Dirasat: Human and Social Sciences, Volume 53, No. 6, 2026, 8656

Deanship of Scientific Research

Attitudes of Media Professionals Working in Jordanian Satellite Channels (JSC) towards Employing Artificial Intelligence (AI) Techniques in Media Works

***Mousa Ahmad Khaireddin*[1], *Obaidah Ali Alrababah*[2]**

[1] Vise Dean of KUTC, Khawarizmi College, Amman, Jordam

[2] Department of Journalism and Digital Media, Faculty of Communication, University of Petra, Amman, Jordan

Received: 6/8/2024
Revised: 22/10/2024
Accepted: 9/12/2024
Published online: 1/1/2026

* *Corresponding author:*
m.khaireddin@khawarizmi.edu.jo

Citation: Khaireddin, M. A., & Alrababah, O. A. (2026). Attitudes of Media Professionals Working in Jordanian Satellite Channels (JSC) towards Employing Artificial Intelligence (AI) Techniques in Media Work. *Dirasat: Human and Social Sciences*, *53*(6), 8656. https://doi.org/10.35516/Hum.2026.8656

Abstract

Objectives: The study aimed to identify the attitudes of media professionals working in Jordanian satellite channels towards employing artificial intelligence (AI) technologies in media work. It also sought to assess the extent to which these professionals recognize the importance of integrating AI in the operations of these channels. Additionally, the study aimed to evaluate the readiness of these channels to successfully implement AI technologies in their work.

Methods: A simple random sample consisting of 95 media professionals working in Jordanian satellite channels was selected. The study adopted a descriptive approach to describe the sample and measure its variables, and an analytical approach to answer the research questions and test the hypotheses.

Results: The study found that although there is a good level of awareness among media professionals regarding the importance of using AI technologies in television work, they hold negative attitudes towards employing these technologies in their channels. The study also revealed statistically significant differences in the attitudes of employees towards the use of AI technologies based on gender. Furthermore, it concluded that there is a lack of readiness among the channels to successfully employ AI technologies in their operations.

Conclusion: The study concluded that Jordanian satellite channels need to improve their infrastructure, internal regulations, and organizational culture to be ready to successfully adopt AI technologies in their work. It also highlighted the importance of focusing on training young professionals with moderate experience, as they tend to have more positive attitudes toward the use of AI technologies in media operations compared to others.

Keywords: Artificial intelligence (AI); Jordanian satellite channels (JSC); awareness; trends; readiness

اتجاهات الإعلاميين العاملين في القنوات الفضائية الأردنية نحو توظيف تقنيات الذكاء الاصطناعي في العمل الإعلامي

***موسى أحمد خير الدين*[1]، عبيدة علي الربابعة[2]**

[1] نائب العميد، كلية الخوارزمي الجامعية التقنية

[2] جامعة البترا، كلية الإعلام، قسم الصحافة والإعلام الرقمي

ملخّص

الأهداف: هدفت الدراسة الى التعرف على اتجاهات الإعلاميين العاملين في القنوات الفضائية الاردنية نحو توظيف تقنيات الذكاء الاصطناعي في العمل الإعلامي، وإلى التأكد من مدى إدراك العاملين في هذه القنوات لأهمية توظيف الذكاء الاصطناعي في عمل هذه القنوات، كما هدفت الدراسة الى التحقق من مدى جاهزية هذه القنوات لتوظيف تقنية الذكاء الاصطناعي بنجاح في عملها.

المنهجية: تم اختيار عينة عشوائية بسيطة مكونة من (95) إعلاميا من العاملين في القنوات الفضائية الاردنية، واعتمدت الدراسة المنهج الوصفي في وصف عينة الدراسة وقياس متغيراتها، كما اعتمدت الدراسة على المنهج التحليلي في الإجابة على أسئلتها واختبار فرضياتها.

النتائج: توصلت الدراسة الى انه بالرغم من وجود إدراك جيد لأهمية استخدام تقنيات الذكاء الاصطناعي في عمل القنوات التلفزيونية من وجهة نظر الإعلاميين العاملين فيها، الا انهم يحملون اتجاهات سلبية نحو توظيف هذه التقنية في عمل هذه القنوات، وتوصلت الدراسة الى وجود فروقات ذات دلالة إحصائية في اتجاهات العاملين في هذه القنوات نحو توظيف تقنيات الذكاء الاصطناعي تعود الى النوع الاجتماعي. كما توصلت الدراسة الى ان هناك نقص في جاهزية لقنوات لتوظيف تقنيات الذكاء الاصطناعي بنجاح في عمل هذه القنوات

الخلاصة: خلصت الدراسة ان القنوات الفضائية الاردنية بحاجة لتحسين بنيتها التحتية وتشريعاتها الداخلية وثقافتها التنظيمية حتى تصبح جاهزة لتوظيف هذه التقنيات بنجاح في عملها. كما ان الدراسة خلصت الى ضرورة التركيز على الشباب من ذوي الخبرات المتوسطة وتدريبهم جيدا وذلك لوجود اتجاهات إيجابية لديهم أفضل من غيرهم نحو توظيف تقنيات الذكاء الاصطناعي في عمل القنوات

الكلمات الدالة: الذكاء الاصطناعي، القنوات الفضائية، إدراك، اتجاهات، جاهزية.

