

Motivations of Media Students to Adopt AI in Practical Courses

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Abstract

The article aimed to reveal the motivations of media students to adopt artificial intelligence applications in practical courses, and a case study was conducted by students in the College of Media at Middle East University in Jordan. This study belongs to the descriptive, interpretive studies using the survey method. The results showed that most artificial intelligence applications that media students depend on the applications that are used in video production and image and sound montage operations and that the general arithmetic mean for the reasons for the reliance of media students on artificial intelligence applications in their practical courses was high (3.67), and that there are statistically significant differences due to specialization, and the journalism and media specialization was the highest among the rest of the specializations. There are statistically significant differences due to students with excellent averages in behavioral and cognitive motivations. The study recommends starting to introduce artificial intelligence applications into scientific courses in media colleges so that they can be used to highlight the thinking and creativity skills of students in producing media content and put forth ethical rules that govern dealing with artificial intelligence applications as a course of study that students deal with within the rules. Moreover, laws keep them away from ethical transgressions, whether producing film content or writing and editing texts.

Keywords: media students, artificial intelligence AI, motivations

1. Introduction

Artificial intelligence applications represent a solid challenge for many aspects of individuals' practical and intellectual lives, whether in the applied sciences or the humanities. This talk was imposed by the inevitability of technological development of means of communication and is accompanied by the inevitability of software engineering development, especially in cloud mathematics, and the fact that these applications are open source and easy to deal with. At its beginnings, this led to large numbers of individuals experimenting with it, and then the benefits of these experiments became apparent. Many questions began to be asked to deal with the role of these applications in influencing all aspects of life, especially in the scientific and educational aspects. Regarding the role of the individual in front of this advanced technology, The media side had a share in raising such questions, whether at the level of academic staff or students and the degree to which the applied performance of both parties was affected in the educational and learning process, primarily since the practical side is based on the creation of media content, which is governed by a set of technical and ethical rules linked to the culture of the societies that create it. Hence, this study identified the motives behind media students' reliance on artificial intelligence applications in their practical academic courses.

AI has made it possible to create personalized learning experiences to meet the needs of each unique college student, whether that means providing guidance or personalized educational content. Students who use AI applications are more motivated because they believe their education is tailored to their needs and skill levels. Guiding college students with AI applications can reduce barriers and learning difficulties. Students' ability to overcome obstacles and develop self-confidence are key factors in their motivation to learn and grow. When AI technologies are used in the classroom, students may face unexpected consequences in terms of their motivation. When creating AI-powered learning experiences, educators must consider these factors to ensure that students are motivated and the experience is enhanced (Awawdy, 2024).

1.1 Problem Statement

Over the past several years, technological advances in AI have led to several significant advances in its widespread adoption and use. These AI breakthroughs have introduced the world to powerful content generation models that allow users to instantly create everything from digital media products to writing samples with simple text queries. As a result,

interest in new AI tools has increased dramatically over the past several months(Trust et al., 2023).

The emergence of artificial intelligence applications has raised many questions in academic media work. These are problems raised regarding the reliance of academic staff and students on them. At the same time, side issues have emerged that address ethical aspects and the extent to which human intellectual effort is achieved in the educational process and students' production of media content. Which is required of them in practical courses in all academic programs (radio and television, journalism, and digital media); from here came the problem of the study in identifying the degree of dependence of students in media colleges on applications of artificial intelligence in practical academic courses and taking the students at the faculty of media at the University of the East Middle as a case study.

According to Linh et al. (2021), AI greatly improves general and higher education by reducing administrative procedures and also alleviates technical tasks for teachers by automating tasks such as grading papers and attendance and customizing curricula. AI also creates excitement for learners through real-time informational feedback, increasing interaction time and providing immediate support. More specifically, when studying ChatGPT in writing classes, ChatGPT provides students with diverse learning materials, which helps them learn and develop ideas for writing assignments. It also provides standardized examples, which enables students to analyze and produce well-organized pieces.

Accordingly, I will try to answer the following questions: What are the fields of using artificial intelligence by media students? What cognitive motivations do media college students achieve from relying on artificial intelligence applications in their practical courses? What behavioral motivations do media college students gain from relying on artificial intelligence applications in their practical courses? What are the statistically significant differences in the motivations of students at media colleges to rely on artificial intelligence applications in their practical courses due to demographic variables (academic level, specialization, and cumulative GPA)?

1.2 The Importance

The article's importance comes from addressing the motives of dependence, which are rarely addressed in studies based on the theory of dependence. Moreover, it presents results that may be reconsidered by researchers focusing on the effects of adopting AI applications. On the other hand, the study explores the impacts of AI on courses that require students to produce media content using multiple artistic templates and techniques, as well as their use of techniques for creating images and sound.

