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The Degree of Importance of Employing Artificial Intelligence Applications in The Educational Process from The Point of View of Vocational Education Teachers in Jordan

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Abstract

The study aimed to identify vocational education teachers' point of view on the importance of employing artificial intelligence applications in the educational process. Its relationship to the variables of gender, teaching experience, and academic qualification to achieve the objectives of the study, in which the descriptive approach was used, In addition to using the questionnaire as a study tool, it was applied to 582 male and female teachers in the second semester of the academic year (2023-2024). Results have been reached in the study until the degree of importance of employing artificial intelligence applications in the educational process from the perspective of vocational education teachers. It came with a degree (a task) with an arithmetic average. It reached 3.44 with a standard deviation of 0.62. The study also found that there were no statistically significant differences attributable to all of the study variables (gender, experience, and educational qualification).

Keywords: *Vocational Education Teacher; Degree of Importance; Degree of Employment; Artificial Intelligence; Application; Educational Process.*

Introduction

The world is witnessing today's development with great scientific knowledge in all aspects of life, and the driving engine for this development is the rapid progress in the field of information and communications technology, and one of the most important systems that this progress has produced is artificial intelligence, and all institutions, regardless of its field, whether economic, commercial or educational, all strive to reach a state of great efficiency and effectiveness in its performance through its use of artificial intelligence in its work, artificial intelligence has become one of the modern and indescribably exciting scientific terms, as it represents the only way to produce intelligent programs capable of doing what humans do in a faster and more accurate manner (Zhou, 2022; Qirqaji, 2023, Ara Shaikh et.al, 2022)

The aim of artificial intelligence science: Artificial intelligence aims to know the nature of human intelligence by creating computer programs capable of simulating human behavior, which is characterized by intelligence and the ability to process information electronically and provide stakeholders with the information they need to help them make various decisions quickly and in a timely manner. Therefore, there must be such applications that rely on technology, simulate the human mind, have high speed in providing the required information, and have capabilities that exceed human capabilities in terms of speed and accuracy (Jia, 2022; Lai et.al, 2023; Thirunavukarasu et.al,2023; Qiu et.al, 2022).

And so it is, look at artificial intelligence in education, its applications may reduce challenges that the education of the future will be facing, as integrating artificial intelligence into education would give the ability to confront the education challenges that exist today, and innovate new teaching and learning practices, which contribute in accelerated progress towards achievements for various educational goals, which puts the responsibility of the various Ministries in Education that has great responsibilities to develop their policies, curricula and strategies to keep their pace with the realities of the revolution of industrial modern technology, which was the spark that lit up new spaces for educators in the search to enrich the culture of artificial intelligence at different stages of education (Li, 2022; Guan et.al, 2021).

The use of technological applications in education, as is the case with any educational method, depends on the extent to which teachers possess skills that make them able to keep up and improve their professional performance effectively. Among the most important of these skills is the skill of being able to educate with proficiency in technology and its use in developing the educational process. In addition to the trends that

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each of them can carry, both sides of the educational process are moving towards the use of educational technology and their acceptance of their new roles presented by educational technology, as the role of the teacher is no longer to transfer information to learners using traditional methods but rather to demand new roles imposed on him by scientific and technological development (Mallik& Gangopadhyay, 2023; Jia et.al, 2023)

The contributions of artificial intelligence to education are critical, a field consisting of the intersection of artificial intelligence science and educational technology science. With the aim of deepening both teachers' and learners' understanding of how to learn and making vulnerabilities to external factors clearer and more comprehensive with the support of AI technology, making teaching, learning, and management smarter (Kshirsagar et.al, 2022; Li et.al, 2022; Syed et.al, 2023).

It is worth noting that artificial intelligence has the ability to improve the quality of teaching in education and help provide a personalized learning environment for students and evaluate grades, even in complex student tasks, to quickly and accurately evaluate many students, allowing teachers more freedom to engage in empathic teaching, which is known as teaching students how they should feel about the scientific content they receive, which contributes to determining how useful this content is to them (Qirqaji, 2023; Qiu et.al, 2022; Li,2022).