Introduction

Ștefănel (2022) points out that the employment and use of (AI) techniques in media work have brought about remarkable development by integrating data and algorithms and transforming them into news stories. This has been called by various terms, including, for example, "robot journalism" or "automated journalism." or algorithmic journalism, that is, the method in which algorithms are used automatically to create news stories through organized and machine-readable data, and this development constitutes another manifestation of technological progress that will lead to major transformations in the structure of media institutions and their methods of work, as well as It represents a unique case in collecting and writing news, in addition to preparing and writing journalistic analyzes about various events and issues. Karnouskos (2020) argues that this matter could lead to important shifts in the concept of media, its characteristics, mechanisms, and societal effects. Many international news agencies, press, and television institutions have relied on the use of (AI) models in performing their daily work by using algorithms to generate automatic news without human intervention, or relying on automated responses to the public through chatting via robots and verifying fake news, which has created significant changes in the rate of its daily production of media content and meeting the needs of an audience of millions of people who are increasingly connected day by day to digital media, especially on websites, social media networks and digital broadcasting platforms. Abdel Hamid (2020) argues that although international media and social networks have made great strides in shifting towards activating (AI) in performing their digital services, the newly developed (AI) systems are still in their early experimental stages in the Arab region. Many questions have arisen about the extent of its success and ability to gain public trust, its contribution to developing the work system within newsrooms, and its performance of many routine daily tasks through algorithms, so that media workers devote themselves to performing deeper roles related to greater analysis, interpretation, and investigation of news stories. Brake (2020) expects that (AI) journalism will witness major developments, especially in light of the so-called digital revolution, which is expected to provide new media technologies such as (AI), augmented reality, and the Internet of Things, in addition to the employment of robots in several fields, including journalistic work, which will have a major impact on the media industry over the next few years.

Research Problem

The tremendous changes in the contemporary business environment, most notably the rapid developments in the information technology sector and communications systems, have led to a dramatic shift in the tools and means of exercising functions and activities and measuring their performance in various sectors, including the media sector. Digitization and application of (AI) techniques in the media sector has placed Jordanian media institutions, with challenges that have forced them to employ this technology in their work so that they can compete and continue to perform their media mission. As Jones (2012) mentions, the Sociotechnical Theory concludes that if new technologies are introduced into any organization, the organization must prepare its infrastructure, organizational culture, and employees to accept the technology to achieve the purpose for which this technology was introduced into the organization. Employing (AI) techniques in media institutions may create a state of readiness, challenge, and passion among some workers in media institutions, it may also develop a state of fear for interests, confusion, and resistance to change among many media professionals. This depends, in part, on the extent to which employees realize this change's importance and readiness for this shift. From here, questions came to the minds of the researchers regarding the preparedness of Jordanian media institutions to employ these technologies successfully. Other questions have arisen about the attitude of media professionals working in (JSC) towards employing (AI) techniques in the work of these channels.

Research Questions and Hypotheses

Research Questions

1. What are the attitudes of media professionals working in (JSC) towards employing (AI) techniques in these channels?
2. To what extent are media professionals working in (JSC) aware of the importance of employing (AI) techniques in media work?
3. Are (JSC) ready to employ (AI) in their programs?

Research Hypotheses

H01: There are no statistically significant differences at ($\mu = 3.5$, $\alpha = 0.05$) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their gender.

H02: There are no statistically significant differences at ($\mu = 3.5$, $\alpha = 0.05$) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their age.

H03: There are no statistically significant differences at ($\mu = 3.5$, $\alpha = 0.05$) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their experience.

H04: There are no statistically significant differences at ($\mu = 3.5$, $\alpha = 0.05$) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their job type.

Research Objectives

1. Identifying the attitudes of media professionals working in (JSC) towards employing (AI) technologies in media work.

2. Identify the awareness of media professionals working in (JSC) of the importance of employing (AI) techniques for media work.

3. Verifying the readiness of (JSC) to employ (AI) in their programs.

4. Verifying the differences in the attitudes of media professionals working in (JSC) due to demographic differences (gender, age, experience, and nature of the job).

Research Importance

Theoretically, the study will shed light on the concept of (AI); the development, and its employment in media work, the expected effects of employing (AI) in media work, and the challenges facing this employment. *Empirically*, the importance stems from the results that the study will reach, which will be available to planners and analysts in the field of digital media, which can help push officials to make sound decisions, which will improve the media's ability to employ (AI) techniques to communicate with audiences and increase their viewership.

Research Limits

The *objective boundaries* of the study are represented in its variables related to the attitudes of media professionals working in (JSC) towards using (AI) techniques in media work, and the awareness of workers in (JSC) of the importance of employing (AI) techniques in the work of these channels. As for the *human boundaries*, they are represented by media professionals working in (JSC) in Various jobs such as news presenters, editors, directors, photographers, linguistic proofreaders, decoration and design workers, sound effects...etc. media jobs. The *spatial boundaries* are represented by the public and private (JSC) operating in the Hashemite Kingdom of Jordan (Jordanian Satellite Channel, Kingdom Channel, Roya Channel, Amman TV) Finally, the *time boundaries* are the second half of the calendar year 2024.

Research Terminology

Satellite channels: They are stations that broadcast their transmission via satellite so that this transmission exceeds the geographical borders of the transmitting country, as it can be received in countries and regions via special devices and capturing signals coming from the satellite, and its television broadcast can be captured in many areas via receivers and satellite dishes (Murad, 2015). This definition applies to the Jordanian satellite channels (JSC) included in the study: the State TV satellite channel, the Kingdom Channel, the Roya Channel, and Amman TV.

The research defines (JSC) *procedurally* as those Jordanian television channels that broadcast in Arabic, are not encrypted, are owned by governmental or private Arab capital, and are directed to the Arab recipient wherever they are. This definition applies to the (JSC) included in the study: the state Satellite Channel, the Kingdom Channel, and the Jordanian Satellite Channel. Roya, Amman TV channel.

Artificial Intelligence (AI): It is a science that contains computer programs, and has certain characteristics that make them simulate human mental capabilities. This science investigates how to make a computer perform the tasks that humans perform but in a better way (Mira and Kate ,2019).

The researcher defines it *procedurally* as the response of computers on the (JSC) included in the study after being

programmed by specialists intelligently to access the processing patterns of higher mental processes within the human mind.

Theoretical framework

Satellite Channels: The comprehensive dictionary of meanings almaany.com/ar/dict (2024) defines the channel linguistically as the channel through which things pass, and the television channel is defined linguistically as the device that carries images and transmits them to the viewer. Technically, satellite channels, according to Al-Danani (2020) are the carrier of content. The media feeds the viewer directly via a direct or cable dish. Satellite channels are tools for education, disseminating knowledge, and disseminating its benefits through the various television programs they provide. They also serve political, religious, national, and humanitarian goals. Al-Sayed (2009) points out that what is broadcast from satellite channels is captured directly without passing through censorship and is not presented within the state's various television services.