1.3 The Aims

The article seeks to achieve a primary aim: to know why media students rely on artificial intelligence applications in practical courses. Furthermore, it will reveal fields of using AI applications by media students and know the cognitive and behavioral motivations that enable them to adopt AI applications in their practical course.

1.4 Terminology

*Applications of artificial intelligence is defined as a term based on the definition of the American Artificial Intelligence Association (AAAS, 2024): "Intelligence demonstrated by machines that mimic human mental abilities, such as learning, thinking, and problem-solving."

*Practical courses are the academic subjects included in the student's study plan, described academically with the word "practical," and in which the media student learns the subject through computers and technical software related to producing media content in all its forms.

2. Literature Review

The author reviewed many studies that dealt with the relationship between artificial intelligence and the educational process at different levels of education and in multiple academic specializations. Some studies dealt with the use of artificial intelligence applications in producing media content by media professionals working in and by media institutions, such as (Heesen et al. 2023; Karimi & Borhani, 2022; Noain-Sánchez, 2022 Yasin et al., 2021). However, the studies that dealt with students of the Faculty of Media were found to be very limited.

Many studies focused on the educational aspect of students. Makanai and Haddad (2024) revealed the media students' attitudes regarding using artificial intelligence applications in learning in Jordanian universities. Makanai and Haddad used the unified theory of acceptance of the use of technology and a random sample of 169 students from Yarmouk University, Arab Open University, and the University of Petra. The results showed a positive trend among university students towards artificial intelligence applications. It improves the efficiency and speed of editing processes and the quality of content and enhances the educational experience. They employed it in media writing, producing and creating new media materials, and searching for sources. Halafawi et al. (2023) identified the attitudes of media students in Egyptian universities towards using artificial intelligence applications in the educational process through the descriptive survey method and on a sample of 400 items. The questionnaire was used as a tool for collecting information. The most

important results of the study were that Egyptian university students are characterized by having a positive attitude towards using artificial intelligence applications in practical courses. There is an increase in the percentage of sample members who use the term artificial intelligence applications.

Goni and Tabassum (2020) showed that 50% of media students in Bangladesh interact with artificial intelligence technologies. They have positive intentions towards learning artificial intelligence as part of their academic studies and believe that artificial intelligence qualifies them for work in the future. The study by Fouad (2021) presented that the trend of media students in Egypt has been positive towards using artificial intelligence refinements in the field of study. The available study sample represented (223). There was a high number of advertising scholars who knew the media fields that used artificial intelligence. Salama (2023) revealed the role of artificial intelligence techniques in developing media production for Gulf university students, and an available sample consisting of (300) was distributed to Ajman University, Al Qasimia University in the Emirates and Gulf University in Bahrain. The results showed students' awareness of the importance of artificial intelligence techniques, that there is a need to employ them in media production, and that the most prominent use came in the field of specialization related to the production of digital photography and three-dimensional design, In transforming characters into animation.

Bender (2023) aimed to know the impact of artificial intelligence applications in education on cinema and television. The most prominent benefits of using artificial intelligence applications in content creation are dealing with the creative arts and knowledge of concepts, and it improves their ability to find job opportunities and the link between theoretical and applied lessons. Hamid (2020) showed the extent to which media students in Egypt and the Emirates accept artificial intelligence applications and their impact on their future careers through an available intentional sample consisting of 320 individuals and based on a model Acceptance of technology and survey methodology; the adverse effects of using artificial intelligence applications came in the following order: they threaten the functions of the human element, and there is a weakness in the aspect of interactivity, and they lead to a lack of creativity on the part of students, and they do not cover all the different issues.

Hassan (2022) explored the rate of educational media students' use of artificial intelligence techniques and the satisfaction achieved. The study used descriptive and parsing methods on 300 individuals from educational media students at El-Mina University and Cairo University. The study showed that the greater the students use artificial intelligence applications, the greater the content search. Educational programs that arouse their interest in developing their scientific skills, research, deduction, and innovation provide them with individual and personal learning abilities. On the other hand, in their study, Ng and Chu (2021) explored the role of teachers in mediating and supporting student motivation to learn using AI technologies in the classroom. They used self-determination theory as a basic framework to investigate how teacher support moderates the effects of student experience on need satisfaction and intrinsic motivation to learn using AI technologies. The analyses revealed that using chatbots, intrinsic motivation, and learning competence depend on teacher support and student experience (i.e., self-regulated learning and digital literacy). Teacher support best satisfies the need for relatedness, and less satisfies the need for autonomy.