There is no doubt that the use of artificial intelligence enhances the learning experience and helps in developing some skills that may be difficult to acquire traditionally or without the use of technology, whereas AI tools such as adaptive e-learning systems and AI-based virtual environments successfully help enhance the learning experience and develop new competencies in students. Students can create a virtual reality environment that simulates the real-life environment, enabling students to learn and gain experience (Zhou, 2022; Ara Shaikh et.al, 2022; Lai et.al, 2023; Thirunavukarasu et.al,2023)

AI can also help find strengths and weaknesses in pre-existing education systems through the use of machine learning and data mining tools in AI that independently analyze education systems when exploring large amounts of data(Guan et.al, 2021; Jia et.al, 2023;Syed et.al, 2023)

It is clear from what has been mentioned that applications of artificial intelligence can't be ignored; it is one of the important educational means in teaching the future, and to achieve its goals, it all depends on the roles of teachers using it, especially those imposed by future challenges, as it facilitates communication between learners, changes in the ways of organizing sources of knowledge, and provides assistance to all individual differences and needs, giving the learning process immense flexibility.

It has been shown in many studies below: study (Qirqaji, 2023) and study (Al-Qahtani, 2022) and study (Al-Qarala and Taha, 2022). And study (Al-Muqeeti& Abu Al-Ola, 2022). And study (Al-Huwaiti, 2022). And study (Al-Habib, 2022). And study (Al-Faifi& Al-Dalalah, 2022). And study (Al-Atl et al., 2021). And study (Al-Subhi, 2020), And study (Zhou, 2022), And study (Lai et.al, 2023) And study (Thirunavukarasu et.al,2023) And study (Guan et.al, 2021)And study (Jia et.al, 2023)And study (Syed et.al, 2023)And study (Ara Shaikh et.al, 2022).The importance of employing artificial intelligence technology in the educational process is that, because of its positive impact on performance, the teacher can achieve its goals more efficiently. Teaching: hence the idea of studying knowledge and the degree of importance of employing vocational education teachers and having them use artificial intelligence applications in the educational process.

Problems of the study and its questions:

In this day and age, with the emergence of technological revolutions, innovation has helped provide a wide list of options, which requires more skills that should be available to people. Teachers need to keep pace with the requirements of the current situation; therefore, this study came to shed light on these new revolutions, which are represented by the artificial intelligence revolution, especially in the educational field, and the importance of these technologies for the teacher in the educational field. And from here arose the

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need for verification and degree of importance for the recruitment of vocational education teachers in Jordan using applications of artificial intelligence in the educational process.

And as mentioned above, in the problem-centric study, in an attempt to answer the following questions:

What is the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan?

1. Are there any statistically significant differences at the significance level ($\alpha = 0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan? Which is attributed to the gender variable (males, females?)

2. Are there any statistically significant differences at the significance level ($\alpha=0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan which is attributed to the variable of teaching experience (less than 10? years, more than 10 years)

3. Are there any statistically significant differences at the significance level ($\alpha=0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan which is attributed to the academic qualification variable (diploma, bachelor's degree, postgraduate? studies).

Goals of the study

The main goal of the study is presented below; try to identify it for me:

1. Recognize the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan.

2. Find out if there are statistically significant differences at the significance level ($\alpha = 0.05$) on the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which are attributed to the gender variable (males and females).

3. Find out if there are statistically significant differences at the significance level ($\alpha = 0.05$) on the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is due to the variable 'teaching experience' (less than 10 years, or more than 10 years?).

4. Find out if there are statistically significant differences at the significance level ($\alpha = 0.05$) on the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan that are attributed to the 'academic qualification' variable (diploma, bachelor's degree, postgraduate studies).

Importance of the study

It is determined the importance of the study in order to keep pace with the emerging industrial revolution data, where artificial intelligence in education is viewed as having the potential to reduce the challenges facing future education. Integrating artificial intelligence into education would give us the ability to confront the challenges of education that exist today and innovate new teaching and learning practices that contribute to accelerating progress towards education and achieving educational goals.