The importance of satellite channels, from the point of view of Murad (2015) stems from their ability to address members of society of all classes and sects. They provide what young and old people of both genders want in any place and at any time, and meet the public political, social, educational, and health needs. The channels are distinguished by their ability to attract viewers, especially teenagers, and achieve a high degree of participation through the education and entertainment materials they provide, in addition to the social impact, they deal with the viewer directly. In this medium, the sender addresses the recipient face to face, storing facts and images, shortening the time between events, and presenting them to the viewers directly or after a while. Satellite channels help in achieving development, education, and rapid delivery of information to remote and isolated areas through direct reception from satellites floating in the orbit of the sky, which have crossed all borders and entered homes without permission, conveying the world in the hands of the user with all that is in it and direct access to it. They also contribute to connecting Arab expatriates in general to their homeland. The importance of satellite channels also stems from the fact that they can carry information materials of great benefit to the viewer, including educational channels that provide free classes in various sciences, and offer cultural channels that display fruitful seminars and discussions, in addition to news transmission sites. Important political, social, cultural, and economic issues, from the heart of the event, and at full speed, the drama that some channels show for the purposeful citizens contributes to the cohesion of the Arab family. This is in addition to purposeful religious heritage satellite channels that focus on Arab heritage and present the basic elements for its preservation. It stands against what regular channels put forward to distort Arab heritage and Islam.

Satellite broadcasting began in Jordan in 1993 launching the Jordanian Satellite Channel, owned by the government Radio and Television Corporation. Nowadays plenty of (JSC) are available to the audience varying in the content they provide. Some of the well-known channels are the ones discussed in this study. In addition to the governmental satellite channel that offers programs include news bulletins, cultural and social programs, and Jordanian drama, in addition to broadcasting national events. There are Roya Channels, launched in 2011 and famous for presenting a wide range of entertainment and social programs. It provides news bulletins, drama series, and various talk shows that discuss issues in Jordanian society. In addition to these channels, we have Al-Mamlaka Channel, which is an independent news channel established in 2018, and focuses primarily on political and economic news locally and globally, it seeks to provide objective coverage of current events. Another satellite channel is Amman TV It is an entertainment channel established in 2017 and offers a variety of programs, including drama series, talk shows, and cultural and social content. It is distinguished by providing content that meets the interests of young people.

Artificial Intelligence (AI): The use of (AI) technologies and their employment in various sectors has led to major transformations in the modern lifestyle and created tremendous opportunities to achieve sustainable development goals by reshaping the means of transportation, health, science, and the financial market, with the innovative solutions and evaluation provided by (AI) applications. including better planning, risk assessment, and faster knowledge exchange, especially during crises. Abdel Hamid (2020) believes that (AI) technologies were not far from developing media work, as they brought about major transformations in the media's ability to influence and address public opinion, and provided smarter, more advanced, and faster tools for conveying the news to the recipient and interacting with the public easily, this development

includes print and audio media, in addition to social networking and new media in general. Abdel Hamid adds that (AI) has contributed to important changes in the profession of journalism and media, as a result of the increasing reliance on smart robots that photograph, edit content, proofread, translate, and deal with huge amounts of data, with greater accuracy and speed than humans, and with a huge level of production that exceeds the levels of traditional content production in a very short time (in few seconds). According to Wash Post PR Blog (2016), (AI) techniques were used in their contemporary form for the first time in the newsroom by The New York Times in a project called (Editor), which involved applying tags to traditionally written news stories. The Washington Post also relied early on a more sophisticated model of (AI), using Heliograph software to cover the 2016 Olympic Games in Rio de Janeiro; The program collected data related to the schedule of events, results, and medal shares.

Despite the development brought about by the use of (AI) technology in journalistic and media work, Wash Post PR Blog (2016) believes that there are general challenges facing the use of (AI) technologies in the field of journalism, the most prominent of which is the availability of data, as (AI) technologies can be best used when there is enough data to capture patterns, learn from them, and improve the system accordingly. Whereas humans can pair experiences and elicit optimal responses from a small number of similar experiences, (AI) requires large amounts of data to know what the correct response should be, without data, the ability of (AI) is limited. There is also a difficulty facing the use of (AI) when this data is unorganized and unstructured. One of the challenges facing the use of (AI) technology is the need for more self-awareness because these technologies cannot explain their outputs: What did it write? What did it do? or how did it get there? This is the task of (AI) designers who must be accountable to the public and service recipients. Another challenge facing the employment and use of (AI) technologies in media work is the issue of redefining copyright and fair use. Modern technologies have often challenged copyright laws in the creative industries, where (AI) technologies may represent a new conflict because they involve (AI) learning from "expressive" works created by humans – a dataset of articles, paintings, or music, this would potentially test the legal interpretation of "fair use", where copyrighted material is used to produce journalistic content without permission or payment for use.

The future of Artificial Intelligence Journalism: Keohane (2017) shows that despite the challenges facing the use of (AI) technologies in journalism, journalists and editors are now finding themselves victims of layoffs from digital publishers and traditional newspaper chains alike. For example, nearly a third of the content published by Bloomberg News uses an automated technology or so-called (AI) technology, and the system (called Cyborg) used by Bloomberg News helps reporters publish thousands of articles about corporate earnings reports every three months. Graefe (2017) referred to a study by the Google News Initiative in cooperation with the International Journalism Research Center at the London School of Economics and Political Science on experts from newsroom leaders from Europe, the United States, and Asia-Pacific, Pointed out there is a growing trend to use these technologies in the field of Newspaper publishing, with newsrooms beginning to explore the potential of these new technologies, though only a few have implemented (AI) on a large scale, for most journalistic institutions, it is still in the experimental adoption stage. While some journalists are ambivalent or skeptical, many are interested in how (AI) technologies will impact workflows and processes, how newsrooms will navigate another new phase, how new technological challenges or opportunities might affect the mission of journalism, as well as the shape and ethics of the news industry in the age of (AI).

