integrity and not relying entirely on AI.
29.3	44	Announcement of the use of AI tools in the research introduction or in the methodology section.
28	42	Refrain from using AI in research work that requires complete self-reflection and creativity.
150	Total	

The results of Table (18) show that the sample members have a great interest in ethical standards and academic controls when using AI in the preparation of their media research, but there is a difference in the importance of these standards for them, with the highest percentage being "commitment to documenting sources that were relied on when

using intelligence tools" which reached 62%, which indicates that the participants consider the documentation of sources as one of the basic rules to ensure scientific honesty. Other results such as "Ensuring that intelligence is used only as an aid tool and not as a substitute for the researcher's personal effort" and "Ensuring that it is not used for academic cheating or circumvention" are also shown, which received 59.3% and 54.7% respectively, indicating that there is an awareness of the importance of maintaining personal effort and staying away from academic misinformation or cheating; It is worth mentioning that some criteria such as "Advertise your use of AI tools in the foreground or in the methodology section" and "Refrain from using them in research work that requires full self-reflection and creativity" were significantly lower, at 29.3% and 28%, reflecting that these standards may not receive the same amount of attention compared to core practices such as documentation and adherence to scientific honesty. Artificial intelligence among participants, as more attention is paid to ensuring that information is documented and used correctly, with some challenges in adhering to standards that require full clarification of the use of AI in scientific research.

Second: Results of the Validity Test of the Field Study Hypotheses:

- ❖ **Hypothesis 1:** There is a statistically significant correlation between the rates of media students' use of AI tools in the preparation of their media research and the quality of the research they prepare (in terms of organization, accuracy, and creativity).

Table (19) shows the significance of the correlation between the rates of use of artificial intelligence tools by the sample members in the preparation of their media research and the quality of the research they prepare (in terms of organization, accuracy, and creativity).

Significance	Morale level	Pearson correlation coefficient	<i>Usage Rates</i> <i>Quality of Research</i>
D	0.000	**0.258	
150			Total Sample (n)

The results of Table (19) show that the Pearson correlation coefficient between the rates of the researchers' use of artificial intelligence tools in the preparation of their media research and the quality of these researches in terms of organization, accuracy and creativity, the results indicate that the correlation coefficient is 0.258, which is considered relatively weak but has a clear statistical significance, and the value of the significance level is 0.000, which means that there is a statistically significant correlation between the two variables of use and quality. The statistical significance of this relationship proves that there is a significant effect of the rates of using artificial intelligence on the quality of research, although this effect is within the limits of weakness according to the value of the correlation coefficient, through this, we can conclude that the use of artificial intelligence tools contributes to improving the quality of media research, but to a **limited extent**, and this may be due to the reliance of some researchers on artificial intelligence as an auxiliary tool without having a significant impact on other aspects of research such as critical thinking or creativity. Based on these results, the first hypothesis can be interpreted positively, as it proves that there is a relationship between the use of artificial intelligence and the quality of research, but it is a weak relationship that needs more studies and analysis to understand how to improve this relationship and increase the impact of artificial intelligence on the quality of research more deeply. Their media research and the quality of the research they prepare (in terms of organization, accuracy and creativity).

- ❖ **Hypothesis Two:** There is a statistically significant correlation between media students' motivations for using AI applications in preparing their media research and the purposes they seek to achieve through their use.

Table (20) shows Pearson's significance for the correlation between the researchers' motivations for using AI tools in preparing their media research and the purposes they seek to achieve through their use

Significance	Morale level	Pearson correlation coefficient	Motivations for use Research Writing
D	0.000	**0.264	
150			Total Sample (n)

The results of Table 20 reveal the Pearson correlation coefficient between the motivations of media students to use AI tools in the preparation of their media research and the purposes they seek to achieve through their use; The significance level value is 0.000, which means that there is a statistically significant correlation between the motivations for using AI and the purposes they seek to achieve through the use of these applications, as the statistical significance of this correlation shows that there is a significant effect between the motivations and the purposes that the sample members seek to achieve, but this effect is relatively weak; it is likely that the motivations of the participants in the use of artificial intelligence are related to the achievement of goals such as speed Writing, improving organization, or increasing accuracy in research, goals that can be tailored to AI's tasks in facilitating the academic research process. Based on these results, we can confirm that there is a correlation between the motivations for using intelligence tools and the academic purposes that the sample members seek to achieve, but this relationship is relatively weak, which indicates the need for more research to understand the factors that can enhance this relationship and improve the impact of AI on academic purposes. Sample members of the AI tools in preparing their media research and the purposes they seek to achieve.

