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Rulings pertaining to the Utilisation of Artificial Intelligence (AI) Applications in Scholarly Research

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Rulings pertaining to the Utilisation of Artificial Intelligence (AI) Applications in Scholarly Research

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Abstract

The concept of this study is centred around clarifying the rulings pertaining to the utilisation of artificial intelligence (AI) applications in scholarly research, while **the importance of this study lies** in the significance of both scholarly research and artificial intelligence (AI), and contributes towards enriching the corpus of Islamic jurisprudence, while clarifying contemporary

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matters and recurrent inquiries along with the rulings of Islamic jurisprudence related to them. **The problem of the study is** embodied in the extent to which utilising (AI) applications in scholarly research is permissible, and identifying what the guidelines in Islamic jurisprudence that ensure the sound utilisation of artificial intelligence (AI) in scholarly research. **This study aims to clarify the extent to** which utilising (AI) applications in scholarly research is permissible and clarifying the role of Islamic jurisprudence in regulating and supporting the procedures of utilising artificial intelligence (AI) applications in the field of scholarly research. The nature of this study necessitated following the descriptive, **analytical methodological** approach. **This study reached to include:** By default according to Islamic law (*Sharī'ah*) it is permissible to utilise (AI) in scholarly research, as long as the scriptural rulings and restrictions are adhered to. The study also clarified that is not permissible to utilise (AI) applications to compose the body text of the study on behalf of the researcher while attributing it to the researcher, whereas it is allowed to utilise (AI) applications to complement scholarly research. **The researcher of this paper holds the view that** it is vital to combine between the technologies of artificial intelligence (AI) and human effort in scholarly research.

Key words: rulings, applications, artificial intelligence, scholarly research.

أحكام استخدام تطبيقات الذكاء الاصطناعي في الأبحاث العلمية

د. آلاء عادل العبيد (*)

تاريخ الاستلام يناير 2024

تاريخ الإجازة: فبراير 2024

ملخص البحث

تقوم فكرة البحث على بيان أحكام استخدام تطبيقات الذكاء الاصطناعي في الأبحاث العلمية، وتتبع أهمية البحث من أهمية البحث العلمي، وأهمية الذكاء الاصطناعي، وفي المساهمة بإثراء المكتبة الفقهية، وبيان النوازل والمسائل المستجدة، والأحكام الفقهية المتعلقة بها، وتتمثل إشكالية البحث في مدى جواز استخدام تطبيقات الذكاء الاصطناعي في الأبحاث العلمية، وما الضوابط الشرعية التي تضمن توظيف الذكاء الاصطناعي في الأبحاث العلمية، وما التوصيف الشرعي لتوظيف تطبيقات الذكاء الاصطناعي في البحث العلمي، ويهدف البحث إلى بيان مدى شرعية استخدام تطبيقات الذكاء الاصطناعي في مجال البحث العلمي، وإبراز دور الفقه في ضبط ودعم إجراءات استخدام تطبيقات الذكاء الاصطناعي في مجال البحث العلمي، مع بيان التوصيف الشرعي لتوظيف تطبيقات الذكاء الاصطناعي في البحث العلمي، وقد اقتضت طبيعة البحث أن أسلك المنهج الوصفي التحليلي، ومن أبرز النتائج التي توصلت لها: أن الذكاء الاصطناعي وسيلة مهمة ومعاصرة في خدمة الأبحاث العلمية،

(*) د. آلاء عادل العبيد: تحمل شهادة دكتوراه (١): في المالية والمصرفية الإسلامية من الجامعة الإسلامية العالمية بماليزيا بتقدير ممتاز مع مرتبة الشرف الأولى، سنة ٢٠١٦م، تحمل شهادة دكتوراه (٢) في الفقه المقارن وأصول الفقه بتقدير ممتاز مع مرتبة الشرف الأولى، سنة ٢٠١٩م،، والماجستير في الفقه المقارن وأصوله من جامعة الكويت سنة ٢٠٠٩م. بتقدير ممتاز مع مرتبة الشرف، عضو هيئة التدريس بقسم الفقه المقارن في كلية الشريعة بجامعة الكويت منذ عام ٢٠١٦م، محاضرة ومدرسة معتمدة في فقه المعاملات المالية والمصرفية الإسلامية، عضوة في عدد من اللجان، نشرت ٢٠ بحثاً علمياً محكماً، وحكمت عدداً من الأبحاث، ولها عدد من الأنشطة البحثية، الاهتمامات البحثية: الفقه المقارن، أصول الفقه، القواعد والنظريات الفقهية، المعاملات المالية المعاصرة، الاقتصاد الإسلامي.

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حقوق الطبع والنشر محفوظة - مجلس النشر العلمي - جامعة الكويت

وأن الأصل في استخدام الذكاء الاصطناعي في الأبحاث العلمية الجواز من الناحية الشرعية؛ إذا روعيت فيه الضوابط والأحكام المنصوص عليها، وبين البحث عدم جواز استخدام تطبيقات الذكاء الاصطناعي في كتابة أصل البحث عن الباحث ونسبته للباحث؛ ولكن يمكن استخدام تطبيقات الذكاء الاصطناعي في مكملات البحث العلمي؛ وترى الباحثة أهمية المزج بين تقنيات الذكاء الاصطناعي والدعم البشري في البحث العلمي، وتعريف الباحثين بأهمية هذه التطبيقات، مع بيان الضوابط والمحظورات الشرعية، وتقترح إطلاق أنظمة وتطبيقات مدعومة بالذكاء الاصطناعي لدعم البحث العلمي، مع تفعيل الحماية الدولية للحقوق الفكرية في مجال البحث العلمي، ووضع قوانين صارمة، وربطها بتوجيهات الشريعة الإسلامية.

الكلمات المفتاحية: أحكام - تطبيقات - الذكاء الاصطناعي - البحث العلمي.

Introduction

All praise is due to the Lord of the entire world, and may Allah exalt the mention of, and bestow peace upon, the most noble of creatures and the master of messengers, our master Muhammad, and upon all of his companions. Thereafter,

Artificial intelligence (AI) is considered to be among the forms of modern technology that is characterised with rapid advancement and evident impact on various fields. Among these fields is academic research. Artificial intelligence (AI) applications have demonstrated an evident role in collecting scholarly material, data analysis, composing studies, working on revealing results, refereeing studies, and many other tools with uses which have varied and branched out.⁽¹⁾ Hence, it is of utmost importance to study the rulings pertaining to the utilisation of artificial intelligence (AI) applications in scholarly research.

Importance of the Study Topic:

- The importance of this study stems from the significance of both scholarly research and artificial intelligence (AI), to ensure benefiting from these applications in a way that respect human values and preserves intellectual property.
- This study also reflects the extent to which Islamic jurisprudence pays attention to the intellectual field and its recurrent inquiries, and what such represents in contributing towards enriching the

(1) Bonnet, Alain, Artificial Intelligence: Promise and Performance. Translated by 'Alī Šabrī Farghalī, Silsilah 'Ālam al-Ma'rifah, Edition 172, 1993, p. 11.

both global literature and that of Islamic jurisprudence.

- This study contributes towards updating understanding within Islamic jurisprudence and its applications in the light of contemporary developments and changes.