AI is reshaping labor markets. According to a report by the McKinsey Global Institute, up to 30% of current work activities could be automated by 2030, potentially displacing 400 to 800 million workers (Manyika et al., 2017). As demand for AI skills continues to increase, it is critical for higher education institutions to future-proof their graduates by motivating them to learn about AI. However, current research on AI education has focused mostly on curricula and technical aspects. Less attention has been devoted to understanding the motivational factors that support students' desire to learn about AI. However, existing research has demonstrated the importance of learning environments and motivational beliefs in fostering students' intentions to learn about new technology (Wang et al., 2023).

From above, we have shown that there are attempts to link the orientation of media college students to artificial intelligence applications by addressing the unified theory of technology acceptance, such as Makanai & Haddad (2024) and Halafawi et al. (2023), which are two studies that were broadcast on the orientation of college students. The media towards artificial intelligence applications, while there are studies that address the impact of the use of artificial intelligence applications on the production of practical materials by media students, such as (Salama, 2023) and (Bender, 2023), while Hamid (2020) presented the impact of the emergence of artificial intelligence applications on the career future of students in media colleges.

Motivation refers to the reason behind individuals' use of means of communication or media, and then the use is made that results in a set of effects (Orekat et al., 2019); when employing the theory in this study, We find that among the most prominent cognitive motivations resulting from accreditation are: increased understanding and analysis, as artificial intelligence applications can provide tools to analyze data and understand the relationships between variables more deeply, which helps students understand complex subjects better (Mitrovic, 2012), and demonstrate mental skills through interaction with artificial intelligence applications, students can develop critical thinking skills, deduction,

analysis, and self-learning, and improve memory and retrieval. Artificial intelligence applications provide effective methods for improving memory, enhancing the ability to retrieve information better. The emergence of creativity and innovation enables students to generate new ideas and innovate solutions to complex problems in various fields, expand knowledge and culture, and provide easy and quick access to information and resources from multiple sources (Sharma et al., 2017), which helps expand the field of knowledge and culture for students (Hamdan et al., 2021), ethical decision making. We find that students' exposure to artificial intelligence applications motivates them to critically evaluate the ethical implications, which enhances their ability to make ethical decisions in creating and publishing content (Lin & Chen, 2021) and exploring resources.

Artificial intelligence facilitates access to comprehensive media content repositories, allowing students to explore diverse viewpoints and sources for their media projects. In addition to the behavioral drivers resulting from adoption, the most prominent ones are increasing motivation and motivation. Artificial intelligence applications can increase the level of motivation among students to participate in learning processes, accomplish tasks, and support effective engagement. Artificial intelligence applications can enhance students' effective engagement in the educational process by providing valuable and stimulating learning experiences (Chen et al., 2021), enhancing interaction and participation. Artificial intelligence applications can motivate students to interact and participate more in educational and learning activities. Improve focus and attention by providing stimulating educational tasks.

Artificial intelligence applications can help students improve their Focus and attention during study, improving performance and effectiveness. Appropriate learning experiences and resources organized by artificial intelligence applications can improve students' performance and increase their effectiveness in learning (Yıldırım & Alpaslan, 2020) and comfort, as media students may tend toward... AI applications are popular because of their convenience in automating tasks such as data analysis and content production (Yang, 2019) and the efficiency in that they offer efficiency gains by simplifying repetitive tasks, allowing students to devote more time to creative efforts, (Xu & Wang, 2020), among the services provided by artificial intelligence applications that are related to the production of media content;

- Collecting and analyzing data and information quickly and accurately
- Writing skills in language, grammar, knowledge, concepts, contexts, and translation,
- Producing Video image and sound editing operations
- Designing the multimedia (infographics, animated infographics, pages)
- Designing digital websites and advertising materials
- Provide discussions that help build and search for creative ideas

Furthermore, AI has made significant inroads into creating professional-level media content. Determining how students can benefit from AI without relying on it is a challenge in creative education. Lim et al. (2023) conducted an exploratory experiment that placed AI as a relational tool for students in a series of drawing activities and examined the potential impact of emotional relationships with machines on social and cultural creative learning. Lim et al indicated that design teachers reliably rated student drawings as more creative than AI drawings, but neither showed a consistent increase in creativity. However, the presence of AI engaged students in exploring different approaches to artistic prompts. We hypothesize that AI can be a teaching tool for transformative creativity if students perceive their relationship with AI as empathetic and collaborative.

The current paper came to investigate the motives for students at media colleges to rely on artificial intelligence applications in their practical courses from the standpoint of examining both sides of the trend, which indicates its positivity towards artificial intelligence applications, and at the same time in the aspect of development that students seek to achieve in their media product through intelligence applications. This study's theoretical framework is based on the theory of dependence on media, focusing on the motives for dependence. The theory is based on the idea that individuals and societies depend on the media to obtain information and influence. Researchers explain how dependence on media can result from personal and social motives. At the same time, influence refers to how media affects individuals and societies (DeFleur & DeFleur, 2022). It also takes from the hypothesis that motivation is built on the first dependence on the means.