- ❖ **Hypothesis Three:** There is a statistically significant correlation between the extent to which the study sample benefited from artificial intelligence tools in the preparation of their media research and their level of awareness of the boundaries between the legitimate and illegal use of these tools.
- ❖ Table (21) shows Pearson's significance for the correlation between the extent to which the study sample benefited from artificial intelligence tools in the preparation of their media research and their level of awareness of the boundaries between the legitimate and illegal use of these tools.

Significance	Morale level	Pearson correlation coefficient	Use of apps Level of Awareness
D	0.000	**0.202 -	
150			Total Sample (n)

The results of Table 21 indicate that the correlation coefficient is -0.202, indicating that there is a weak negative correlation between the use of AI tools and their level of awareness of the boundaries between the legitimate and illegal use of these tools; This suggests that some of them have a tendency to rely more on these tools without paying enough attention to the ethical and academic rules that govern their use; the significance level value is 0.000, which indicates that the relationship between the two variables is statistically significant, i.e., the correlation is not the result of chance; and although the relationship is negative, inverse, and weak, the existence of a statistical significance reinforces the importance of understanding the impact of excessive use of these tools on the researchers' consciousness The ethical and legal limits governing their use.

These findings can be explained by the fact that the extensive use of AI tools may lead to less attention to ethical standards related to academic research, such as proper documentation and adherence to scientific honesty, which may contribute to the escalation of

concern about the possibility of misuse of these tools in the future. their media research and their level of awareness of the boundaries between the legitimate and illegal use of these tools.

- ❖ **Hypothesis Four:** There are statistically significant differences between media students (study sample) according to their demographic characteristics (gender, educational level, age, specialization) in the impact of their use of artificial intelligence tools on their research and analytical skills.

Table (22) The significance of the differences between the respondents according to their demographic characteristics (gender, educational level, age, specialization) in the effect of their use of artificial intelligence on their research and analytical skills

Statistical Indicators			Standard deviation	Average	Number	Impact	
Moral level	Degree of Freedom	audition				Demographic Variables	
0.037 D	148	=ت 4.422	0.47396	2.6739	46	male	genre
			0.38015	2.8269	104	Female	
0.000 D	2 142	=ف 13.357	0.57735	2.5	4	diploma	Educational Level
			0.36335	2.845	129	academic	
			0.49259	2.3529	17	Post University	
0.037 D	148	=ت 4.442	0.37753	2.83	100	to 25 18	lifetime
			0.47121	2.68	50	From 26 of 35	
0.000 D	4 145	=ف 5.559	0.41381	2.7841	88	Electronic Press and Publishing	Specialization
			0	3	26	Radio and television	
			0.37553	2.8462	13	Digital Media	
			0.52223	2.4545	11	Public Relations	
			0.52223	2.5	12	Mass communication	

First , **with regard to gender**, the results showed that there was a difference between males and females in this effect, as it was found that females benefited more from AI in improving their research and analytical skills compared to males; The difference in averages between males (2.6739) and females (2.8269) was statistically significant, indicating that females showed greater benefit; The group of undergraduate students showed a high average of 2.845, while the group of diploma students benefited the least from the average, with an average of 2.5; The 18-25 age group also showed a greater impact of use on their research skills compared to the 26-35 age group, where the average of the first category was 2.83 while the average of the second category was 2.68; **in terms of academic disciplines**, the results showed a clear difference in the impact of the extent to which AI is utilized between different disciplines. Students in Radio and Television were the most benefited, with an average of 3.00, while Mass Communication had the least benefit, with a score of 2.5; while the impact rates in other disciplines such as "Journalism and Electronic Publishing", "Digital Media", and "Public Relations" ranged between 2.5 and 2.8, indicating that media majors in general benefited to varying degrees from the use of artificial intelligence; Overall,

the results indicate that the impact of artificial intelligence on research and analytical skills varies based on demographic characteristics, as the female category, at the university level, the younger age group, and different media disciplines showed a disparity in their use of these applications. According to their demographic characteristics (gender, educational level, age, specialization) in the impact of their use of AI and its various tools on their research and analytical skills.