Problems of the Study:

1. What are the applications of artificial intelligence (AI) that have an impact on the field of scholarly research?
2. What are the rulings of Islamic jurisprudence related to utilising artificial intelligence (AI) applications in the field of scholarly research?
3. Has Islamic jurisprudence regulated and supported the procedures of utilising artificial intelligence (AI) applications in the field of scholarly research? And what are the boundaries and directions of such regulation?

Objectives of the Study:

- Identifying the artificial intelligence (AI) applications utilised in the field of scholarly research.
- Reaching to the rulings of Islamic jurisprudence pertaining to the utilisation of artificial intelligence (AI) applications in the field of scholarly research.
- Projecting the role of Islamic jurisprudence in regulating and supporting the procedures of utilising artificial intelligence (AI) applications in the field of scholarly research.

Previous Research Papers:

According to the literature that has been reviewed, the researcher has not found any research paper which specifically focuses

on the rulings pertaining to utilising artificial intelligence (AI) applications in scholarly research; however, there are a few studies that this study has benefited from in some aspects, as follows:

1. The Role of Artificial Intelligence (AI) in Scholarly Research (*Dawr al-Dhakā' al-Isṭinā'ī fī al-Baḥth al-ʿIlmī*), by two researchers: Īnās ʿAbd ul-Razzāq ʿAlī, and Surrah Ṭāhā Yāsīn (2016). It aimed to define the concept of artificial intelligence (AI), its stages, its advantages, its defects, and the role of artificial intelligence (AI) in contemporary research, while identifying the risks of artificial intelligence (AI) and its applications in modern education. The most prominent findings included that artificial intelligence (AI) shapes a huge advancement in scholarly research methods, and that there is a vital need to come up with effective plans to train and equip researchers.

This research paper differs from the topic of this current study, as this current study deals with the aspect of Islamic jurisprudence pertaining to the utilisation of artificial intelligence (AI) and does not merely touch upon artificial intelligence (AI) in a general manner.

2. Artificial intelligence (AI) and Its Impact on the Formation of Religious Rulings 'Fatwā' (*Al-Dhakā' al-Isṭinā'ī wa Atharuhu fī Ṣinā'ah al-Fatwā*), by ʿUmar bin Ibrāhīm bin Muḥammad, Journal of the Saudi Fiqh Association, volume 22, edition 57, (30 April 2022). In his study, he advocated for the establishment of a free-of-charge application through which artificial

intelligence (AI) is utilised in the issuing of religious rulings (*fatwā*), and that such an application would be connected to the role of issuing such religious rulings (*fatwā*), as well as concluding that artificial intelligence (AI) can be applied to other branches too such as creed and linguistics.

This research paper differs from the topic of this current study, as this current study touches upon an aspect that his research paper did not, which is namely the aspect of scholarly research and the regulations pertaining to utilising artificial intelligence (AI) in this endeavour from the perspective of Islamic law (*Sharīʿah*).

3. Inquiries of Islamic Jurisprudence Pertaining to Robots (*Al-Masā'il al-Fiqhīyah al-Muta'alliqah bil-Shakhṣ al-Ālī al-Robot*), by ʿĀdil bin Shuqayr al-Murshidī. This is a thesis submitted to attain a master's degree from the High Judiciary Institute at the Imam Muhammad Ibn Saud Islamic University.

This research paper differs from the topic of this current study, as this research paper focuses on robots, whereas artificial intelligence (AI) includes robots and other forms of systems and apparatus. Furthermore, this research paper did not touch upon the issue of scholarly research and the regulations pertaining to utilising artificial intelligence (AI) in this endeavour from the perspective of Islamic law (*Sharīʿah*).

Study Methodology:

In order to achieve its objectives, this study relied upon the descriptive, analytical approach due to such being the most suitable for this study, through which data related to the topic of this study

can be collected, arranged, analysed, and interpreted, concluding with results that can be generalised. Qualitative research will specifically be used in doing comprehensive research and study on the relevant materials from primary and secondary sources, journals, articles, books.

Study Limitations:

This study did not clarify all the aspects of rulings pertaining to artificial intelligence (AI). It was confined to clarifying its tools and rulings related to one of its fields of application, namely scholarly research.

Study Outline:

1. Preface: Defining artificial intelligence (AI) and scholarly research
 - 1.1 The concept and definition of artificial intelligence (AI)
 - 1.2 The concept and definition of scholarly research
2. The First Subheading: The fields of utilising artificial intelligence (AI) applications in scholarly research
 - 2.1 Utilising artificial intelligence (AI) applications prior to writing a research paper
 - 2.2 Utilising artificial intelligence (AI) applications while writing a research paper
 - 2.3 Utilising artificial intelligence (AI) applications in the finishing draft of a research paper
 - 2.4 Utilising artificial intelligence (AI) applications after completing a research paper
3. The Second Subheading: The rulings and regulations pertaining

to utilising artificial intelligence (AI) applications in scholarly research

3.1 Rulings pertaining to utilising artificial intelligence (AI) applications in scholarly research

3.2 Regulations pertaining to employing artificial intelligence (AI) applications in scholarly research

3.3 The *Sharī'ah*-based prescription in employing artificial intelligence (AI) applications in scholarly research

4. The conclusion: This includes the most important results and recommendations

And with that, I praise Allah for His complete grace and His immense bounties, and may Allah exalt the mention of, and bestow peace upon, our prophet Muhammad, and upon his household and all of his companions.

Preface Defining artificial intelligence (AI) and scholarly research

1.1 The concept and definition of artificial intelligence (AI)

1.1.1 artificial intelligence (AI) as a whole concept defining artificial intelligence (AI) as individual words:

Linguistically the word *al-dhakā*' (i.e. intelligence) means the perfection and completion of something⁽¹⁾, and it was said that *al-dhakā*' is the speed with which results are suggested. It is also said '*rajukun dhakī*' when one has full comprehension, and understands and realises matter quickly, being swift in judgement and intense in intuition.⁽²⁾

From a **conceptual perspective, *al-dhakā*' (i.e. intelligence)** has been said to be the ability to think abstractly, or the ability to psychologically adapt to new problems and situations. Some aggregate these definitions, hence defining it as the ability to learn and apply what has been learned to adapt to new situations and to solve new problems, or general mental abilities.⁽³⁾

The common ground between the linguistic and conceptual definitions is that whoever is characterised as having swift comprehension and deep insight would have the ability to learn

(1) Refer to: Al-ʿAyn, by Al-Farāhīdī (5) (339), the root (dha-ka-wa); Al-Zāhir fī Gharīb Alfāz al-Shāfiʿī, by Al-Harawī (page 263); Maqāyīs al-Lughah, by Ibn Fāris (2) (357,358).

(2) Ibn Manẓur, Abū al-Faḍl Jamāl al-Dīn Muḥammad bin Manẓur, Lisān al-ʿArab, Ṣadīr Publishing House, Beirut, 1414 AH, 3rd edition, 13th volume, page 73.