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Limitations of the study

Limitations that the study presents to me:

- Objective Limit: The degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan.
- Human Limit: The study was applied to vocational education teachers in Jordan.
- Spatial Limit: Public schools affiliated with the Jordanian Ministry of Education.
- Time Limit: Apply this to the study in the second semester of the academic year (2023/2024).

Terms of the study

Adopt the study with the following terms:

Artificial intelligence applications in education

The educational systems are dependent on automatic computers with independent databases (they determine what is taught) or knowledge bases for educational content (which determines how to teach) and attempts to use inferences about the learner's ability to understand topics and identify his weaknesses and strengths so that it can adapt the learning process dynamically.

It is also known as him using devices, programs, machines or systems capable of simulating human intelligence to carry out specific operations and tasks such as instant chat bots and programs (Al-Ghamdi and Al-Farani, 2020).

As he knows it, it is: applications that rely on artificial intelligence, which is the ability of a computer to simulate the human mind, which seeks to develop computer systems to work with high efficiency, speed, and great accuracy by imitating and simulating the mental and mental processes of humans in learning, thinking, deducing, reasoning, making decisions, solving problems, managing, and completing tasks successfully in all aspects of the educational process without fatigue or exhaustion.

Vocational education teacher

He is a qualified teacher who holds a university degree specializing in vocational education. He was appointed to the Jordanian Ministry of Education for the purpose of teaching the vocational education curriculum, which starts from the fourth grade until the tenth grade.

Methods And Field Procedures

Curriculum for the study

For the answer to the questions of the study, the descriptive method was used due to its suitability and the nature of the current study, and he knew (Al-Assaf, 2012) what the descriptive method is: "that type of research through which all members of the research community or a representative sample of them are interrogated, with the aim of describing the phenomenon studied in terms of its nature and degree of existence only, without going beyond that to study the relationship or deducing the causes."

The community was in the study, with 625 teachers appointed

The community is involved in the study of all vocational education teachers in the Jordanian education directorates. The study sample initially consisted of 625 male and female teachers, to whom the study tool

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was distributed electronically through the use of modern means of communication such as Facebook and WhatsApp. 43 questionnaires were excluded due to their lack of correct responses, and thus 582 questionnaires remained that were retrieved correctly, which is the number that represents the study sample, as the study sample was chosen randomly, and the following Table No. (1) shows the distribution of study individuals according to its variables:

Table 1: The distribution of study sample members according to study variables

Variable	Category	Repetition	The Ratio (%)
Sex	Male	245	42%
	Female	337	58%
Total		582	100%
Qualification	Intermediate diploma and bachelor's degree	388	67%
	Postgraduate	194	33%
Total		582	100%
Years of Experience	Less than 10 years	347	60%
	More than 10 years	235	40%
Total		582	100%

A tool of the study

To answer questions of the study to achieve its goals, it has been referred to previous research and studies related with a topic study as study (Qirqaji, 2023), and study(Al-Habib, 2022) and study (Al-Ghamdi & Al-Farani, 2020) and study (Al-Subhi, 2020) and study (Ara Shaikh et.al, 2022), study (Thirunavukarasu et.al,2023), and study (Li, 2022), and study (Mallik& Gangopadhyay, 2023), and study (Kshirsagar et.al, 2022), and study(Syed et.al, 2023), and study(Guan et.al, 2021). where it was done with tool design in the study in its initial form, which was in the form of a questionnaire, was formed of two parts:

Part 1: It contains demographic data about the sample study, including sex, number of years of experience, and educational qualification.

Part 2: It included sections of the study tool that were designed to measure the reality of vocational education teachers employing artificial intelligence applications in the educational process, which, in its initial form, included 25 paragraphs.

Validity and reliability of the study tool

To verify the validity and reliability of the study tool, the following procedures were followed:

First: validity of the study tool

The validity of the study tool was verified by following the following steps:

The validity of the apparent consistency (the arbitrators believed)

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The validity of the apparent consistency of an instrument study was verified through its presentation bits. The initial image was presented to a group of experienced judges from the faculty specializing in vocational education and a number of educational supervisors for the vocational education curriculum in the Ministry of Education. This was in order to express their opinion on the suitability of the study tool to the nature of the purpose to be achieved from it, in addition to reviewing it and proposing the addition, deletion, or merging of some paragraphs. The arbitrators presented a set of suggestions represented in the process of merging and deleting some paragraphs, and the researcher committed to making the amendments required by the arbitrators so that the study tool in its final form consisted of 20 items.

