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Original Article

## **Maqasid Al-Shariah in the Age of AI: A Critical Examination of ChatGPT Usage Among International Islamic University Malaysia Students**

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### **ABSTRACT**

This study investigates the permissibility and ethical implications of ChatGPT usage within Islamic contexts, focusing on Muslim students at the International Islamic University Malaysia (IIUM). Employing a mixed-method approach, the research combines quantitative surveys (n=83) with qualitative interviews of Islamic scholars and Artificial Intelligence (AI) experts to examine the intersection of artificial intelligence and Islamic jurisprudence, particularly in relation to Maqasid al-Shariah. The study addresses the critical gap in understanding ChatGPT's ethical use from an Islamic perspective, which poses potential risks to academic integrity and spiritual development. Key findings reveal a discrepancy between students' perceptions of ChatGPT's permissibility (93.8% considering it permissible) and the lack of clear ethical guidelines. The research identifies multifaceted factors influencing ChatGPT reliance, including familial, peer, and social media influences. Islamic scholars emphasize the necessity of critical thinking, recognition of AI limitations, and prioritization of human wisdom in ChatGPT usage. The study concludes that ChatGPT's permissibility in Islam is context-dependent, requiring careful evaluation of its purposes and impacts considering Maqasid al-Shariah, particularly Hifz al-Din and Hifz al-Nafs. This research contributes to the ongoing discourse on technology integration within Islamic frameworks, offering a nuanced analysis of ChatGPT's implications for Muslim users and providing ethical guidelines aligned with Islamic principles of moderation, truthfulness, and social responsibility.

**Keywords:** Islamic Ethics, Artificial Intelligence, ChatGPT, Maqasid al-Shariah, IIUM Students

### **Introduction**

The emergence of ChatGPT, developed by OpenAI, marks a significant milestone in artificial intelligence (AI), revolutionizing human-machine interactions and information access.<sup>1</sup>

<sup>1</sup> Wu, Tianyu, Shizhu He, Jingping Liu, Siqi Sun, Kang Liu, Qing-Long Han, and Yang Tang. "A brief overview of ChatGPT: The history, status quo and potential future development." *IEEE/CAA Journal of Automatica Sinica* 10(5) (2023): 1122-1134.

This advanced language model generates human-like responses to a wide range of prompts and questions, demonstrating an ability to understand context and provide detailed explanations. Its widespread adoption across education, business, and personal use sectors has sparked important ethical questions, particularly in Islamic societies where technological adoption must align with religious principles.

ChatGPT's sophisticated machine learning algorithms, trained on vast amounts of textual data, enable it to produce coherent and contextually appropriate responses.<sup>2</sup> This capability has made it an attractive tool for various tasks, from academic assistance to creative writing and problem-solving. However, its rapid integration into daily life, especially in academic and professional settings, has raised concerns about ethical use and implications.

The Islamic world has a long history of engaging with technological advancements through *ijtihad* (independent reasoning) to ensure alignment with religious teachings.<sup>3</sup> ChatGPT presents a new challenge in this ongoing dialogue between faith and innovation. Central to this challenge is the concept of *Maqasid al-Shariah*, or the higher objectives of Islamic law, which include the preservation of faith, life, intellect, lineage, and property.<sup>4</sup> These objectives serve as a framework for evaluating the permissibility and ethical use of new technologies in Islamic contexts.

At the International Islamic University Malaysia (IIUM), students across various disciplines are increasingly turning to ChatGPT for academic assistance. This trend reflects a broader shift in how knowledge is accessed and processed in the digital age. The efficiency and accessibility of ChatGPT offer a tempting shortcut for students facing demanding academic workloads. However, this convenience raises concerns about the impact on critical thinking skills, academic integrity, and overall education quality.<sup>5</sup>

Beyond academia, Muslim professionals are incorporating ChatGPT into their work processes for tasks such as content creation, data analysis, and customer service. This widespread adoption raises questions about the authenticity of AI-assisted work and potential displacement of human labour. In the realm of religious inquiry, ChatGPT's ability to provide information on Islamic topics presents both opportunities and challenges, particularly regarding the accuracy and contextual appropriateness of its responses to complex theological questions.

The core problem this research addresses is the lack of clear guidance on the permissibility and ethical use of ChatGPT from an Islamic perspective. As Muslim students and professionals increasingly rely on this AI tool, they do so without a comprehensive understanding of how its use aligns with Islamic principles and values. This gap in knowledge and guidance poses several risks:

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<sup>2</sup> El Ganadi, Amina, Riccardo Amerigo Vigliermo, Luca Sala, Matteo Vanzini, Federico Ruoizzi, and Sonia Bergamaschi. "Bridging Islamic Knowledge and AI: Inquiring ChatGPT on Possible Categorizations for an Islamic Digital Library (full paper)." In *CEUR Workshop Proceedings*, vol. 3536 (2023): 21-33.