(3) Abū al-ʿAzam, ʿAbd ul-Ghanī, Muʿjam al-Ghanī, al-Ghanī Establishment for Publications, Rabat, 2013, 1st edition, 1st volume, page 12516.

from previous situations, solve new problems, and adapt to new developments.⁽¹⁾

Al-Iṣṭināʿ (i.e. **artificial**) is that which has been produced and is not natural⁽²⁾, as it is said *‘wardun iṣṭināʿī’* and *‘qamarun iṣṭināʿī’*. As for the words *ṣināʿī* and *iṣṭināʿī*, they both refer to something that resembles natural things, except that *ṣināʿī* is an identical copy of that which is natural, whereas *iṣṭināʿī* is different than that which is natural; therefore, it is more eloquent to use the word *iṣṭināʿī* in the context of artificial intelligence (AI), because the materials used in constructing it are non-existent in natural intelligence, which includes nerves and that which the human brain consists of.⁽³⁾

1.1.2 Defining artificial intelligence (AI) as a whole concept:

There are various expressions used by scientists in defining the concept of artificial intelligence (AI), which include the following definitions:

It has been defined as ‘the ability to build machines capable of carrying out tasks that require human intelligence’.⁽⁴⁾ It has

(1) Refer to: Uṣūl ‘Ilm al-Nafs, by Prof. Dr. Aḥmad ‘Izzat Rājīh (page 311); Al-Dhakā’ wa al-Furūq al-Fardīyah, by Māhā al-‘Assāf (page 4); and Al-Ma‘āni Muṣṭalahāt fī ‘Ilm al-Nafs, by Dr. Bid‘ al-‘Ashāqilah (page 59).

(2) ‘Umar, Aḥmad Mukhtār, Mu‘jam al-Lughah al-‘Arabīyah al-Mu‘āṣir, Al-Ma‘ārif Publishing House, 2008, 2nd volume, page 1363. Refer also to: Mūsā, ‘Abdullāh, Al-Dhakā’ al-Iṣṭināʿī: Thawrah fī Tiqānīyāt al-‘Aṣr, Al-Majmū‘ah al-‘Arabīyah for Training and Publication, 2019, page 18.

(3) Refer to: Al-Mu‘jam al-Wasīṭ, by the Academy of the Arabic Language in Cairo (525/1), the root (ṣa-na-‘a).

(4) Ṭalbah, Muḥammad Fahmī, Al-Ḥāsib wa al-Dhakā’ al-Iṣṭināʿī, Delta Books Collection, 2000, page 28.

also been defined as ‘the aggregation of appliances or systems designed to simulate human intelligence with the purpose of carrying out certain tasks based on the information it gathers’.⁽¹⁾ It has also been said that it refers to ‘computation systems capable of carrying out functions similar to that which humans do, including education, adaptation, synthesis, self-correction, and the use of data in complex processing tasks.’⁽²⁾

It has been noticed that the disparity in defining artificial intelligence (AI) stems from differences in defining human intelligence in general. One may define artificial intelligence (AI) as: A system of computation that aims to innovate new capabilities that simulate the mental capabilities of the human brain, which includes planning, making conclusions, suggesting solutions and implementing them, in order to provide services that did not previously exist.

Artificial intelligence (AI) is the result of the intelligence that it is fed with by humans, so the extent of equations and data that it is fed with reflects on the extent to which it can carry out smart tasks.⁽³⁾

1.2 The concept and definition of scholarly research

(1) Refer to: Al-Qāḍī, Ziyād ‘Abd ul-Karīm, Muqaddimah fī al-Dhakā’ al-Iṣṭinā’ī, Al-Mujtama’ al-‘Arabī Library, Amman, 1431 AH, page 16.

(2) Refer to: Ghāzī, ‘Izz al-Dīn, Al-Dhakā’ al-Iṣṭinā’ī: Hal Huwa Tiknolojīyā Ramzīyah? The Faculty of Humanities, Fikr al-‘Ulūm al-Insānīyah wa al-Ijtimā’īyah Journal, Fas, 6th edition, 2007, page 44.

(3) Limao, Zhang., Yue, Pan., Xianguo, Wu., Mirosław, J., Skibniewski. (2021). Introduction to Artificial Intelligence. 1-15.

1.2.1 Defining scholarly research as individual words:

Linguistically the word *al-baḥṭh* (i.e. researching) centres on seeking something, as in the saying of the Most Exalted, ‘Then Allah sent a crow digging [a grave] in the ground [for a dead crow], in order to show him how to bury the corpse of his brother.’ [The Holy Qur’ān, 5:31] – meaning to inspect.⁽¹⁾

Conceptually, *al-baḥṭh* (i.e. researching) has been defined as striving to answer a problem in accordance with credible scientific methodologies.⁽²⁾

The word *‘Ilmī* (i.e. scholarly) is derived from *‘Ilm* (i.e. knowledge), which linguistically means certainty, and it also comes with the meaning of knowing.⁽³⁾

Conceptually, it is realising something as it is with sheer perception⁽⁴⁾, as perception could reach to the level of certainty which is the highest degrees of knowing, while it could reach the level of speculation.⁽⁵⁾

1.2.2 Defining scholarly research as a whole concept:

Conceptually, *al-baḥṭh* (i.e. researching) has been defined as exerting structured mental effort in solving a certain problem or issue through inspection, verification, surveying, analysing,

(1) Mukhtār al-Siḥāḥ, by Al-Rāzī, page 29; Al-Miṣbāḥ al-Munīr, by Al-Fayyūmī, page 36.

(2) Refer to: Al-Baḥṭh al-‘Ilmī, Khuṭṭatuh, wa Aṣālatuh, wa Natā’ijuh, Al-Quds Open University Journal, 20, 87.

(3) Al-Miṣbāḥ al-Munīr, by Al-Fayyūmī, 427/2.

(4) It has other definitions. Refer to: Al-Ta’rīfāt, by Al-Jirjānī, page 155; Sharḥ Mukhtaṣar al-Rawḍah, by Al-Ṭūfī, 168/1.

(5) ‘Aqd al-Baḥṭh al-‘Ilmī bayn al-Nazarīyah wal-Taṭbīq, by Jamāl Sayyid, page 49.

comparing, presenting, and criticising in accordance with credible scientific methodologies.⁽¹⁾ It can also be defined as ‘the aggregation of processes that the researcher adheres to in order to solve a scholarly issue.’⁽²⁾

(1) Manāhij al-Baḥth al-‘Ilmī, by Muḥammad ‘Ukkāshah, page 116.

(2) Refer to: ‘Aqd al-Baḥth al-‘Ilmī bayn al-Nazarīyah wal-Taṭbīq, by Jamāl Sayyid, page 60.

First Chapter

The fields of utilising artificial intelligence (AI) applications in scholarly research

2.1 Utilising artificial intelligence (AI) applications prior to writing a research paper

The utilisation of artificial intelligence (AI) in scholarly research is considered to be a groundbreaking development. Artificial intelligence (AI) systems have the ability to assist researchers before commencing the writing of research papers by collecting scholarly material during the initial search for resources and studies relevant to the topic of the study while automatically compiling them and analysing huge amounts of data with impeccable speed and precision. These applications provide various options for searching, and present the best results about the study points that interest researchers. These applications even provide the ability to extract hidden information within the data. Such searches include resources in various languages with the option to translate the results into the Arabic language, in addition to searching through the contents of texts and files (data search), and reading PDF files taken from search engines. This also includes the notifications feature that presents additional information in the future about any new developments that relate to the researcher's interests. These applications also provide researchers the feature of directing questions about a particular aspect of the search, and subsequently offering answers while indicating the location within a research paper, without the need to read through the entire research paper

to reach certain information, which as a result saves the researcher a lot of time and effort.⁽¹⁾