Internal consistency and validity

To ensure that the statements are related to the overall degree of scale, internal consistency was measured, and its validity was confirmed by calculating the Pearson correlation coefficient between each statement on the scale and the total degree of scale. The result is as shown in Table 2):

Table No. 2: Coefficient Engagement Paragraphs Degree questionnaire for the college for scale

Indicatio n	**Correlation Coefficient**	**Paragraph**	**Indicatio n**	**Correlation Coefficient**	**Paragraph**
.000	**.732	11	.000	**.647	1
.000	**.701	12	.000	**.552	2
.000	**.639	13	.000	**.629	3
.000	**.636	14	.000	**.552	4
.000	**.618	15	.000	**.712	5
.000	**.529	16	.000	**.523	6
.000	**.633	17	.000	**.590	7
.000	**.527	18	.000	**.637	8
.000	**.673	19	.000	**.558	9
.000	**.592	20	.000	**.593	10

A function at a level$\alpha = 0.01$

It is evident from Table No. 2 that all correlation coefficients are statistically significant at some level ($\alpha = 0.01$), which indicates the validity of the internal consistency of the tool for the study.

Second: instrument stability of the study

To verify the stability of the study tool, instrument reliability was calculated for the study using a parameter (Cronbach alpha). Its value reached 0.91. This value is considered high and indicates a high degree of stability of the study tool and its readiness for actual application on the ground.

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Statistical treatment used

The use of a group in the study to process statistical data is as follows:

- The arithmetic mean is to calculate the value given by individuals in a sample for the study for each phrase on the scale and also to arrange the weights of each statement on the scale based on the responses of sample members to the study.

- Standard deviation: to see how scattered the data is (the sample responses in the study) from its arithmetic mean, the deviation is also useful in knowing the order of the means if some of them are equal, so that the rank of the statement is best for the one whose standard deviation is less.

Correlation coefficient (Pearson Correlation Coefficient) to calculate the internal consistency of an instrument of the study.

- (Cronbach alpha to calculate the stability coefficient of a tool for the study.

- To interpret the results and determine the level of responses to the tool's statements, the correction method appropriate was used, which is represented by a five-point Likert scale, where weights were given scores for each of the alternatives as follows: Very Important = 5 marks; Important = 4 marks; Average Importance = 3 degrees; Not Important = 2 degrees; Not Very Important = 1 degree. These answers were classified into five equal levels using the following equation:

Class length = (greater value - less value) ÷ number of tool alternatives = (1-5)÷5 = 80.0, so we get the following classification shown in Table No. 3:

Table No. 3: The distribution of the length of the categories according to the hierarchy used in the tool for the study

Average Range	Response Level
5 - 4.21	Very Important
4.20 -3.41	Important
3.40 -2.61	Average Importance
2.60 -1.81	Not Important
1.80 -1.0	Not Very Important

Results of the study to be discussed

Related results answer the first question of the study, which states: "What is the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan?"

To answer this question, arithmetic means and standard deviations were extracted for paragraphs of scale to determine the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, arranged in descending order according to their arithmetic averages, as shown in the following table No. 4:

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Schedule (4): Arithmetic means and standard deviations for paragraphs of scale the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, ranked in descending order according to their arithmetic averages.