Discussing the most important results of the study:

- The results of the study indicate that 69.3% of media students in the study sample use artificial intelligence tools on a regular basis, reflecting an increasing reliance on these tools in academic and media research. This is in line with [Abdullatif's \(2022\) study](#) which indicates a significant shift towards automating academic tasks and improving research efficiency, as these tools are considered an essential tool for improving productivity. On the other hand, it shows that 30.7% of the study sample uses AI non-permanently, which may indicate a reluctance or lack of confidence in the integration of these tools with research processes.
- The results reflect that the majority of the sample members (53.3%) rely on multiple AI tools in the basic stages of research, such as organization, paraphrasing, auditing, etc., which reflects the effective use of these tools in improving the quality of research work, while the lowest percentage (36.7%) who use the tools only in the early stages, shows the possibility of a psychological or cognitive barrier in some researchers. It prevents them from fully relying on these tools in the most specialized stages of research, and this is shown by the studies of both [Marzouk \(2023\)](#).
- Tools such as ChatGPT and Gemini are the most popular among respondents, with 53.3% relying on them, reflecting the growing interest in tools that contribute to speeding up the content generation process effectively, making them an ideal tool for improving academic productivity; 51.3% The importance of access to accurate scientific sources, which reflects the ability of these tools to facilitate access to deep and reliable knowledge, which is in line with [Saqr's \(2024\) study](#).
- The results showed that 74% of media learners (the study sample) consider their motivation to use AI applications to be "high", suggesting that learners are aware of the significant benefits of these tools in improving the accuracy and efficiency of search. [As explained by Salem \(2021\)](#), this growing awareness of the benefits of using AI is likely to be the main reason behind this trend, reflecting a shift towards enhancing innovation, efficiency, and academic analysis, as emphasized by [Shams El-Din \(2022\)](#).
- The results show that 68% of the study respondents seek to achieve "high goals" from the use of artificial intelligence, which indicates that there is a great ambition to improve the quality of scientific research, while 32% aim to achieve "medium goals", indicating a difference in the researchers' priorities or their limited ability to fully use these tools in all aspects of research.
- The study showed that 77.3% of media students (the study sample) feel that the use of AI has a "high" impact on improving the quality of media research; this result shows that AI contributes significantly to improving the organization, auditing, and creativity of academic research, as participants believe that digital tools can enhance the ability to deliver more accurate and objective academic content.
- The results of the study showed that 63.3% of the sample selected for the study face challenges related to adhering to academic and ethical standards when using AI tools, highlighting the need to develop an ethical framework for this and this shows the need to increase academic awareness about the ethical use of AI, especially with regard to documenting sources and ensuring scientific honesty.

- The results show that 78% of media scholars (the study sample) believe that AI has a "high" impact on their research and analytical skills, and this result indicates that it enhances the ability to manage and analyze data more accurately, thus contributing to improving researchers' skills in delivering more in-depth and structured research results.
- 66% of the respondents reported a "moderate" effect on their self-abilities in scientific research, while 34% indicated a "high" effect, reflecting that artificial intelligence is not considered a crucial tool to improve everyone's self-abilities, as it may require a certain level of experience to use these tools effectively in research processes, as Ahmed (2022) pointed out.
- 62% of media students (the study sample) indicated that adherence to ethical standards in documenting sources is crucial when using AI tools, and this confirms that scientific honesty standards should remain at the top of researchers' priorities when adopting these tools in academic research, and this result is consistent with the study of Al-Dajah (2024).
- For example, the relationship between the use of artificial intelligence and the quality of media research indicates that there is a strong correlation between the use of these tools and the high level of organization and accuracy in research.
- The results showed that there are statistically significant differences between media students (the study sample) according to their demographic characteristics, such as academic specialization, age, gender, and educational level, indicating that these factors affect the extent to which they benefit from artificial intelligence in improving research and analysis skills.