Furthermore, artificial intelligence (AI) also carries out spoken or written speech analysis. It analyses sound files, considering that it consists of a sequence of sound units known as phonemes, analysing that which is written in letter, then analysing the words, then the sentences; however, this analysis contains many errors due to the contrast between the structure of meaning in sentences compared to that of individual words, in addition to the various meanings words can have.⁽²⁾

Also, some artificial intelligence (AI) systems can assist the researcher in choosing the correct methodology of their study and ways to implement it, and arranging previous studies by taking another look at these studies along with their references, while suggesting to the researcher what can be presented, while also deriving and developing ideas for future studies, which assists the researcher to carry on where others ended. Artificial intelligence (AI) also provides the researcher with advanced methods to analyse the data it had aggregated and to extract complex patterns and directions unseen to the naked eye. For instance, in the field of biology, artificial intelligence (AI) has the ability to analyse the genome and determine the relationship between genes and

(1) <https://chat.openai.com/>

(2) Refer to: Naẓarīyah al-Fūnīm fī al-Lughah, Dr. Intiṣār al-Ṭayyārī, Al-Majallah al-Jāmi'ah, 20th edition, page 56.

illnesses with immense speed, which better enables researchers to navigate strategies towards findings cures.⁽¹⁾

These systems can also extract all scholarly material and previous ideas, compiling them into a Word file which can be edited with full referencing, which makes it easier for the researcher to write their study with ease, saving time and effort.⁽²⁾

2.2 Utilising artificial intelligence (AI) applications while writing a research paper

2.2.1 Benefitting from natural language processing (NLP)⁽³⁾

Researchers can benefit from the natural language processing (NLP) feature available in computers to comprehend and analyse human language to carry out research tasks as follows:

1. Categorising academic texts in accordance with topic or category.
2. Analysing academic texts and extracting information from them.
3. Comprehending scholarly texts in various languages.
4. Improving the quality of the study from a linguistic perspective.⁽⁴⁾

2.2.2 Benefitting from artificial intelligence (AI) in analysing and categorising data, as follows:

(1) Fabio, Morandín-Ahuerma. (2022). What is Artificial Intelligence?. International Journal of Research Publication and Reviews, 03(12):1947-1951.

(2) Refer to: <https://typeset.io>

(3) Natural language processing (NLP) is within the field of computer and linguistic sciences, and it focuses on the interactions between computers and human languages.

(4) <https://harpa.ai/>

1. Filtering, organising, and arranging data into clear, relevant groups.
2. Assisting in reaching to clear results that are easy to read.
3. Revealing deviations and amending them.⁽¹⁾

2.2.3 Benefitting from artificial intelligence (AI) in analysing pictures and videos:

This is accomplished by:

1. Accurately identifying of living creatures within photos and video clips. This feature helps researchers particularly in the field of medical research and analysing satellite images.⁽²⁾
2. Automatically copying of the sound contents of video clips, and that saves the researcher's time and effort.
3. Summarising content and extracting vital information from it without needing to watch the entire video.⁽³⁾

2.2.4 Benefitting from artificial intelligence (AI) in summarising books:

In scholarly research, summarising books is considered to be among the vital matters that artificial intelligence (AI) assists the researcher in achieving, as it takes the burden of summarising texts off the researcher through quotational summarisation. This is done by quoting the most important sentences and concepts mentioned without including unnecessary details. This strengthens the ability

(1) <https://www.perplexity.ai/>

(2) <https://glasp.co/>

(3) <https://vizard.ai/>

to reach information faster, saving the researcher time and effort.⁽¹⁾

2.2.5 Benefitting from artificial intelligence (AI) in generating and arranging content:

Artificial intelligence (AI) technologies assist the researcher in strengthening the process of writing by generating academic content, composing academic texts, and paraphrasing research papers, academic articles, and postgraduate theses. These systems analyse the sources of knowledge and utilise them to generate new content in an academic style.⁽²⁾

These applications also offer the feature of managing references and resources, which enables the researcher to refer back to them when writing the research paper, and organising and arranging them according to the way preferred by the researcher, whether that is according to the topic of the study, the study's author, the publisher, or the year of publication. It also offers the option of searching within references and jotting down notes regarding these points. These applications also carry out the statistical analysis of data in a swift and effective way, in addition to generating recommendations for researchers based on the analysis of available data and information.⁽³⁾

(1) AskYourPDF AI PDF Chat

(2) <https://www.perplexity.ai/>

(3) Zotero, EndNote , Mendeley

2.2.6 Benefitting from artificial intelligence (AI) in carrying out experiments and simulations:

Artificial intelligence (AI) can assist in carrying out scientific experiments in an automated and effective manner by designing a plan for the experiment, defining the variables, and coming up with the results. Artificial intelligence (AI) can also assist in the simulation of various circumstances and situations, as it utilises prototyping in order to reveal the process or behaviour of a complex system. Additionally, artificial intelligence (AI) can improve and develop things which actually exist, as it works to adjust, improve, or simplify methods, appliances, or applications, rendering better and swifter results, and subsequently accelerating the pace of scientific advancement.⁽¹⁾

2.3 Utilising artificial intelligence (AI) applications in the finishing draft of a research paper

Researchers can benefit from artificial intelligence (AI) technologies in the finishing draft stage of a research paper in several ways, such as:

2.3.1 Benefitting from artificial intelligence (AI) in proofreading and editing texts:

Artificial intelligence (AI) applications serve the researcher in writing their research paper. It provides instructions on the general form and organisation of the text, suggests relevant words and expressions, assists in composing and formatting the text, and

(1) <https://bard.google.com/chat>

processes the written texts in terms of spelling and syntax. There are dedicated tools for correcting spelling and syntax errors and designing templates. The source of these systems is a corpus of texts that reflect the actual usage of the language which it regards as a blueprint for linguistic correction. Numerous artificial intelligence (AI) tools that assist in proofreading the syntax and spelling of texts and words have recently appeared, providing corrective features for texts and providing the most suitable options in terms of spelling and syntax, while offering support for various languages.⁽¹⁾

2.3.2 Benefitting from artificial intelligence (AI) in translating texts:

These applications provide the feature of automatically translating texts. Compared to conventional computer translation, translations rendered by artificial intelligence (AI) are characterised with uniquely translating the entire text through the context of the discourse, and not through the literal translation of each word on its own, which subsequently reduces the amount of mistakes.⁽²⁾

2.3.3 Benefitting from artificial intelligence (AI) in illustrations:

These applications serve researchers by illustrating their ideas and results in the form of schemas and graphs, and by generating mind maps, illustrative drawings, and presentation slides.⁽³⁾

(1) Grammarly , Essay Bot, Kattab, Rytr

(2) Wordfast, MemoQ

(3) Mindiy, Context Minds

2.4 Utilising artificial intelligence (AI) applications after completing a research paper

The role of artificial intelligence (AI) is not confined to preparing the research paper, but rather it extends to other services beyond that, such as choosing the most suitable journal for the researcher to publish their study in according to their academic field, while also enabling researcher to share ideas and research results, leading to the enrichment of databases and the achievement of more efficient and effective research results.