Rank	Ferries	SMA	Standard Deviation	Priority Level
1	Providing a flexible communication system that allows all parties involved in the educational process to communicate	4.03	0.62	Important
2	Employing artificial intelligence applications in classroom management	3.85	0.58	Important
3	Providing feedback to the learner on his level of performance on an ongoing basis	3.78	0.71	Important
4	Providing a series of educational programs that contribute to raising educational efficiency	3.70	0.66	Important
5	Providing artificial conversation or a smart chatbot to conduct a dialogue with the learner and monitor his dimensions	3.62	0.58	Important
6	Identifying the learner's weak points and working to evaluate them according to the educational curriculum	3.59	0.57	Important
7	Providing enriching learning resources and training activities for curriculum content using artificial intelligence applications	3.55	0.55	Important
8	Adapting to the learner's individual and group abilities and speed	3.51	0.72	Important
9	Preparing electronic tests that are delivered remotely while imposing monitoring systems on learners	3.47	0.68	Important
10	Accelerating the educational process for the learner, both as much as possible for him and his needs	3.44	0.64	Important
11	Build tests that suit the learners' levels and present the tests to them	3.42	0.69	Important

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12	Designing smart digital curricula using multiple digital media and technologies	3.41	0.56	Important
13	Marking required tests and homework electronically	3.38	0.60	Average Importance
14	Providing feedback to the teacher about the learner's educational level, needs, and inclinations	3.30	0.53	Average Importance
15	Providing assistance to learners and providing them with accurate answers constantly	3.29	0.55	Average Importance
16	Providing a continuous evaluation system for teacher and learner performance	3.23	0.61	Average Importance
17	Storing learner data and monitoring their grades within the educational environment	3.18	0.52	Average Importance
18	Create smart and integrated content platforms	3.16	0.60	Average Importance
19	Providing a detailed report to the teacher about the courses that are difficult for the student to understand and assimilate	3.09	0.74	Average Importance
20	Providing a guide to studying the content of the smart curriculum with summaries of the chapters	2.91	0.77	Average Importance
The total score of the scale indicates the degree of importance of employing artificial intelligence applications		3.44	0.62	Important

It is clear from reviewing the results of the previous Table No. 4 that the general arithmetic mean of the study sampled responses to the items measuring the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan reached 3.44. It is an indicator that indicates the priority level (Important), and the value of the standard deviation of the general arithmetic mean of the scale reached 0.62. It is also noted in Table No. 4 that (12) poverty at On a degree (a task) and the (8) paragraphs on the degree of Moderate Importance, it is also noted that the arithmetic means of the scale's expressions ranged between 2.91-4.03. The paragraph that states "providing a flexible communication system that allows all parties involved in the educational process to communicate" came in first place, with an arithmetical average of 4.03 and a standard deviation of 0.62, and to a degree (a task), It was followed in second place by the paragraph that states "employing artificial intelligence applications in classroom management" with a arithmetical average of 3.85 and a standard deviation of 0.58 and to a degree (a task), the paragraph that stipulates "providing a detailed report to the teacher on the courses that are difficult for the student to understand and assimilate" ranked penultimately,

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with a mean of 3.09 and a standard deviation of 0.74 and to a degree, Moderate Importance in the last place was for the paragraph that states: "Providing a guideline for studying the content of the smart curriculum with summaries of the chapters" with a arithmetical average of 2.91 and a standard deviation of 0.77 and to a low degree very.

It is clear from the result of the answer to this question, which came with a degree (Important) with regards to the importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which means that vocational education teachers are aware of the importance of employing artificial intelligence applications in the education process, they sense this, whether in feedback, in personal learning, in providing smart content and evaluation, or in flexible communication between parties to the educational process. This may indicate the progress and development taking place in the field of technology and its importance in education. Thus, we find that this result is consistent with what was stated at the study (Al-Huwaiti and Bani Ahmed, 2022) and also when (Ara Shaikh et.al, 2022), and at (Humans, 2020), and at (Al-Ghamdi & Al-Farani, 2020).

Results related to answering the second question to study, which states

Are there any statistically significant differences at the significance level? ($\alpha = 0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the gender variable (males, females).

To answer this question, the t-test was used, and the arithmetic means and standard deviations were extracted as shown in the following Table No. 5:

Schedule (5): Test results (T) to indicate the differences in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the gender variable males, females))

Sex	The Number	SMA	Standard Deviation	Value (v)	Degrees of Freedom	Significance Level
Male	245	3.69	0.62	0.468	395	0.597
Female	337	3.74	0.59			

The previous table (5) shows there are no statistically significant differences between male and females teachers in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the gender variable (males, females), where the t value reached 0.468 respectively, which means that it is not statistically significant at the significance level ($\alpha \leq 0.05$), and these results are due to those vocational education teachers, regardless of whether male teachers or female teachers view the necessity of introducing artificial intelligence applications into the educational process, as they live in the same teaching environments and see various technological developments, and this may be a motivation for them regarding the need to provide appropriate training to teachers regarding artificial intelligence applications.