Previous studies

The study by ***Abdel Hamid (2020)*** aimed to monitor the use of (AI) applications in the production of media content, and the perception of a sample of the Egyptian public about the credibility of the content produced via (AI) compared to the content produced by human editors. A sample of 400 economic news followers, were exposed to two models of news coverage of stock price trading on the Egyptian Stock Exchange, one by a robot on the Cairo 24 website, and the other by a human journalist on the Youm7 website. The results indicated that the most prominent areas that have succeeded in employing (AI) applications in media work are automated chatting via websites and social media networks, with an average score of 4.03, followed by dealing with big data, with an average score of 4.01, then the feature of recognizing faces of characters on social media networks, with an average score of 3.99. Machine translation came in fourth place, with a mean

of 3.81. The results showed that the order of the elements of the credibility of the message produced through (AI) tools, which was presented on the Cairo 24 website, was as follows: "Accuracy is in first place with a mean of 3.83, followed in the category of objectivity, with a mean of 3.65, then "separating fact from opinion" with an average My account 3.64, and in the fourth place, justice and fairness for different points of view, with an arithmetic mean of 3.46, and in last place is the quality of wording of the news, with an arithmetic mean of 3.43.

The study by ***Brake (2020)*** aimed to monitor the trends of communicators toward the use of (AI) techniques in press institutions in Egypt and Saudi Arabia, by identifying the factors affecting the acceptance of communicators to use these technologies and their rates of use, leading to the attitudes of communicators towards the future of the journalism industry in light of the use of these technologies, and what are their proposals to achieve optimal use in the field of journalistic work. The study was conducted on a sample of 193 individuals, during the period from June to September 2019, the study found that the level of use of these technologies was low at 34.2%, followed by non-use of (AI) technologies at 33.6%, then at moderate level at 26.6%, and finally at a high level at 5.6%. The study also found that there are no statistically significant differences between the tendency of communicators towards using(AI) techniques and the press institutions in which they work depending on the country to which the institution belongs, as well as the presence of a statistically significant direct relationship between some variables related to individual differences and UTAUT elements, as well as the presence of a statistically significant relationship Between UTAUT elements and each other.

The study by ***Miroshnichenko (2020)*** aimed to answer the question: Will robots replace journalists? Based on a review of the current state of automated journalism, and an analysis of common arguments about "robots not being able to" overcome humans in creative practices, the study indicates that readers sometimes cannot distinguish between news written by robots or humans and that the use of robots has shown great success. In dealing with big data, analyzing it, and writing economic and sports news, the study expects that newsrooms in media institutions will rely on robots during the next decade to produce the largest amount of content as quickly as possible per the economics of those institutions' work to increase the number of visits and views to their websites.

The study by ***Lewis & Guzman (2020)*** linked (AI) and the public's interactions with it by developing models of communication theory and emerging technology to find a compatible formula for the relationship between humans and machines through three main aspects of (AI) techniques, including (1) the functional dimensions that the public understands from these devices and applications. (2) The dynamics that connect the public through these technologies, and the limits of the relationship between the public and (AI) technology, whether between the individual himself or between the individual and others. (3) Metaphysical implications that blur the boundaries between human, machine, and communication.

The study by ***Moravec et al (2020)*** aimed to characterize the application of algorithms at the Czech News Agency CTK and convert large data files into news texts based on the production of reports on trading results on the Prague Stock Exchange using (AI) without human intervention for the Czech News Agency during the year 2019, to compare the production rates of the algorithms, and the quality of journalistic content produced by humans. The results indicated that the financial situation in Czech newsrooms reveals the inevitability of relying on (AI) in Czech journalism to continue its mission. Despite all of this, journalists expect that their roles will continue their mission, and they will work in conjunction with (AI) techniques to produce reports in a better way.

The study by ***Sylvia & Olmsted (2019)*** indicates that companies operating in the media sector increasingly rely on (AI) tools in the media industry to discover audience content, engage them through augmented reality, improve messages, manage and create content, audience participation statistics, and operational automation. But they face major challenges in balancing effectiveness and efficiency, the human element, and (AI).

The study by ***Hassoun (2019)*** aimed to describe the current state of technology and its role in renewing and modernizing journalism, by focusing on the role of (AI) in changing journalistic practice, identifying the potential effects on the future of journalists as a result of employing (AI) applications, and deducing ethical and professional challenges that may disturb journalistic practices. The journalism profession is a result of the emergence of these modern technologies. The study concluded that (AI) technologies represent a major development in the journalistic work environment in the digital age,

especially in light of their ability to overcome contemporary journalism's basic problems, combat fake news, edit news according to editorial policy, and customize content. The study also indicated that the use of (AI) applications in journalism raises professional and ethical issues, especially; Undermining creativity, lack of monitoring, bias, transparency, fairness, use of data, and data quality. It also concluded that (AI) techniques will improve the work of journalists instead of replacing them, and therefore, (AI) does not threaten communicators in journalistic institutions.

The study by ***Monti (2019)*** aimed to analyze the ethical and judicial problems of automated journalism based on (AI) techniques, especially regarding freedom of information, by applying the European concept of freedom of information and media regulation, with a special focus on the Italian legal system. The study finds that, about the scope of European legal systems, the Italian system has developed the idea of freedom of information more broadly, and innovations have been developed that can be implemented in understanding how issues related to automated journalism are formulated from a legal point of view.

The study by ***Tatalovic (2018)*** sought to determine the extent of reliance on (AI) techniques in the global press by summarizing scientific studies and research and placing them in the form of press reports by using automation techniques, as happened in some newspapers about sports, political, and economic topics, as the study found Scientific journalism has not yet benefited from (AI) techniques as happened in sports, political, and economic journalism, and editors working in the field of scientific journalism are still unaware of the importance of using (AI) techniques in preparing reports for scientific journalism.