These applications also assist academic journals in supporting their global distribution, in elevating the global ranking of these journals, in bringing resources closer to researchers, in converting studies which are hard to circulate into electronic texts which are easy to circulate (digitalisation), which as a result facilitates reaching them anywhere in the world, and in increasing the frequency of citation, which subsequently assists in elevating the ranking of academic journals and universities. These applications are also utilised in processes that verify the authenticity of research papers by analysing citation and referencing, scanning, and detecting plagiarism, which subsequently has a positive impact on the quality of the studies. Artificial intelligence (AI) applications also offer the ability to generate a summary for each book or research paper after digitalisation into various languages to facilitate their use and increase their global distribution.⁽¹⁾

(1) CiteSpace

All this makes artificial intelligence (AI) a vital tool in enhancing academic research by enabling researchers to reach new levels of analysis and comprehension in various academic fields.

Second Chapter

The rulings and regulations pertaining to utilising artificial intelligence (AI) applications in scholarly research

3.1 Rulings pertaining to utilising artificial intelligence (AI) applications in scholarly research

Knowledge has a revered and esteemed position in Islam. The knowledge that Islam advocates is not exclusively confined to religious knowledge, but rather it encompasses all forms of beneficial knowledge throughout various temporal disciplines. Based on that, it can be said that there is no objection to utilising artificial intelligence (AI) as a form of knowledge. There is also no objection to using its applications in scholarly research, given that such usage is free from matters prohibited in Islamic law (*Shari'ah*). Scriptural evidence of the permissibility of utilising artificial intelligence (AI) applications in scholarly research can be found in the Qur'ān, in Prophetic narrations, and through common sense.

3.1.1 In the Qur'ān:

1. He, the Most Elevated, said, 'Do you not see that Allah has subjected to you whatever is in the earth...' [The Holy Qur'ān, 22:65]

The aspect of evidence: This Qur'ānic verse includes everything that Allah subjected on the face of the earth and beneath it, such as fruits, energy, treasures, and so forth, in order to benefit from

them.⁽¹⁾ Artificial intelligence (AI) technologies are among those bounties that have been subjected for the service of humanity; therefore, it is among the permissible and there is no objection to utilising it.

2. He, the Most Elevated, said, ‘...and made the word of the disbelievers lowest, while the Word of Allah is supreme...’
[The Holy Qur’ān, 9:40]

The aspect of evidence: Muslims must be in pace with contemporary applications, because whoever masters these technologies shall have academic, economic, and political dominance on earth, and Allah, the Most Exalted, wants His Word to be supreme.

3.1.2 Evidence from Prophetic narrations:

Regarding the Battle of the Trench (*Ghazwat ul-Khandaq*), the historians of battles mentioned that the person who suggested digging the trench was Salmān the Persian, who said, ‘O Messenger of Allah! Indeed, in Persia whenever we were besieged we would dig a trench around us.’⁽²⁾ Through this action, the Messenger, may Allah exalt his mention and bestow peace upon him, revealed that it is permissible to benefit from that which comes from others⁽³⁾, under the condition that it does not violate the noble Islamic law (*Shari‘ah*). This stands as evidence that it is permissible to utilise

(1) Al-Tafsīr al-Wāḍiḥ, Muḥammad Maḥmūd Hījāzī, Al-Jīl al-Jadīd Publishing House, Beirut, (427/3).

(2) Al-Jāmi‘ al-Kāmil, Al-A‘ẓamī, 317/8.

(3) Mawāqif Ḥalafa fīha al-Nabī Ṣallā Allāhu ‘alayhi wa Sallam, Khamīs al-Sa‘īd (60).

that which comes from others if such achieves a considerable benefit to Muslims, and there is no doubt that utilising these artificial intelligence (AI) applications falls within this general category.

3.1.3 Through common sense:

Utilising artificial intelligence (AI) applications is considered to be among the common practices (*Al-ʿĀdāt*) regarding which common sense can be applied in justifying the rulings related to it, unlike some ritual worships (*Al-ʿIbādāt*) which the Legislator (i.e. Allah) had decreed to be followed without interpretation.⁽¹⁾ The utilisation of artificial intelligence (AI) applications is regarded to be among the contemporary beneficial sciences which are free from prohibitions in Islamic law (*Sharīʿah*). The default stance towards common practices (*Al-ʿĀdāt*) which people have become accustomed to in their temporal lives and have a need for is permissibility, as long as there is no scriptural evidence that proves the opposite.⁽²⁾ Ibn Taymīyah, may Allah have mercy upon him, said, ‘I am unaware of any dispute among any of the scholars before me that anything which does not have scriptural evidence stating that it is prohibited is absolutely [permissible] without any restrictions.’⁽³⁾

– Bringing ease to researchers and removing hardships from

(1) Majmūʿ al-Fatāwā, by Ibn Taymīyah, 346/29; Iʿlām al-Muwaqqiʿīn, by Ibn al-Qayyim, 259/1.

(2) Al-Shāṭibī, Al-Muwāfaqāt, 165/2.

(3) Majmūʿ al-Fatāwā, 538/28.

- them is among the objectives of Islamic law (*Sharīʿah*), as mentioned by Him, the Most Glorious and Manifest, ‘...Allah intends ease for you, not hardship...’ [The Holy Qur’ān, 2:185]. And ‘Ā’ishah, may Allah be pleased with her, said, ‘Whenever the Prophet, may Allah exalt his mention and bestow peace upon him, was given a choice between two matters, he would [always] choose the easier as long as it was not sinful to do so...’⁽¹⁾ Hence, providing simplified, facilitated services through available technology may bring relief to many researchers, in addition to consecutiveness and swiftness in accomplishment.
- It is also regarded as common sense to achieve benefits from utilising artificial intelligence (AI) applications. Overall, they benefit the interests of anyone who utilises them, while the risks of utilising them are rare and limited. The legitimate interest in using of any tool or technology is outstanding and strong. The scriptural texts advocate acquiring anything that brings benefit to the people and removing anything that has been proven to be harmful and corrupt. Indeed, the objectives of Islamic law (*Maqāṣid al-Sharīʿah*) exclusively focus on achieving the welfare of people in the two worlds (temporal and hereafter).⁽²⁾

3.1.4 Utilising artificial intelligence (AI) applications in the body text of scholarly research:

(1) Al-Bukhārī, 2736.

(2) Refer to: Al-Muwāfaqāt, 9/2.

As previously revealed in the definition, scholarly research refers to a structured method through which the researcher endeavours to reveal information,⁽¹⁾ and the research paper grants the researcher monetary and symbolic rights as a result of the output of their specialised capabilities. Such intellectual property is considered to be wealth preserved for its owner according to Islamic law (*Sharī'ah*), with guarantees and systems in place to preserve it, making it exclusive for their owners from which they can benefit during their lifetime and their next-in-kin can benefit from after their life.⁽²⁾ Therefore, it is not permissible under Islamic law (*Sharī'ah*) to present work generated by artificial intelligence (AI) applications as the researcher's own work, as some researchers do so by utilising artificial intelligence (AI) applications in composing academic text on behalf of the researcher, benefiting from artificial intelligence (AI) in generating and formatting the entire content, after which the researcher attributes the study to themselves. The same ruling applies whether the entire work or part of it is attributed to others, or whether artificial intelligence (AI) applications are the foundation of the study, replacing the researcher in composing the research paper. This is so for the

(1) 'Ammār Qandiyājī, *Al-Baḥṭh al-'Ilmī wa Istikhdām Maṣādir al-Ma'ālūmāt*, (Jordan, Al-Bārūdī al-'Ilmīyah Publishing House, 1999), page 5.