3. Method

This study belongs to descriptive, interpretive studies that are concerned with analyzing, interpreting, and evaluating the characteristics of a particular phenomenon quantitatively and qualitatively and revealing the relationship between the demographic variables of the study sample members related to the motives for the media students to rely on artificial intelligence in their practical courses. It used the survey method to research this phenomenon.

3.1 The Population and Sample

The study sample comprised 100 male and female students at the Faculty of Media at Middle East University. The

sample was selected using the intentional sampling method because the study is based exclusively on media students during the 2023/2024 academic semester. The selected sample represents 20% of the study population of 508 in the university's media departments. Media students, in particular, deal with specialized courses in news and information production, content building, writing newspaper articles, and radio and television programs. Accordingly, they are the student group that deals most with text and content. With the emergence of artificial intelligence technologies and its invasion of the media, especially social networking sites, it has become very important for students to keep pace with these developments and learn to use artificial intelligence applications, especially in creating content and at the same time detect-checking content generated by artificial intelligence. In addition, artificial intelligence is important for students in facilitating their academic tasks and duties. The following are the characteristics of the study sample:

Table (1). Sample characteristics, N= 100

item	category	frequency	Ratio
Academic level	1 st grade	30%	30
	2 nd grade	27%	27
	3 rd grade	22%	22
	4 th grade	21%	21
Major	TV and Radio	27%	27
	Journalism and media	26%	26
	Digital media	47%	47
GPA	Accepted	2%	2
	Good	12%	12
	v. good	36%	36
	Excellence	50%	50

3.2 The Data Collection

The field study form was implemented by reviewing the theoretical literature on the motives for accreditation. It was prepared from four axes: The first axis deals with the demographic variables of the study sample members (academic level, cumulative GPA, and specialization), and the second axis deals with the applications of artificial intelligence that students in media colleges rely on. It consisted of six aspects based on studies that dealt with artificial intelligence applications' services to their users. The third axis deals with the cognitive motivations students at media colleges gain from relying on artificial intelligence applications in their practical courses and consists of seven paragraphs. The fourth axis deals with the behavioral motivations students at media colleges gain from relying on artificial intelligence applications in their practical courses. The form was distributed to students electronically from Google Forms.

After responses, the author sorted and coded the answers according to the requirements of the SPSS program and conducted statistical operations appropriate to the study questions, such as frequencies, percentages, means, and standard deviations. Thus, this led to an evaluation of the level of the paragraphs of each axis of the study.

3.3 Validity and Stability

The tool has been reviewed by three reviewers¹. Then, the author modified it according to their comments and corrections. Then, the Cronbach alpha coefficient was used to test the stability and reached 84.6%, which confirms that the study tool is suitable for measurement. The response scores for the items on the cognitive motivations' axis and the behavioral motivations axis were determined as follows: (3) high, (2) middle, (1) low, and the mean levels were estimated as follows: (2 - 3) high / (1 - 1.99) middle / (0 - 0.99) Low. The tests used were frequencies, percentages, means, and standard deviations for the answers to the knowledge sample. The One-Way ANOVA test was used to determine the statistically significant differences in students' responses to the motivations for their reliance on AI applications in their practical courses. The LSD test was used to find out the sources of these statistical differences.

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4. The Results and Discussion

4.1 The Fields of Using Artificial Intelligence by Students

To answer this question, frequencies and percentages were extracted, and students could choose more than one application, as in Table (2):

Table (2). The fields of AI applications that students use in their practical courses

Application services	Ratio
Collecting and analyzing data and information quickly and accurately	41.8
Writing skills in language, grammar, knowledge, concepts, contexts, and translation,	39.2
Producing Video image and sound editing operations	57.0
Designing the multimedia (infographics, animated infographics, pages)	40.5
Designing digital websites and advertising materials	26.6
providing discussions that help build and search for creative ideas	49.4

Table (2) shows that the application of artificial intelligence that students of the Faculty of Mass Communication rely on the most is “applications in video production and image and sound montage processes.” This result is consistent with the result of the study by Hossam Ali Salma (2023), followed by “applications that provide discussions that help in “Building and searching for creative ideas.” This result is consistent with studies by Makani and Haddad (2024) and (Lim et al., 2023). “Applications that provide the collection and analysis of data and information quickly and accurately,” and it is also consistent with the result of the study by Makani & Haddad (2024). Then came “Applications in Media Design.” Multiple uses (infographics, animated infographics, and pages).” This result is consistent with Bonde Stuart’s study (2023), which showed that artificial intelligence applications provide benefits in creating content and dealing with the creative arts.