The study by ***Shields (2018)*** applied to 1,000 journalists, indicates that 80% of media practitioners believe that (AI) will have significant impacts on the media industry, while 62% believe that (AI) technologies will improve decision-making, and 47% believe that they will improve productivity. However, a third of respondents to the study also felt not completely confident in their understanding of (AI) applications and how they can be applied in their work, and saw human control as less difficult, (47%) of respondents saw (AI) applications as trustworthy. (45%) felt that (AI) would hurt their work or job capabilities.

The study by ***Gaily (2018)*** tried to answer whether the use of (AI) applications in the field of sports journalism and the introduction of automatically produced content is just another evolutionary stage in the field of sports journalism, or will lead to a revolution that can be defined as a comprehensive change, the study concluded that although the use of (AI) applications would contribute to automating sports content and formulating future predictions, it is still unable to replicate collective or public deduction, creativity, or human judgment, and given the limits of with the current dexterity of robots needed to implement (AI) driven mass automation, occupations requiring manual dexterity will likely remain in demand in the near term.

Methods and Procedures

Methodology: The research adopted descriptive statistics to identify the sample characteristics and measure variables using frequencies, arithmetic mean, standard deviation, and a T-test. The study also relied on inferential statistics to test the research hypotheses using one-way analysis of variance (ANOVA) to measure differences in the level of attitudes of media professionals working in the (JSC) towards employing (AI) techniques in media work due to mediating factors (demographic factors). Statistical Package for the Social Sciences (SPSS) program was used to perform these statistical tests.

Population and Sample: The research population consists of all media professionals working in the (JSC) that broadcast their programs on a regular daily basis, namely: The Jordanian Satellite Channel (owned by Jordanian Television), Al-Mamlaka Channel, Roya Channel, and Amman TV Channel. Population volume as obtained by communicating with the human resources departments of these channels equals (270) media professionals, and according to the table for determining the sample size from a known population Sekaran (2009) the research selected a simple random sample consisted of (95) person of media professionals working in those channels. Accordingly, the study tool (the questionnaire) was distributed to the sample members, after conducting descriptive statistics, as shown in Table (1), it was found that (73.7%) of the respondents were male and that the highest percentage were young people (26-30 years old), at a

rate of (27.4%), the study sample showed that (80.8%) were young people under the age of (40) years. This confirms that the percentage of workers who have less than (10) years of experience is (61%) and that (34.7%) of these are those whose experience ranges between (6) years and (10) years. The characteristics of the study sample, also showed that the largest percentage of respondents to the study questions were television reporters, at 25.3%.

Table No. (1): Description of the demographic variables

Variable	frequency	%
Gender		
Male	70	73.7
Female	25	26.3
Total	95	100
Age		
20 - 25 years	9	9.5
26 - 30 years	26	27.4
31 - 35 years	21	22.1
36 - 40 years	22	22.1
More than 40 years	18	18.9
Total	95	100
Experience		
5 years or less	25	26.3
6 - 10 years	33	34.7
11 - 15 years	12	12.6
16 - 20 years	12	15.8
More than 20 years	10	10.5
Total	95	100
Job Type		
Announcer	11	11.6
Reporter	24	25.3
Director	8	8.4
Developer	12	9.6
Photographer	13	13.7
Editor	18	18.9
Lightning	1	1.1
Decoration	1	1.1
Others	7	7.4
Total	95	100

Research Tool: The research tool consists of a questionnaire to collect the data necessary for statistical analysis. The questionnaire consisted of three parts: the first was the cover letter and the second was devoted to measuring the demographic characteristics of the study sample. The third part consisted of (30) questions prepared to measure study variables using a five-point Likert scale. To increase the ***Validity*** of the research tool, it was presented to a group of arbitrators specialized in media, including academics and professionals, and modifications were made in light of the arbitrators' observations. The ***Reliability*** of the tool was also measured using the Cronbach Alpha coefficient. The results, as illustrated in Table (2), showed that reliability for all variables is above the limit required to be exceeded, which is (0.60).

Table No. (2): Reliability of research tool (Cronbach's alpha coefficient)

Variable	Questions	Cronbach's alpha
Awareness of media professionals to the importance of employing (AI) techniques in media work	Q1 - Q10	0.733
Attitudes of media professionals towards employing (AI) techniques in media work	Q11 - Q20	0.917
Readiness of (JSC) for employing (AI) techniques	Q21 - Q30	0.813

Statistical Analysis

1. Answering Research questions

What are the attitudes of media professionals working in (JSC) towards employing (AI) techniques in these channels?

The statistical results are listed in Table No. (3) and Table No. (4) reveals a presence of negative attitudes for media professionals working in (JSC) towards employing (AI) techniques in these channels. The arithmetic mean (μ=3.1453), which is less than the test value (μ=3.5), as well as the value (T-calculated= - 2.648) is less than the value of (T-tabulated=2.05). This was confirmed by the value of the actual significance level (α=0.11), which is higher than the test significance level (α=0.05).

What is the level of awareness of media professionals working in (JSC)for the importance of employing (AI) techniques in media work?

The statistical results are listed in Table No. (3) and Table No. (4) reveals a good awareness among media professionals working in (JSC) of the importance of employing (AI) techniques in these channels. The arithmetic mean (μ=4.005), which is higher than the test value (μ=3.5), likewise the value (T-calculated= 9.729) which is higher than the value of (T-tabulated=2.05) and confirmed by the value of the actual significance level (α=0.00), which is less than the test significance level (α=0.05).

Are (JSC) ready to employ (AI) techniques in their work?

The statistical results are listed in Table No. (3) and Table No. (4) reveals a clear lack of preparedness of (JSC) to employ (AI) techniques in their work. The arithmetic mean (μ=4.2326), which is higher than the test value (μ=3.5), likewise the value (T-calculated= 14.048) which is higher than the value of (T- tabulated=2.05) and confirmed by the value of the actual significance level (α=0.00), which is less than the test significance level (α=0.05).