(2) Refer to: Ḥaqq al-Ibtikār fī al-Fiqh al-Islāmī al-Muqāran (pages 126; 136 and beyond); Dr. 'Abd ul-Ḥalīm al-Jundī and Al-Shaykh 'Abd ul-'Azīz 'Īsā, *Al-Ḥuqūq al-Ma'nawīyah*, as part of the papers of the Fifth Session of the Islamic Jurisprudence Council's Conference held in Jeddah, *Al-Majma' Journal*, 5th edition, (2458/3).

following reasons:

1. Because understanding the rulings requires experience, induction, and critical thinking. These skills are unique to the human brain and not to such applications.
2. Because academic work expresses the comprehension and effort of the researcher. Using artificial intelligence (AI) applications to carry out composition is considered to be cheating and deception which goes against Islamic law (*Shari'ah*), based on his saying, may Allah exalt his mention and bestow peace upon him, 'The one who boasts of receiving what he has not been given is like him who has put on the two garments of falsehood.'⁽¹⁾ And he, may Allah exalt his mention and bestow peace upon him, said, 'If anyone claims what is not his he does not belong to us, and let him come to his seat in Hellfire.'⁽²⁾ The aspect of evidence is that the person who boasts about abundance they actually do not possess, by projecting they own what they actually do not in front of people and falsely adorning themselves with such, is reprehensible just like the one who wears two garments of falsehood, and this includes researchers who attribute to themselves research papers that

(1) Narrated by Al-Bukhārī, The Book of Wedlock, The Chapter about Consuming What is not Rightfully Earned, and That Which is Prohibited from Boasting About, Narration number 5219, 7/35.

(2) Narrated by Muslim, The Book of Faith, (The Chapter about the Status of Faith of the One Who Disregards His Father while Knowing), Narration number 112, 79/1; and by Ibn Mājah, The Book of Rulings, The Chapter about the One Who Claims What is no Theirs and Disputes about It, Narration number 2319, 777/2.

they did not actually write.⁽¹⁾

3. Because scholarly research is founded upon the knowledge and fruits of the ideas concluded by the researcher, due to which the researcher is granted monetary and symbolic rights. Receiving compensation for that which was not their own effort is considered to be sinful consumption of wealth.
4. In Islam, the mind is connected with thought, which constitutes the essence of human life. Preserving it is considered one of the five main primary objectives (*darūrīyāt*), as the rules and principles of Islamic law (*Sharī'ah*) stipulate the preservation of ownership to their rightful owners. Copying from artificial intelligence (AI) applications without the researcher carrying out any rephrasing is considered to be a violation of the intellectual rights of others, since the input of these applications comes from external research currently present on the internet which subsequently gets copied without acknowledging the references. By default, benefitting from these research papers which are present on the internet is permissible within the boundaries permitted by the contract of leasing in Islam, without permitting the researcher to attribute the intellectual production of others to themselves, which is regarded to be deception prohibited in Islam. As mentioned in the Prophetic narration attributed to him, may Allah exalt his mention and bestow peace upon him, 'If anyone comes to water, no Muslim

(1) Refer to: Sharḥ al-Nawawī 'alā Muslim, (14/110).

having come to it before him, it belongs to him.’⁽¹⁾ Hence, books are rightfully for their authors, and it is not permissible to produce anything identical to it; however, it is permissible to benefit from it by reading it, selling it, and granting it as a gift.⁽²⁾

5. Obligations pertaining to the preservation of rights have a religious basis in Islamic law (*Shari‘ah*). It is compulsory to carry out these obligations and preserve this trust. These obligations are considered to be a fulfilment of a religious obligation, whereas falling short in fulfilling these obligations is a neglect of fulfilling this religious obligation.⁽³⁾

6. Violating such rights is considered to be theft and transgression against people’s wealth and rights, and sinfully consumption of it. The fundamental rules of researchers state that all forms of intellectual cheating and plagiarism are considered to be academic crimes categorised under professional faults, where anyone convicted of such may be dismissed, decertified, and subjected to legal persecution.⁽⁴⁾

7. It is important that a researcher is characterised with upholding academic integrity in transmitting information and

(1) Narrated by Abū Dāwūd, (3071). It has a weak chain of narration. Refer to: Al-Da‘īf al-Jāmi‘, 5622.

(2) Nāsir bin Muḥammad bin Mashrī al-Ghāmīdī, Ḥimāyah al-Milkīyah al-Fikrīyah fī al-Fiqh al-Islāmī, 1st volume, page 2.

(3) Ibid.

(4) Al-Sariqah al-‘Ilmiyah Mā Hiya wa Kayfa Atajannabuhā, Imam Muhammad Ibn Saud Islamic University, in the framework of supporting education within the university, 8th edition, 1434 AH, page 9.

ascribing it to its owners. Integrity is the opposite of treason, meaning that the researcher is entrusted with the information that is in their possession just as a deposit is entrusted with a depositary to safeguard it. This is a unique character of the Muslim *Ummah*, as it is specialised in preserving the chains of narrators (*isnād*) and verifying all knowledge that is transmitted through narration or through writing and scribing.⁽¹⁾

3.1.5 Utilising artificial intelligence (AI) applications to complement scholarly research:

As previously mentioned, it is permissible to utilise artificial intelligence (AI) applications in scholarly research, providing that such utilisation is free from matters prohibited under Islamic law (*Sharīʿah*). If these technologies are utilised as an additional tool and as a method to support researchers in an aspect that serves the study, and the objective of this technique is simplifying the process while providing services with efficiency that is par with human capabilities, with there being no dangers related to implementation, or without taking the role of the researcher in their study, then there is no objection to such under Islamic law (*Sharīʿah*). This includes seeking the help of artificial intelligence (AI) applications before commencing the research paper, during the initial search for resources, during the analysis of spoken or written discourse, and in assisting the researcher in choosing the

(1) Farūq Ḥamādah, *Manhaj al-Baḥth fī al-Dirāsāt al-Islāmīyah Taʿlīf wa Taḥqīqan*, Damascus, Al-Qalam Publishing House, 1421 AH, 2000 AD, 1st edition, page 55.

most suitable methodology for their study. This also includes seeking help from artificial intelligence (AI) applications during the study process in analysing academic texts and extracting information from them, understanding academic texts in various languages, analysing photos and videos, and summarising some books; utilising these applications in the final draft of studies, in preparing questionnaires, in linguistic editing and proofreading of the printed material, in carrying out some minor formatting; and seeking the help of artificial intelligence (AI) applications after completing the research paper by choosing the most suitable publication journal. All these functions that do not substitute the researcher in carrying out their study are considered to be a blend between these applications and the efforts of the researcher, hence improving these research papers without committing any violation against Islamic law (*Shari'ah*), against international laws, or against the ethics of scholarly research.⁽¹⁾

(1) Refer to: Ḥaqq al-Ibtikār fī al-Fiqh al-Islāmī al-Muqāran (pages 126; 136 and beyond).

Third Chapter:

Regulations pertaining to the utilization of artificial intelligence applications in scholarly research

Firstly: What is meant by the regulations for utilising artificial intelligence in scientific research

Linguistically, *Dhabit* is derived from *Dhabt*, and its plural is *Dhawabit*. It is said to control something, meaning to control it and dominate on it.⁽¹⁾

What is meant by the controls for employing artificial intelligence in scientific research is:

A set of conditions, rules, and caveats that researchers must adhere to when using artificial intelligence techniques in scientific research, so that their work remains under the umbrella of legality.