4.2 The Cognitive Motivations Achieved by Artificial Intelligence Applications

Frequencies, percentages, standard deviation, and arithmetic averages were extracted to answer the question, as in Table (3).

Table (3). The cognitive motivations achieved by artificial intelligence applications

Cognitive motives	High		Middle		Low		Mean	S. deviation	Level
	frequency	%	frequency	%	frequency	%			
Dealing with the ethics of media content	71	71%	23	23%	6	6%	2.65	0.592	High
Expanding my knowledge and culture	60	60%	38	38%	2	2%	2.58	0.535	High
Improving my information reading skills	59	59%	36	36%	5	5%	2.54	0.593	High
Access to comprehensive information bases	48	48%	43	43%	9	9%	2.39	0.650	High
Creativity and innovation	43	43%	50	50%	7	7%	2.36	0.612	High
Possessing advanced mental skills	43	43%	49	49%	8	8%	2.35	0.626	High
Enhancing my understanding and analyzing media content	35	35%	57	57%	8	8%	2.27	0.601	High
Total Mean							2.44	0.601	High

Table (3) shows that the general average of the cognitive motivations achieved because the media students relied on artificial intelligence applications in their practical courses was high (2.44). This result is when compared to the results of studies that dealt with the trends and extent of acceptance of Media students towards artificial intelligence applications, such as Halafawi et al. (2023) and the study of Makani & Haddad (2024), which showed the positive attitude and acceptance by media students of artificial intelligence applications. We find that there is an agreement

between these results and the results of this study. We find that this result does not agree with Alaa Fouad (2021), which showed that the general arithmetic mean of the cognitive component was average based on the measure of the arithmetic mean range in the study.

4.3 The Behavioral Motivations of Artificial Intelligence Applications in Practical Courses

Frequencies, percentages, standard deviation, and arithmetic averages were extracted to answer the question, and Table (4) shows that.

Table (4). Behavioral motivations of artificial intelligence applications in practical courses

behavior motives	High		Middle		Low		Mean	S, deviation	Level
	frequency	%	frequency	%	frequency	%			
Improving my performance	72	72%	26	26%	2	2%	2.70	0.503	High
Focus and attention	66	66%	30	30%	4	4%	2.62	0.565	High
Conducting multiple practical experiments	53	53%	40	40%	7	7%	2.46	0.626	High
Interacting and participating strongly	55	55%	34	34%	11	11%	2.44	0.686	High
Simplifying the required practical tasks	50	50%	44	44%	6	6%	2.44	0.608	High
Finishing the practical aspect quickly	41	41%	51	51%	8	8%	2.33	0.620	High
Accomplishing Comfortably	43	43%	37	37%	20	20%	2.23	0.763	High
Total Mean							2.46	0.624	High

Table (4) shows that media students' general mean of behavioral motivations on artificial intelligence applications in practical courses was high (2.46). The result agrees with the results of studies that examined the use of artificial intelligence applications, such as Hassan (2022) and Stuart (2023). The result of cognitive motivations does not agree with the result of Alaa Fouad (2021), in which the general arithmetic average of the behavioral component was average, as it reached (3.32), building the average range scale in the study.

4.4 The Statistically Significant Differences

The statistically significant differences in the media students' motivation responses about artificial intelligence applications in practical courses are due to demographic variables (academic level, Major, and GPA). The One-Way ANOVA test was used to test this hypothesis. Statistically significant in the cognitive and behavioral motivations for dependence, the LSD test was used to show the sources of variation in the students' cognitive and behavioral motivations, and the results were as follows:

4.5 Academic Level

Table (5). ANOVA test: Differences in the media students' cognitive and behavioral motivations were achieved from their reliance on AI applications according to the academic level

	Source of deviation	Sum of squares	Degree of freedom	Mean of squares	F value	Sig.
cognitive motivations	Between groups	.1850	3	.0620	.3440	.7940
	Within groups	17.244	96	.1800		
	total	17.429	99			
behavioral motivations	Between groups	.2380	3	.0790	.4320	.7310
	Within groups	17.623	96	.1840		
	total	17.860	99			

The One Way Anova test showed that there were no statistically significant differences in the cognitive and behavioral motivations achieved by students in media colleges from their reliance on artificial intelligence applications according to the academic level variable, as the P value reached (0.344) at the significance level (0.794), for cognitive motivations, while The value of F was (0.432) at the level of significance (0.731) for behavioral motivations, which are values that are not statistically significant at the level of (0.05), and since all previous studies did not take the variable of academic level into their analysis; We find that the result of this study is taken as a result that may achieve agreement or disagreement with future studies.