Study Proposals:

In light of the urgency and endeavor of researchers and students in many scientific disciplines to employ artificial intelligence tools and its applications in scientific research, especially in the media field, the researcher suggested the following:

- The need to provide training programs for students of media colleges aimed at teaching them how to use artificial intelligence tools and its multiple applications effectively in preparing their media research, in order to maximize the use of these tools in improving the quality of research.
- Motivate students to use AI only as an aid and not as a substitute for personal effort. They should be encouraged to develop independent critical thinking skills to ensure that these tools are not completely relied upon.
- Organizing workshops and lectures on the ethical standards for the use of AI in scientific research, to ensure that these tools are not used for illegal purposes such as academic cheating.
- Activating university policies related to academic controls regarding the use of artificial intelligence in scientific research and ensuring that these policies are clear to students so that they can use them legally and ethically.
- Promoting awareness of the importance of independent research and the ability to innovate by encouraging media students to develop their own ideas and not completely rely on artificial intelligence to create ideas or write texts.
- Encouraging students and researchers in certain media disciplines to use AI applications that suit the nature of their media specializations, such as the use of artificial intelligence in digital journalism or digital media, radio and television.
- Introducing the study of artificial intelligence applications in scientific research within the curricula of media faculties, with a focus on how students can benefit from these tools in the context of scientific research methodology and controls.

- Conducting more field studies on a larger sample of students of media colleges periodically and continuously to continue evaluating the impact of artificial intelligence on the quality of academic research and students' research and analytical skills, which contributes to improving the strategy of using these applications in this field.
- Encourage students to communicate continuously with their professors to guide them in the use of artificial intelligence in line with scientific research standards and academic ethics, in addition to providing the necessary technical support when needed.
- Encouraging students of media colleges to use artificial intelligence to improve the quality of research, while emphasizing the need to maintain personal creativity in analysis, synthesis, and innovation, to ensure that their research continues to reflect their critical thinking and academic originality in the field of media and communication and its accelerated technologies.

Study References:

First: Arabic References:

- 1) Ahmed, Essam Mohamed Sayed (2022) An Artificial Intelligence-Based Training Program to Develop Self-Learning Skills and the Trend Towards Participatory Learning among Chemistry Teachers, **Journal of the Faculty of Education**, 38(3), pp. 106-155.
- 2) Al-Daja, Tarek Mamdouh. (2024). The Reality of Using CHATGPT Artificial Intelligence in the Educational Learning Process from the Perspective of Teachers in Jordan, **Unpublished Master's Thesis**, Department of Educational Technology, Faculty of Arts and Educational Sciences, Middle East University, Amman, Jordan.
- 3) Al-Mashhadani, Saad, **Media Research Methods**, **University Book House**, UAE, 2017, p. 20.
- 4) Abdel Qader, Abdel Razek Mokhtar Mahmoud. (2020). Applications of Artificial Intelligence: An Introduction to the Development of Education in Light of the Challenges of the Coronavirus (COVID-19) Pandemic, **International Journal of Research in Educational Sciences**, 3(4), pp. 171-224.
- 5) Abdel Wahab, Saad Hassan Mohieldin. (2023) The Effectiveness of Some Artificial Intelligence Applications in the Development of E-Learning Skills and Self-Regulation among Educational Technology Students with High and Low Mental Capacity, **Journal of Specific Education Studies and Research**, 9(4), pp. 700-757.
- 6) Allam, Etemad Mohamed (2012) **Statistics in Social Research**, Anglo-Egyptian Library, Cairo.
- 7) Mohammed, Fatima Salah El-Din Rifaat. (2023). Artificial Intelligence: An Approach to Enhancing Academic Excellence in Egyptian Universities: A Prospective Study, **Educational Sciences**, 31(1), pp. 1-63.
- 8) Zaabata, Cyrine Hajar, Sabbagh, Omar (2023), The Use of Artificial Intelligence Tools in Scientific Research in the Field of Social Sciences and Humanities: Advantages and Limits, **Journal of Humanities**, **University of Mentory Constantinople**, Vol. 34, No. 3, pp. 145-163.
- 9) Faleh, Ashraf, Omar (2022), **Artificial Intelligence in Media, (Future Technology Has Become a Reality and Present)**, Dar Wael Publishing, Amman, 2021, pp. 41-42.
- 10) Nasser, Noha El-Sayed Ahmed (2023) Recent Trends in Research and Studies of the Uses of Artificial Intelligence in Public Relations, **Journal of the Union of Arab Universities and Communication Technology**, Volume 2022, Issue (11), Part One, pp. 183-219.
- 11) Shereen Farouk Rabie Abdel Latif (2022) Monitoring the mechanisms of fourth generation wars in Arab and directed satellite channels and virtual social networks and their relations with directing Egyptian elites towards them by applying artificial

intelligence and machine learning techniques, unpublished PhD thesis, Department of Media, Faculty of Arts. Mansoura University.