Table No. (3): Measurement of research variable

Variable	Responses	Arithmetic Mean	Std. Deviation	Std. Error
Attitudes	95	3.1453	0.8842	0.0907
Awareness	95	4.0053	0.5062	0.0519
Readiness	95	4.2326	0.5083	0.0521

Table (4): T-test for research variables

variable	Responses	T-value	df	Sig (α)
Attitudes	95	2.648 -	94	0.110
Awareness	95	9.729	94	0.000
Readiness	95	14.048	94	0.000

T-test was conducted at μ =3.5, and α =0.05, T- tabulated=2.05

2. Testing Research Hypotheses

H01: *There are no statistically significant differences at (μ = 3.5, α = 0.05) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their gender.*

The statistical results, as illustrated in Table (5), reveal that the value of (F- calculated = 0.74) for the gender variable, which is much lower than the value of (F- tabulated = 2.10), and the value of the actual significance level was (α= 0.392) which is higher than the test significance level value (α=0.05), therefore we reject the null hypothesis and accept the alternative one which says that there are statistically significant differences in the attitudes of media professionals working in (JSC) towards employing (AI) techniques due to the gender variable,

H02*: There are no statistically significant differences at (μ = 3.5, α = 0.05) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their age.*

The statistical results, as listed in Table (5), revealed that the value of (F- calculated = 2.54) for the age variable, which is slightly higher than the value of (F- tabulated = 2.10), and the value of the actual significance level was (α= 0.045) for the age variable, which is slightly less than the test significance level value is (α=0.05). Therefore, we accept the null hypothesis which states that there are no statistically significant differences in the attitudes of media professionals working in (JSC)towards employing (AI) techniques due to the age variable.

H03: *There are no statistically significant differences at (μ = 3.5, α = 0.05) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their experience.*

The statistical results, as illustrated in Table (5), revealed that the value of (F- calculated = 4.259) for the variable number of years of experience, which is higher than the value of (F- tabulated = 2.10), and the value of the actual significance level was (α=0.03) for the variable of experience, which is less than the test significance level value is (α=0.05). Therefore, we accept the null hypothesis which states that there are no statistically significant differences in the attitudes of media professionals working in (JSC) towards employing (AI) techniques due to the variable number of years of experience.

H04: *There are no statistically significant differences at (μ = 3.5, α = 0.05) in the attitudes of media professionals working in (JSC) towards employing (AI) techniques in media work due to their job type.*

The statistical results, as listed in Table (5), revealed that the value of (F- calculated = 2.703) for the variable job type, which is higher than the value of (F- tabulated = 2.10), and the value of the actual significance level was (α=0.011) for the variable of job type, which is less than the test significance level value is (α=0.05). Therefore, we accept the null hypothesis which states that there are no statistically significant differences in the attitudes of media professionals working in (JSC) towards employing (AI) techniques due to the variable job type.

Table (5): One-way (ANOVA) to test (H01, H02, H03, H04)

Demographic Variable		Sum squares	df	Mean squares	F	Sig (α)
Gender	Between Groups	0.58	1	0.58	0.74	0.392
	Within Groups	72.915	93	0.784		
	Total	73.495	94	-		
Age	Between Groups	7.456	4	1.864	2.54	0.045
	Within Groups	66.040	90	0.784		
	Total	73.495	94	-		
Experience	Between Groups	11.696	4	2.924	4.259	0.03
	Within Groups	61.799	90	0.687		
	Total	73.495	94	-		

Demographic Variable		Sum squares	df	Mean squares	F	Sig (α)
Job Type	Between Groups	14.769	8	1.846	2.703	0.011
	Within Groups	58.727	86	0.683		
	Total	73.495	94	-		

ANOVA- test was conducted at μ =3.5, and α =0.05, F- tabulated=2.1

Results and discussion

1. There are negative attitudes among media professionals working in (JSC) towards employing (AI) techniques in the work of these channels (μ=3.1453, T-calculated= -2.648 and α =0.11), despite their awareness of the expanding role of technology, including (AI) techniques (as will appear in measuring the awareness). However, they do not prefer using digital technologies in media work because they feel (as they answered in the questionnaire) that it will reduce their creativity, threaten their career future, not respect individual privacy, and increase media crimes, in addition they don't like to live in virtual reality.

This result was consistent with the study by Brick (2020), which addressed the attitudes of journalists in Egypt and Saudi Arabia towards the use of (AI) techniques, as it concluded that the largest percentage of journalists (34%) preferred to use it on small range, while the percentage of those who wanted to use it widely, not exceeding (5.6%) of the respondents. The study by Grafe (2017) conducted by the Google News Initiative on those working in press publishing concluded that although there is an increasing attitude toward using (AI) techniques in press publishing, some journalists are contradictory or they are skeptical about the ability of (AI) to manage newsrooms, they also wonder what the ethics of news production look like in the age of (AI). The result reached by Moravec (2020) differed from our study, which concluded that journalists who were interviewed expect that their roles will remain important and that they will work in conjunction with (AI) techniques to produce the report a better way.

2. There is a high level of awareness among media professionals working in (JSC) about employing (AI) techniques in the work of these channels (μ=4.0053 T-calculated=9.729, α =0.000), and that the future will increase the role of technology and software in digitizing the media and that this will lead to improving the quality of work, it also leads to an increase in the level of transparency in reporting the news. However, half of the media professionals surveyed do not believe that the virtual broadcaster (robot) will be able to replace the human broadcaster. They expect that employing (AI) techniques will contribute to falsifying the recipient's awareness, increase media piracy, and push legislators to adopt new legislation to regulate media work.