4.6 Major

Table (6). ANOVA test: differences in the cognitive and behavioral motivations of media students towards artificial intelligence applications according to the Major variable

	Source of deviation	Sum of squares	Degree of freedom	Mean of squares	F value	Sig.
cognitive motivations	Between groups	1.840	2	.9200	5.724	.0040
	Within groups	15.590	97	.1610		
	total	17.429	99			
behavioral motivations	Between groups	.8160	2	.4080	2.321	.1040
	Within groups	17.045	97	.1760		
	total	17.860	99			

The One-Way ANOVA test showed that there were statistically significant differences in the cognitive motivation achieved by students in media colleges from their reliance on artificial intelligence applications according to the major variable, where the value of F reached (5.724) at the level of significance (0.004), which are statistically significant values at the level of (0.05). In contrast, no statistically significant differences were proven in the behavioral motivations achieved by students at media colleges from their reliance on artificial intelligence applications according to the specialization variable, as the F value reached (2.321) at the significance level (0.104), which are values that are not statistically significant at the level of (0.05). This result is consistent with studies that showed that the cognitive aspect, whether influenced or motivated, is equal among media students in all their specializations, such as Alaa Fouad (2021) and Goni Tabassum (2022), and the sources of variation in the cognitive motivations achieved by students at media colleges from their reliance on AI Applications according to the specialization variable.

Post-analysis of variance (LSD) was used to conduct multiple comparisons between specialization categories and clarify the source of the differences. The results were as follows:

Table (7). Post-test (LSD)

Major (I)	Major (J)	Mean Difference (I-J)	Sig.
TV and Radio	Journalism and media	-0.34961*	.0020
	Digital media	-0.26568*	.0070

The table above shows that there are statistically significant differences in the cognitive motivations of media students toward artificial intelligence applications according to the specialization variable, where the specialization (journalism and media) came in first place, then in second place (digital media), then in third place (broadcasting). Moreover, television), this result highlights that the cognitive motivation of the Department of Journalism and Mass Communication at the Faculty of Media at the Middle East University is high compared to the students of the digital media, radio, and television specializations. This result did not appear in any of the previous studies, which provides a beginning to compare it with the results of future studies.

4.7 GPA. Grade Point Average

Table (8): Anova test, differences in the cognitive and behavioral motivations achieved by students in media colleges from their reliance on artificial intelligence applications according to the GPA

	Source of deviation	Sum of squares	Degree of freedom	Mean of squares	F value	Sig.
cognitive motivations	Between groups	1.806	3	.6020	3.699	.0140
	Within groups	15.623	96	.1630		
	total	17.429	99			
behavioral motivations	Between groups	1.771	3	.5900	3.522	.0180
	Within groups	16.090	96	.1680		
	total	17.860	99			

The (One Way ANOVA) test showed that there were statistically significant differences in the cognitive and behavioral motivations achieved by students at media colleges from their reliance on artificial intelligence applications according to the cumulative GPA variable, where the P value reached (3.699) at the significance level (0.014) for cognitive motivations. It was also proven that there were Statistically significant differences in the behavioral motivations achieved by students at

media colleges from their reliance on artificial intelligence applications according to the cumulative GPA variable, where the value of F reached (3.522) at the level of significance (0.018), which are statistically significant values at the level of (0.05). To determine the sources of variation in the cognitive and behavioral motivations achieved by students in media colleges from their reliance on artificial intelligence applications according to the cumulative GPA variable, a dimensional analysis of variance (LSD) method was used to conduct multiple comparisons between the GPA categories and clarify the source of the differences as shown in the following table:

Table (9). (LSD) test, sources of variation in the cognitive motivation of media students towards artificial intelligence applications according to GPA variable

	GPA (I)	GPA(J)	Mean Difference(I-J)	Sig.
cognitive motivations	Excellence	Accepted	.194440	.5090
		Good	0.34921*	0.011
		V. good	0.25730*	0.004
behavioral motivations	Excellence	Accepted	-0.02381	.9360
		Good	0.14286	0.298
		V. good	0.28476*	0.002

The table above shows that there are statistically significant differences in the cognitive motivation achieved by students of media colleges from their reliance on artificial intelligence applications according to the cumulative GPA variable, where the cumulative GPA (excellent) came in first place, then in second place (good), then in third place (good). Very), no statistically significant differences regarding the cumulative average (acceptable) were proven. It was also proven that there were statistically significant differences in the behavioral motivations students at media colleges achieved from their reliance on artificial intelligence applications according to the cumulative GPA variable, where the cumulative GPA (excellent) came in first place, then in second place (very good). In contrast, no significant differences were proven to exist. Statistically, the cumulative GPA is (good) and (acceptable). These results indicate that students with excellent GPAs rely on artificial intelligence applications in their practical courses because they provide cognitive motivation. This result has not been examined in previous studies, which makes it an introduction for comparison with future studies.