- 12) Doaa Fathy Salem (2021) The Effectiveness of Using Artificial Intelligence Technologies in Social Media from the Perspective of Educational Media Students Facebook as a Model, Egyptian Journal for Public Opinion Research. Cairo University - Faculty of Mass Communication - Public Opinion Research Center, Volume 20, Issue 3 September 102021 19.
- 13) Ayman Abdallah Aviv Safar (2024) The Use of Artificial Intelligence Technologies in Egyptian Websites and Their Implications on the Communicator: A Field Study of Cairo 24 Websites - The Seventh Day - Masrawy. Scientific Journal of Digital Media Studies and Public Opinion, Volume 1, Issue 1, January 2024, 42 100.
- 14) Fathi Mohamed Shams El-Din (2022) The Communicator's Vision of the Future of Media Professionals in the Age of Artificial Intelligence, Scientific Journal of Radio and Television Research, pp. 24-1-26.

:Second: Foreign References

- 1) Bimber, B. (1990). **The Politics of Information Technology**. Oxford University Press. New York.
- 2) Burkov, A. (2019). **The Hundred-Page Machine Learning Book**. Andriy Burkov.
- 3) Chai, Ching Sing; et.al. (2020). Factors Influencing Students' Behavioral Intention to Continue Artificial Intelligence Learning, **2020 International Symposium on Educational Technology (ISET)**, Bangkok, Thailand, pp. 147-150, doi: 10.1109/ISET49818.2020.00040.
- 4) Domingos, P. (2012). A Few Useful Things to Know About Machine Learning. **Communications of the ACM**, 55(10), pp. 78 – 87.
- 5) Goodfellow, I., Bengio, Y., & Courville, A. (2016). Deep Learning. MIT Press.
- 6) McLuhan, M. (1964). **Understanding Media: The Extensions of Man**. McGraw-Hill.
- 7) Mitchell, T. (1997). **Machine Learning**. McGraw-Hill.
- 8) Moor, Robert L.; Jiang, Shiyang; Abramowitz, Brian. (2022) What would the matrix do?: a systematic review of K-12 AI learning contexts and learner-interface interactions, **Journal of Research on Technology in Education**, 55(1), pp. 7 – 20.
- 9) Ouyang, Fan; Zheng, Luyi; Jiao, Pengcheng (2022) Artificial intelligence in online higher education: A systematic review of empirical research from 2011 to 2020, **Educ Inf Technol**, (27), pp. 7893 – 7925. <https://doi.org/10.1007/s10639-022-10925-9>.
- 10) Postman, N. (1992). **Technopoly: The Surrender of Culture to Technology**. Knopf.
- 11) Russell, S., & Norvig, P. (2022). **Artificial Intelligence: A Modern Approach** (4th ed.). Pearson.
- 12) Smith, M. R., & Marx, L. (1994). **Does Technology Drive History?**. MIT Press.
- 13) Veblen, T. (1899). **The Theory of the Leisure Class**. Macmillan.
- 14) Wang, Xinghua; et.al. (2023). What matters in AI-supported learning: A study of human-AI interactions in language learning using cluster analysis and epistemic network analysis, **Computers & Education**, (194), <https://doi.org/10.1016/j.compedu.2022.104703>.
- 15) Younis, Hassan; Sundarakani, Balan; Sundarakani, Balan. (2022). Applications of artificial intelligence and machine learning within supply chains: systematic review and future research directions, **Journal of Modelling in Management**, 17(3), pp. 916 – 940. <https://doi.org/10.1108/JM2-12-2020-0322>.
- 16) Zhang, Baobao; et.al. (2021) Ethics and Governance of Artificial Intelligence: Evidence from a Survey of Machine Learning Researchers, **Journal of Artificial intelligence Research**, (71), DOI: <https://doi.org/10.1613/jair.1.12895>.

- 17) Zheng, Lanqin; et.al. (2021). The effectiveness of artificial intelligence on learning achievement and learning perception: A meta-analysis, **Interactive Learning Environments**, 31(9), pp. 5650 – 5664.