The results reached by Sheild (2018) conducted (1000) journalists agreed that (80%) of practitioners are aware of the use of (AI) and believe that (AI) will have a major role in the media industry, and (62%) believe that applications of (AI) will improve decision-making. The study by Miroshnichenko (2020), which aimed to answer an important question: Will robots replace journalists, also showed that the respondents believe that robots have revealed success in dealing with huge data and that newsrooms will depend on it during the next decade. The study by Abdel Hamid (2020) that he carried out to monitor the Egyptian public's awareness of the content of (AI), showed that the sample averaged (4.03 out of 5) that it succeeded, especially on social sites and communication networks

3. There is a lack of readiness for (JSC) to employ (AI) techniques in their work, (μ = 4.2326, T-calculated =14.048, α = 0.000), and (JSC) needs to develop their infrastructure, pump greater financial resources, and increase the speed of Internet networks to be able to employ (AI) techniques successfully perform their work, they also need to employ new expertise and hold intensive and advanced training courses for their workers. Television channels also need to change their media culture to suit digital changes, amend their internal legislation regulating their media work, and introduce the Arabic language into artificial intelligence software.

4. There are statistically significant differences in the attitudes of workers in (JSC) towards employing (AI) techniques in their work due to gender (F-calculated = 0.74, α = 0.392). But there are no statistically significant differences in the attitudes of workers in (JSC) towards employing (AI) techniques in their work due to the age variable (F- calculated = 2.54,

α = 0.045), or due to the number of years of experience (F - tabulated = 4.259, α = 0.03,), or due to the job type (F- calculated = 2.703, α = 0.011).

However, the results of the (H012) test appeared close to the test's cut-off point in terms of both the (F- value) and the significance level (α). We believe that the reason is that 80.8% of the sample members are young people under forty years of age, and this reduces the variance of age of respondents and prevents the occurrence of differences of attitude among (JSC) media professionals towards employing (AI) techniques due to age.

Conclusion

From the above results, the study concluded the following:

1. Neither the media professionals have a positive attitude towards employing (AI) in their jobs, nor (JSC) are ready enough to employ (AI) in their programs.

2. On the other hand, there are high level of awareness among media professionals working in (JSC) about employing (AI) techniques in the work of these channels and its role in improving the quality of the media work.

3. Although half of the media professionals surveyed do not believe that the (robot) will be able to replace the humans, they expect that it will contribute to falsifying the recipient's awareness, increase media piracy, and push legislators to adopt new legislation to regulate media work.

4. The study also concluded that there are differences in the attitudes of workers in (JSC) towards employing (AI) techniques in their work due to gender but there are no differences in these attitudes due to the age variable.

Recommendations

From the above results and conclusions, the study recommends that (JSC) should seek to improve its infrastructure of computers, software, digital technologies, and the Internet to facilitate and successfully employ (AI) techniques in their work. (JSC) must pump more financial resources and develop legislation to help improve the environment that supports the use of (AI) techniques in its work. On the other hand, (JSC) is required to Spread and develop a culture of dealing with this technology as the language of the future, and for workers to feel that this technology came to work, improve its quality, and does not pose a threat to any employee if he uses it and deals with it well. For (JSC) to make this shift, they also need to send workers to specialized training courses in employing (AI) techniques, in administrative work and receive expertise from outside the channels to hold training courses.

REFERENCES

Al- Attiya, A. (2005). *The Effect of Satellite TV Programs on The Acquisition of Delinquent Behavior in Children*. Master's thesis, Saudi Arabia, Naif Arab University for Security Sciences.

Abad Al-Hamid, A. (2020). Employing Artificial Intelligence Applications in Producing Media Content and Its Relationship to Its Credibility Among the Egyptian Public. *Journal of Media Research, Al-Azhar University*, 55(5), 2798-2860.

Abdul Rahman, G. (2017). Dimensions of Professional and Ethical Responsibility for Talk Shows on Government and Private Satellite Channels in Addressing Economic Crises, Iraq. *Scientific Journal of Radio and Television Research, p. 460.* University of Baghdad.

Al-Danani, A. (2006). *Arab satellite broadcasting and the challenges of globalization* (1st ed., Part 1). Modern University Office.

Al-Hazmi, M. W. (2022). The future of educational media in light of digital transformation. *Journal of Specific Education Research*, 80.

Alli, W., & Hassoun, M. (2019). Artificial Intelligence and Automated Journalism: Contemporary Challenges and New Opportunities. *International Journal of Media, Journalism and Mass Communications (IJMCMC),* 5(1), 4049.

Al-Sayed, M. (2009). *The impact of satellite channels on family values*. Egypt, Al-Arabi Publishing and Distribution.

Anshari, M., Hamdan, M., Ahmad, N., Ali, E., & Haidi, H. (2022). COVID-19, Artificial Intelligence, Ethical Challenges and Policy Implications. *AI & SOCIETY*. doi: https://doi.org/10.1007/s00146-022-01471-6

Brake, A. (2020). Attitudes of Communicators Towards Artificial Intelligence Techniques in Egyptian and Saudi Journalistic Institutions. *Journal of Media Research, Al-Azhar University*, 55(5), 2798-2860.

Chan, O., & Sylvia M. (2019). A Review of Artificial Intelligence Adoptions in the Media Industry. *International Journal on Media Management*, 21(3-4), 193- 215.

Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2022). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human Resource Management Review*, *33*(1), 100899.

Copeland, B. (2024). *Artificial intelligence Britannica*. The Editors of *Cyclopedia Britannica*, February 8, 2024.

Craiut, M. V., & Iancu, I. R. (2022). Is technology gender neutral? A systematic literature review on gender stereotypes attached to artificial intelligence. *Human Technology*, *18*(3), 297–315. https://doi.org/10.14254/1795-6889.2022.18-3.6

Dash, G., Sharma, C., & Sharma, S. (2023). Sustainable marketing and the role of social media: An experimental study using natural language processing (NLP). *Sustainability*, *15*(6), 5443. https://doi.org/10.3390/su15065443

Galily, Y. (2018). Artificial intelligence and sports journalism: Is it a sweeping change? *Technology in Society*, 1–5. Available online: https://www.researchgate.net/publication

Glahn, H. (1970). Computer-produced worded forecasts. *Bulletin of the American Meteorological Society*, *51*(12), 1126–1132.

Graefe, A. (2017). *Guide to automated journalism*. *Columbia University Academic Commons*. Available online: https://towcenter.columbia.edu/news/guide-automated-journalism

Guzman, A., & Seth, C. (2020). Artificial intelligence and communication: A human-machine communication research agenda. *New Media & Society*, *22*(1), 70–86.