The result showed that the general mean of media students' reliance on artificial intelligence applications in their practical courses was high. This result is consistent with the results of Hossam Ali Salma (2023), which showed that there is awareness among University students on the importance of applications of artificial intelligence in the educational process, and Fouad (2021) showed that there is a positive trend in the attitudes of media students in Upper Egypt towards applications of artificial intelligence, Makani & Haddad (2024) that also showed that there is a positive trend among students of media colleges. In Jordanian universities, the application of artificial intelligence and the study of Tabassum (2022) showed that 50% of university students in Bangladesh interact with artificial intelligence techniques and have positive intentions toward learning artificial intelligence.

5. Conclusion

AI technologies have been integrated into four major educational areas: teaching, learning, assessment, and management. For example, intelligent tutoring systems can recommend subject content, tasks, and teaching strategies; chatbots can provide feedback to promote students' self-regulated learning and answer students' management inquiries; and auto-correcting systems can provide more effective grading(Ng & Chu, 2021).

The applications of artificial intelligence that students adopt are mainly those used in producing video, image, and sound montage operations. Also, there was an increase in the general mean of responses about the cognitive motivation items achieved by media students. An increase in the general arithmetic average of the average behavioral motivations achieved by students of the Faculty of Information. Statistically, there are no significant differences due to academic level, but there are due to specialization; the journalism and media specialization was the highest among the other specializations, and there are statistically significant differences for students with excellent grades in behavioral and cognitive motivations.

6. Recommendations

The author recommends authoring a course on artificial intelligence to be included in the media teaching plan in universities. The course has to include a section on the ethics and laws of using artificial intelligence:

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References

- AAAS. (2024). *Artificial Intelligence*. AAAS. <https://www.aaas.org/ai2>
- Awawdy, M. (2024). Exploring the unexpected effects of artificial intelligence applications on student motivation from the perspective of college students within the Green line. *International Journal of Advance Research in Education & Literature (ISSN 2208-2441)*, 10(7), 1-19. <https://doi.org/10.61841/sc91gm21>
- Bender, S. M. (2023). Coexistence and creativity: screen media education in the age of artificial intelligence content generators. *Media Practice and Education*, 24(4), 351-366. <https://doi.org/10.1080/25741136.2023.2204203>
- Chen, F., Liu, Z., Cheng, Y., & Liu, B. (2021). Investigating Students' Perceptions and Behavioral Intentions Toward Artificial Intelligence in Education: An Extended Technology Acceptance Model. *IEEE Transactions on Education*, 64(1), 56-65.
- DeFleur, M. L., & DeFleur, M. H. (2022). Mass Communication Theories: Explaining Origins, Processes, and Effects, Second Edition. In *Mass Communication Theories: Explaining Origins, Processes, and Effects, Second Edition*. <https://doi.org/10.4324/9781003083467>
- Fouad, A. (2021). The Attitude of Media Students in Upper Egypt Towards Using the Artificial Intelligence in the Media Work. *Media Research Journal*, 59(4), 2183-2246. <https://doi.org/10.21608/jsb.2021.209872>
- Goni, Md. A., & Tabassum, M. (2020). Artificial Intelligence (AI) in Journalism: Is Bangladesh Ready for it? A Study on Journalism Students in Bangladesh. *Athens Journal of Mass Media and Communications*, 6(4). <https://doi.org/10.30958/ajmmc.6-4-1>
- Halafawi, A., Al Ushri, W. I., Hatab, A. H., & Uqdeh, A. A. saeed. (2023). Trends of media students in Egyptian universities towards the use of artificial intelligence applications in the educational process. *The Scientific Journal for Qualitative Education*, 18(18), 1013-1038. <https://doi.org/10.21608/sjsep.2024.278539.1040>
- Hamdan, N., Yusop, F., & Kamaruddin, M. A. (2021). Impact of Artificial Intelligence Technology in Education: A Literature Review. *2nd International Conference on Advanced Science and Engineering Technology (ICASET)*, 117-122.