Secondly: Regulations for utilising artificial intelligence applications in scholarly research

The controls that govern these applications must be taken into account, and do not deviate them from the purpose for which they were developed, as follows:⁽²⁾

Intentions and objectives: The researcher must feel that Allah SWT is watching over him, and his intention in employing artificial intelligence techniques must be permissible according to Shariah. However, if the purpose for which these tools were created is not permissible according to Shariah; the tools are forbidden, and it is

(1) Al-Faraahidi, Al-Khaleel Ibn Ahmad. (n.d.). Al-'Ain. Tabba'at Al-Qaahirah: Al-Hilaal. 7/23.

(2) Azulai, Aoudri. 2018. Linastagil Ahsan Maa Fi Al-Zakaa Al-Istinaa'I. Risaalat UNESCO, P. 36-37.

not permissible to use them.⁽¹⁾

Compatibility with Shariah: The use of these applications should not conflict with divine (Quranic) texts and objectives of Shariah, or the moral values such as cheating, taking into account the issues and areas which AI applications can research and employ; it is not permissible. For example, Using virtual reality applications for artificial intelligence to represent unseen matters, such as depicting heaven and hell, or embodying prophets and angels; this is one of the unseen matters whose nature only Allah SWT knows,⁽²⁾ and it is not linked to a political system that is hostile to Islam.

Welfare or Interest and harm: Through the use of these applications, the human welfare should be achieved and the service of religion and the world to be facilitated,⁽³⁾ and their use should not result in harm or corruption. Although the means are permissible in principle, they are forbidden if they lead to evil or harm.⁽⁴⁾

Imam Ibn al-Qayyim (may Allah have mercy on him) says: “If the Almighty Allah forbids something and He has ways and means that lead to it, then He forbids and forbids them, in fulfillment of His prohibition, confirming it, and preventing it from approaching

(1) Shalbi, Muhammad Mustafa. 1947 AD. Ta'leel Al-Ahkaam. Al-Qaahirah: Matba'at Al-Azhar, P. 382.

(2) Al-Shatri, 'Abd Al-Rahmaan. 2012. Zajr Al-Sufahaa 'An Ibaahat Tamthil Al-Sahaabah Wa Al-Anbiyaa. Al-Riyad: Daar Al-Hidaayat, P. 13.

(3) Makhdam, Karamtullah. 1999 H. Qawaaid Al-Wasaail Fi Al-Shariah Al-Islaamiyyah. Al-Riyad: Daar Ishbiliya Li-Nashri Wa Al-Tawji', P. 347.

(4) Al-Sa'di, 'Abd Al-Rahmaan Naasir. 1426 H. Taisiir Al-Karim Al-Rahmaan Fi Tafsiir Kalaam Al-Mannan. Al-Qaahirah: Daar Al-Hadith, P. 269.

to maintaining it.”⁽¹⁾

That financial technology serves the research as an additional tool and means of assistance to researchers in some aspects, rather than that this technology be the basis for research and replace the researcher in writing his research. Because understanding rulings requires experience, reasoning, and critical thinking, and these skills are distinguished by the human mind in terms of applications. Therefore, these applications must be combined with human interpretation and not replace the researcher in preparing the research.

Periodic follow-up and consultation with scientists and experts:

Understanding artificial intelligence applications, how they work, the concepts and techniques used, continuous review of these applications by official scientific and legitimate bodies, and periodic follow-up to evaluate the accuracy of the outputs, data and information resulting from them.⁽²⁾ These technologies and applications may require periodic maintenance to troubleshoot and work to fix them; as some studies have proven, ChatGPT technology links Muslims to violence, and this confirms the necessity of periodic examination and review of these technologies.⁽³⁾

(1) Ibn Al-Qayyim, Muhammad Ibn Abi Bak 1411 H. Ilaam Al-Muaqqiyin An Rabb Al-Aalameen. Muhammad Abd Al-Salaam Ibrahim, Ed. (Beirut: Dar Al-Kutub Al-Ilmiyyah), P. 109.

(2) Poole, David & Mackworth, Alan, (2017). Artificial Intelligence Foundations of Computational Agents. University of British Columbia, Vancouver, p. 63.

(3) Aal Shaikh, Hishaam Ibn ‘Abd Al-Malik. Dawaabit Tazif Taqniyah Al-Ma’lumat Al-Tatbiqiyah Fi Khidmat Al-Fiqh. Issue: 76. Al-Riyaad: Majallat Al-Buhuth Al-Fiqhiyyah Al-Mu’aasirah, 37.

Scholarly honesty: The researcher must ensure verification before transferring from artificial intelligence websites, and be careful to convey the correct information. Because these applications contain the correct and false information, the researcher should investigate the accuracy. Because Allah SWT Says: “O you who have believed, fear Allah and be with those who are true.”⁽¹⁾

These applications should be characterized by scientific integrity and preservation of researchers’ data, ensuring that these applications do not violate researchers’ intellectual property rights, and protecting data and information related to research; that no one other than the researcher may see it, and that no one else may benefit from his effort extracted from sources or results without his permission.⁽²⁾

Intellectual property rights: The researcher must verify the results of the reliability of the data and models used in artificial intelligence applications before adopting them, and take into account people’s efforts and intellectual property without trying to obscure or circumvent research efforts.⁽³⁾

Preserving human dignity and achieving justice: Artificial intelligence must be used in a way that achieves justice and equity

(1) Quran, 9:119

(2) Mahmud Masri (2014), Al-Amanah al-A’ammah baina al-Dawabit al-Akhlaqiyyah wa wara’ al-A’lam al-Rabbani, Sultan Muhammad University, Turkiye, P. 328-340.

(3) Bustanah, Dr. Shaharzaad. 2016. Al-Milkiyyah Al-Fikariyyah Fi Al-Fiqh Al-Islaami. Jaamiah Baskarah. Issue: 44, P. 603.

among people, and must not be used in any research that affects human dignity, conflicts with moral values, or discriminates against any race, gender, or color.

Fourth Chapter

Legal regulations for utilising artificial intelligence applications in scholarly research

There is no absolute legal ruling that applies to all uses of artificial intelligence in scientific research. rather, the ruling is determined based on the context and details of each case, and the legal description of these applications can be limited to the following legal rulings:

- A duty to work on as an obligation,⁽¹⁾ such as: if there is a necessity or urgent need to use these applications, such as some areas of medicine in which it is not possible to achieve rapid diagnosis to save a person, or effective treatment without relying on these technologies, such as analyzing medical images faster and more accurately, which contributes to quickly finding a diagnosis, saving the lives of others, and competing with the people of wrongdoing if necessary. Such as if there are those who use it as a platform to spread false religions and deviant ideas, then there must be those among the people of Islam who use these

(1) Al-Bahuti, Masur Ibn Yunus. 1429 H. Kasshaf Al-Qanaa' 'An Matan Al-Iqnaa'. Lajnat Mutakhassisah Fi Wazaarat Al-'Adl, Ed. Al-Riyad: Wazaarat Al-'Adl, 4/250

techniques to convey the message of Islam.

▪ It is recommended to do: The use of artificial intelligence applications in scientific research is recommended in the following cases:

1. If these applications help in disseminating Islamic knowledge, conveying the Islamic message to non-Muslims, and saving time and effort, and speeding up the completion of task.