Hall, S. (2018). Can you tell if this was written by a robot? 7 challenges for AI in journalism. *World Economic Forum*. Available online: https://www.weforum.org/agenda/2018/01/can-you-tell-if-this-article-was-written-by-a-robot-7-challenges-for-ai-in-journalism/

4o

Hsu, J. (2023). *Deepfake Videos Create False Memories – But So Do Fake Articles.* RetrievedFromMetroid's:https://www.newscientist.com/article/2383218-deepfake-videos-createfalse-memories-but-so-do-fake-articles/11/02/2024

Jackson, F. (2023). Meet China's AI news anchor: A virtual young woman claims to have learned the skills of 'thousands of presenters – but can only answer pre-set questions with propaganda-driven responses.

Jones, G. (2012). *Organization theory: Design and change* (7th ed.). Pearson, Prentice Hall.

Jordanian Satellite Stations - Media Commission. (2023). Archived from the original on 3/21/2021, accessed on 11/8/2024.

Joyce, K., Smith-Doerr, L., Alegria, S., Bell, S., Cruz, T., Hoffman, S. G., Noble, S. U., & Shestakofsky, B. (2021). Toward a sociology of artificial intelligence: A call for research on inequalities and structural change. *Socius: Sociological Research for a Dynamic World*, *7*, 237802312199958. https://doi.org/10.1177/2378023121999581

Kang, H., & Lou, C. (2022). AI agency vs. human agency: Understanding human-AI interactions on TikTok and their implications for user engagement. *Journal of Computer-Mediated Communication*, *27*(5). https://doi.org/10.1093/jcmc/zmac014

Karnouskos, S. (2020). Artificial intelligence in digital media: The era of deepfakes. *IEEE Transactions on Technology and Society*, *1*(3), 138–147.

Keohane, J. (2017). What news-writing bots mean for the future of journalism. *Wired*. Available online: https://www.wired.com/2017/02/robots-wrote-this-story/

Konstantin, D. (2016). Mapping the field of algorithmic journalism. *Digital Journalism*, *4*(6), 703. https://doi.org/10.1080/21670811.2015.1096748

4o

Laato, S., Tiainen, M., Najmul Islam, A. K. M., & Mäntymäki, M. (2022). *How to Explain AI Systems to End Users: A Systematic*

Literature Review and Research Agenda. Internet Research, 32(7), 1–31. dohttps://doi.org/10.1108/intr-08-2021-0600.

Language models in scholarly publishing. (2023). *Journal of the Association for Information Science and Technology, 74*(5). https://doi.org/10.1002/asi.24750

Leppänen, L., Tuulonen, H., & Sirén-Heikel, S. (2020). Automated journalism as a source of and a diagnostic device for bias in reporting. *Media and Communication, 8*(3), 39–49. Available online: https://www.researchandmarkets.com/reports/1056044/artificial_intelligence_ai_global_

Lund, B. D., Wang, T., Mannuru, N. R., Nie, B., Shimray, S., & Wang, Z. (2023). ChatGPT and a new academic reality: Artificial intelligence-written research papers and the ethics of large language models in scholarly publishing. *Journal of the Association for Information Science and Technology, 74*(5). https://doi.org/10.1002/asi.24750

Mira, A., & Kate, T. (2019). Applications of artificial intelligence in education from the point of view of university teaching. *Proceedings of the First International Scientific Conference for Human Studies: Intelligence and Mental Abilities, Center for Psychological Research.*

Miroshnichenko, A. (2020). AI to bypass creativity. Will robots replace journalists? (The answer is 'Yes'). *Information (Switzerland), 9*(7). https://doi.org/10.3390/info9070183

Monti, M. (2019). Automated journalism and freedom of information: Ethical and juridical problems related to AI in the press field. *Opinion Juris in Comparation, 1*(2). Available online: https://papers.ssrn.com/so13-papers.cfm?abstract=3318460

Moravec, V., Veronika, M., Jakub, S., & Ekštein, K. (2020). *Communication Today; Trnava, 11*(1), 36-53.

Msughter, A. E., Perpetua, A. O., & Itiafa, A. L. (2023). Artificial intelligence and the media: Revisiting digital dichotomy theory. In R. Raja, & H. Raja (Eds.), *Information Systems Management.* https://doi.org/10.5772/intechopen.108042

Murad, D. (2015). *Women's Use of Satellite Media Channels and The Gratifications They Achieve*. Master's thesis, Algeria, Shahid Hamma Lakhdar University.

Nel, E., Marais, L., & Mqotyana, Z. (2023). The regional implications of just transition in the world's most coal-dependent economy: The case of Mpumalanga, South Africa. *Frontiers in Sustainable Cities, 4.* https://doi.org/10.3389/frsc.2022.1059312

Sekaran, U. (2009). *Research methods for business: A skill-building approach* (5th ed.). John Wiley & Sons Inc.

Shields, R. (2018, July 6). What does the media industry think about the impact of AI? *The Drum.* Retrieved from https://www.thedrum.com/news/2018/07/06/what-themediaindustry-really-thinks-about-the-impact-ai (Accessed on September 22, 2020).

Ştefănel, A. (2022). An ethical analysis of media's usage of artificial intelligence: A case study on Associated Press. *Studia Universitatis Babes-Bolyai-Ephemerides*, *67*(1), 77–86.

Tatalovic, M. (2018). AI writing bots are about to revolutionize science journalism: We must shape how this is done. *Journal of Science Communication, 17*(1), 1–7. Available online: https://jcom.sissa.it/archive/17/01/JCOM_1701_2018E

Washington Post PR Blog. (2016). The Washington Post experiments with automated storytelling to help power 2016 Rio Olympics coverage. Available online: https://www.washingtonpost.com/pr/wp/2016/08/05/the-washington-post-experiments-with-automated-storytelling-to-help-power-2016-rio-olympics-coverage/