- Hamid, A. A. (2020). Egypt and UAE Mass Communication students' acceptance of using artificial intelligence applications and its impact on their future careers: A study based on the technology acceptance model. *Egyptian Journal of Public Opinion Research*, 19(2).
- Hassan, I. (2022). Uses of Educational Media Students for Artificial Intelligence Applications and Satiated is achieved " A Field study. *Egyptian Journal of Media Research*, 81.
- Heesen, J., Heesen, J., & Heesen, J. (2023). Artificial intelligence in journalism: Legal and ethical framework of platform learning systems. *Plattform Lernende System*, 1-4.
- Karimi, N., & Borhani, M. (2022). Challenges of content production using large-scale artificial intelligence tools. *Acta Scientific Computer Sciences*, 4(4), 56-63.
- Lim, J., Leinonen, T., Lipponen, L., Lee, H., DeVita, J., & Murray, D. (2023). Artificial intelligence as relational artifacts in creative learning. *Digital Creativity*, 34(3). <https://doi.org/10.1080/14626268.2023.2236595>
- Lin, Y., & Chen, Y. (2021). How does AI influence users' ethical decision making in content creation? The moderating role of personal moral philosophies. *Journal of Business Ethics*, 169(2), 253-273.
- Linh, T. T. M., Thi, N., & Ha, T. (2021). The Impacts of Technology-based Communication on EFL Students' Writing. *AsiaCALL Online Journal*, 12(5).
- Makanai, S., & Haddad, W. (2024, April 24). Media students' attitudes toward using AI tools for learning. *Conference on Artificial Intelligence and Media Content Creation (April 28-29, 2024)*.
- Manyika, J., Chui, M., Miremadi, M., Bughin, J., George, K., Willmott, P., & Dewhurst, M. (2017). Harnessing Automation for a Future that Works. *McKinsey Global Institute, January*.
- Mitrovic, A. (2012). Intelligent Tutoring Systems: E-Learning and Knowledge Management for Education. *Journal of Computing and Information Technology*, 20(1), 1-2.
- Ng, D. T. K., & Chu, S. K. W. (2021). Motivating students to learn ai through social networking sites: A case study in Hong Kong. *Online Learning Journal*, 25(1). <https://doi.org/10.24059/olj.v25i1.2454>
- Noain-Sánchez, A. (2022). Addressing the Impact of Artificial Intelligence on Journalism: the perception of experts, journalists and academics. *Communication and Society*, 35(3). <https://doi.org/10.15581/003.35.3.105-121>
- Orekat, A., Jarrar, L., & Al-Badri, H. (2019). The role of electronic journalism in providing media students with special journalistic skills in digital media : students of the faculty of media at the University of the Middle East model. *Dirasat: Humanities and Social Sciences*, 46(3), 363-376. <https://archives.ju.edu.jo/index.php/hum/article/view/101714>
- Salama, H. A. (2023). Artificial intelligence techniques are employed to develop the production of media students in Gulf universities. *Journal of Association of Arab Universities For Media Research and Communication Technology*, 2023(11), 1-70. <https://doi.org/10.21608/jcts.2023.317500>
- Sharma, S. K., Palvia, S. C. J., & Kumar, K. (2017). Changing the landscape of higher education: From standardized learning to customized learning. *Journal of Information Technology Case and Application Research*, 19(2), 75-80. <https://doi.org/10.1080/15228053.2017.1345214>
- Trust, T., Whalen, J., & Mouza, C. (2023). Editorial: ChatGPT: Challenges, Opportunities, and Implications for Teacher Education. *Contemporary Issues in Technology and Teacher Education*, 23(1).
- Wang, F., King, R. B., Chai, C. S., & Zhou, Y. (2023). University students' intentions to learn artificial intelligence: the roles of supportive environments and expectancy-value beliefs. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00417-2>
- Xu, Y., & Wang, L. (2020). Exploring the impact of AI on work: A systematic review and future research agenda. *International Journal of Information Management*, 52.
- Yang, Y. (2019). Convenience in the digital age: A critical review of technology acceptance literature. *AIS Transactions on Human-Computer Interaction*, 11(3), 172-197.
- Yasin, Dr. Z., Iqbal, N., & Islam, I. (2021). Use of Artificial Intelligence in Journalism by Pakistani and Foreign Journalists. *Journal of Peace, Development & Communication*, 05(04). <https://doi.org/10.36968/jpdc-v05-i04-03>
- Yilmaz, R., & Karaoglan Yilmaz, F. G. (2023). The effect of generative artificial intelligence (AI)-based tool use on students' computational thinking skills, programming self-efficacy and motivation. *Computers and Education: Artificial Intelligence*, 4. <https://doi.org/10.1016/j.caeai.2023.100147>
- Yıldırım, G., & Alpaslan, M. (2020). The Effects of Using Artificial Intelligence-Based Adaptive Educational Systems on Learners' Motivation and Academic Achievement. *International Journal of Emerging Technologies in Learning (IJET)*, 15(22), 198-213.