Results related to answering the third question to study which states

Are there any statistically significant differences at the significance level? ($\alpha = 0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the teaching experience variable (less than 10 years, more than 10 years)"

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To answer this question, the t-test was used, and the arithmetic means, and standard deviations were extracted as shown in the following Table No. 5:

Schedule (6): Test results (T) to indicate the differences in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the variable of teaching experience (less than 10 years, more than 10 years).

Teaching Experience	The Number	SMA	Standard Deviation	Value (v)	Degrees of Freedom	Significance Level
Less than 10 years	347	3.75	0.52	0.364	597	0.394
More than 10 years	235	3.61	0.55			

The previous table (6) shows there are statistically significant differences among vocational education teachers in Jordan in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the variable of teaching experience (less than 10 years, more than 10 years), where the value of T was 0.364 respectively, which means it's not statistically significant at the significance level ($\alpha \leq 0.05$) and this is attributed to the result from vocational education teachers, regardless of their teaching experience, feel the necessity of hiring applications of artificial intelligence in the educational process this may be due to the rapid scientific, technical and technological development, which requires them to have good knowledge of artificial intelligence applications in order to be able to keep up with everything new and keep up with every development.

Results related to answering the fourth question to the study, which states

Are there any statistically significant differences at the significance level? ($\alpha = 0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the variable 'qualification' (intermediate diploma and bachelor's degree, postgraduate)"

To answer this question, the t-test was used, and the arithmetic means, and standard deviations were extracted as shown in the following Table No. 5:

Schedule (7): Test results (T) to indicate the differences in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the variable 'educational qualification' (intermediate diploma, bachelor's degree, postgraduate studies).

Qualification	The Number	SMA	Standard Deviation	Value (v)	Degrees of Freedom	Significance Level
Intermediate diploma and bachelor's degree	388	3.66	0.50	0.684	597	0.425
Postgraduate (master's and PhD)	194	3.75	0.58			

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The previous table (7) shows there are statistically significant differences among vocational education teachers in Jordan in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers in Jordan, which is attributed to the 'academic qualification' variable (intermediate diploma, bachelor's degree, postgraduate studies), where the value of T was 0.684 respectively, which means it's not statistically significant at the significance level ($\alpha \leq 0.05$) and this may be attributed due to the result until teachers with various academic qualifications, whether at the first university level or even those holding graduate degrees, are well aware of the importance of possessing technological skills, especially artificial intelligence applications, which are considered among the latest technological technologies at the present time.

Conclusions

In light of what the results indicated, the researcher concludes the following

1. The degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers may come with a degree (a task) on the scale as a whole, with an arithmetic average of 3.44 and a standard deviation of 0.62.

2. There are no statistically significant differences at the significance level ($\alpha \leq 0.05$), the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers, which is attributed to the gender variable.

3. There are statistically significant differences at the significance level ($\alpha \leq 0.05$) in the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers, which attributed to the 'scientific qualification' variable for teacher.

4. There are statistically significant differences at the significance level ($\alpha \leq 0.05$), the degree of importance of employing artificial intelligence applications in the educational process from the point of view of vocational education teachers which attributed to the 'teaching experience' variable of the teacher.

Recommendations and suggestions

In light of the results of the study, the researcher suggests the following:

- I am directing the attention of my vocational education teachers to the importance of acquiring knowledge and skills about artificial intelligence and its applications.

- Directing decision-makers and educational planners to the importance of employing artificial intelligence applications in the educational process.

- Providing the educational environment with the necessary applications and devices for employment with techniques using artificial intelligence in education.

- Holding training courses for vocational education teachers to familiarize them with the applications of artificial intelligence and to provide them with skills to employ them in the educational process.

- Procedure studies similar to the study present and general education teachers from different specializations with different variables.

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