2. In the event of enhancing communication between researchers, keeping pace with modern developments, disseminating Islamic knowledge, and achieving public interests without causing any harm or corruption.

▪ It is permissible to work with: It is permissible to use complementary artificial intelligence applications that do not fall within the essence of the research and its original material, such as spelling, linguistic, and typographic checking, formal coordination, and conducting questionnaires, without relying entirely on these applications, so that the research remains an expression of the capabilities and understanding of the researcher himself.

▪ It is disliked to exercise: The researcher must exercise caution and be aware in transmitting, and be keen on scientific honesty in scientific research. It is disliked that, adopting what has been transmitted from the applications of artificial intelligence without verifying the approved statements of the scientist from whom he quoted, and not being sure of the existence of a statement of his after him that contradicts it, or a statement transmitted

from him by his trustworthy students. It is also disliked to rely on narrations and opinions of one scholar of school of thought from the books of another school of thought, or from books classified according to the method of comparative jurisprudence.⁽¹⁾

It is disliked to rely on transmission from these applications without verifying the original sources. The basis in the extraction of the original narration, which is often given precedence over the secondary narration, is as old as the classification, and this is distinguished by the human mind, so it is not correct to quote a source from a source that is older than it. Therefore, the researcher must verify this to ensure scientific honesty.⁽²⁾

Islamic scholars were keen to verify information and receive it from original sources. Some of them took the trouble of traveling for the sake of one narration, and they urged students to stay away from seriousness. Because it may lead to confusion in the meanings, since the student has not received the knowledge or information directly from his shaykh, and therefore he may lack a deep and sound understanding of the concepts.⁽³⁾

Imam Al-Nawawi, (may Allah have mercy on him) said: “It is not permissible for someone whose fatwa was a transmission of

(1) Mahmud Masri (2014), *Al-Amanah al-A'ammah baina al-Dawabit al-Akhlaqiyyah wa wara' al-A'lam al-Rabbani*, Sultan Muhammad University, Turkiye, P. 63

(2) Ibid, P. 63

(3) Al-Nawabi, Muhi Uddin Yahya. 1347 H. *Al-Majmu Sharh Al-Muhazzab Ma' Takmilat Al-Sabaki Wa Al-Mutii'*. Group of Scholars, Ed. Al-Qahirah: Idarat Al-Tabaa't Al-Muniriyyah, Matba'at Al-Tadaamun Al-Ukhra, 81/1

the doctrine of an imam if he relied on books to rely except on a book whose authenticity is reliable, and that it is the doctrine of that imam. If he is confident that the origin of the classification is in this capacity, but this copy is not reliable, then he should prove it with agreeing copies of it. He may gain confidence from an unreliable version on some issues if he sees that the saying is orderly, and he is an astute expert and it is not hidden from him because he has trained in the areas of omission and change.”⁽¹⁾

▪ Forbidden: Artificial intelligence applications work must not be presented as the work of a researcher; as some researchers do scientific writing for the researcher using artificial intelligence applications, and then the researcher attributes the research to himself whether a percentage of the entire work of others or part of it; because academic work expresses the researcher’s understanding and effort, and using artificial intelligence applications to write is considered fraud and deception that is contrary to Shariah.

It is forbidden for the researcher to benefit from studies or scientific research, to quote from them without indicating the source from which the quote was made, and to attempt to obscure or circumvent the intellectual rights and original contributions of the researchers. If the research relies on the work of others, it must be clearly indicated. Whoever attributes the effort of others to himself is a hypocrite, and whoever attributes the rights of others to himself is a thief, and he who is satisfied with what he was not

(1) Ibid, 81/1

given is like wearing a fabricated dress.⁽¹⁾

Al-Nawawi (may Allah have mercy on him) said: “a part of advice is to add the benefit that surprises the one who said it. Whoever does that will be blessed in his knowledge and condition, and whoever deludes that and imagines what he takes from the words of others that it is his, then he is deserving of not benefiting from his knowledge, nor will he be blessed in it.” Now, the knowledge and virtue seekers continue to add benefits to the one who said it. We always ask Allah Almighty to grant us success for that.”⁽²⁾

It is forbidden to use artificial intelligence applications if their purpose is to achieve illegal gains or mislead others.

It is forbidden to use artificial intelligence applications in anything that leads to vice, brings discord, and destroys morals.

(1) Ibid, 81/1

(2) Al-Nawabi, Muhi Uddin Yahya. 1417 H. Bustaan Al-'Aarefeen Fi Al-Deen. Muhammad Al-Hajjaar, Ed. Beirut: Daar Al-Basaair Al-Islaamiyyah, 15.

Conclusion

The research revealed that artificial intelligence is an important and contemporary means in the service of scholarly research, and at the same time some legal and ethical violations have emerged according to the nature of its use, which calls for studying the reality of these applications and setting some legal regulations for their use.

Firstly: Results

1. The applications of artificial intelligence in scholarly research are many and varied, and in their entirety they bring great benefit to researchers.
2. The application of artificial intelligence in scholarly research must be carried out in accordance with strict legal standards and regulations.
3. The possibility of extracting applications of artificial intelligence in scholarly research on the basis of the principle in the customs of the solution until the evidence indicates otherwise.
4. There is no absolute legal ruling that applies to all uses of artificial intelligence in scholarly research, rather, that will be determined based on the context and details of each case.
5. It is not permissible to use artificial intelligence applications to write the origin of the research about the researcher and attribute it to the researcher, but artificial intelligence applications can be used to supplement scientific research.

6. Utilising artificial intelligence (AI) applications in scholarly research should be free from matters prohibited under Islamic law (*Sharīʿah*). If these technologies are utilised as an additional tool and as a method to support researchers in an aspect that serves the study, and the objective of this technique is simplifying the process while providing services with efficiency that is par with human capabilities, with there being no dangers related to implementation, or without taking the role of the researcher in their study, then there is no objection to such under Islamic law (*Sharīʿah*).

Secondly: Recommendations

The research concluded with the following recommendations:

1. It is recommended to devote specialized scholarly studies to discuss the applications of artificial intelligence in general, and in particular in the field of scholarly research, while clarifying the legal ruling related to them.
2. Holding scholarly seminars and conferences for researchers to discuss the applications of artificial intelligence in scholarly research, and how researchers can benefit from them, while clarifying the legal regulations and prohibitions.
3. It is proposed to launch systems and applications powered by artificial intelligence to support scholarly research. This enables research to be facilitated and facilitated, which contributes to its development and increases the speed and accuracy of its completion.
4. The importance of preachers and scholars searching for ways to employ artificial intelligence in the service of the Muslim Ummah, in terms of legal, linguistic, and other research.
5. Activating international protection of intellectual rights in the field of scholarly research through the means of artificial intelligence, establishing strict laws, and linking them to the directives of Islamic Shariah, which views it as a religious duty, before it is an international duty.
6. Forming specialized committees for universities, educational and research institutions to follow up on the rate of transfer of artificial intelligence programs, and to enact instructions on

work mechanisms within the framework of specific objectives; to enhance integrity and honesty in scholarly research procedures and the preservation of intellectual property rights.

7. Ensure a thoughtful, balanced, and integrated combination of artificial intelligence techniques and human support when using artificial intelligence applications in scholarly research.

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كلية الشريعة والدراسات الإسلامية
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