<sup>3</sup> Aliff Nawi et al., 'The Need for Guidelines and Islamic Ethics in Artificial Intelligence (AI) Research,' *Journal of Fatwa Management and Research*, vol. 26(2)(2021): 280-297.

<sup>4</sup> 'Abd al-'Azīm Abū Zayd, 'Al-Taṭbīqāt al-Mālīyah lil-Dhakā' al-Ṣinā'ī Masā'ilu Shar'īyah wa Ab'ādun Maqāṣidīyah,' *Majallat Isrā al-Dawliyah lil-Mālīyah al-Islāmīyah*, 13(3),(2022): 1-30.

<sup>5</sup> De Castro, C. Alves. "A discussion about the impact of ChatGPT in education: Benefits and concerns." *Journal of Business Theory and Practice* 11, no. 2 (2023):28-31.

1. Threat to Academic Integrity: The ease of generating AI-produced content raises concerns about academic dishonesty and potential violations of Islamic ethical principles of honesty and trustworthiness.<sup>6</sup>
2. Erosion of Critical Thinking Skills: Over-reliance on ChatGPT may hinder the development of critical thinking and problem-solving skills, crucial for personal growth and fulfilling one's role as a khalifah (vicegerent) on earth.<sup>7</sup>
3. Misinformation in Religious Matters: Using ChatGPT for religious inquiries without proper verification risks spreading inaccurate or contextually inappropriate information about Islam, potentially compromising the preservation of religious knowledge.<sup>8</sup>
4. Ethical Dilemmas in Professional Settings: The integration of ChatGPT in work processes raises questions about the authenticity and ownership of AI-assisted work, as well as potential conflicts with Islamic principles of social justice and fair labor practices.<sup>9</sup>
5. Impact on Spiritual Development: Excessive reliance on AI for tasks traditionally requiring human effort and reflection may affect spiritual growth and the development of virtues emphasized in Islam, such as patience, perseverance, and humility.<sup>10</sup>

To address these complex issues, the study aims to answer the following research questions:

1. What are the current understanding and usage patterns of ChatGPT among Muslim students at IIUM?
2. How does ChatGPT usage align with or challenge the principles of Maqasid al-Shariah?
3. What are the perspectives of Islamic scholars and AI experts on the permissibility and ethical use of ChatGPT?
4. How can guidelines be developed to ensure ChatGPT use aligns with Islamic ethical principles?
5. What are the potential long-term implications of ChatGPT usage on Islamic education and spiritual development?

Based on these questions, the research objectives are:

1. To examine the current understanding and usage patterns of ChatGPT among IIUM Muslim students.
2. To analyze the alignment of ChatGPT usage with Maqasid al-Shariah principles, focusing on the preservation of faith (Hifz al-Din) and intellect (Hifz al-Aql).

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<sup>6</sup> Islam, Iyolita, and Muhammad Nazrul Islam. "Opportunities and challenges of chatgpt in academia: A conceptual analysis." *Authorea Preprints* (2023): 1-12.

<sup>7</sup> Nugraha, M. T., M. R. Fahmi, and I. A. Prakoso. Integrasi Tradisi Dan Teknologi Dalam Pembelajaran Fiqh Dengan Pemanfaatan Chatgpt. *INNOVATIVE: Journal Of Social Science Research*, 3(6)(2023): 4486–4495.

<sup>8</sup> Ali Reza Bhojani & Marcus Schwarting, 'Truth and Regret: Large Language Models, the Quran, and Misinformation,' *Theology and Science*, 21(4)(2023): 557-563.

<sup>9</sup> Aliff Nawi et al., "A Preliminary Survey of Muslim Experts' Views on Artificial Intelligence." *Islamiyyat* 43, no. 2 (2021): 3-16.

<sup>10</sup> Elanor Bird et al., "The Ethics of Artificial Intelligence: Issues and Initiatives," *European Parliamentary Research Service* (2020): 1-84.

3. To explore and synthesize the perspectives of Islamic scholars and AI experts on the permissibility and ethical use of ChatGPT within Islamic contexts.
4. To develop comprehensive guidelines for the ethical use of ChatGPT in accordance with Islamic principles, suitable for implementation in Muslim academic and professional settings.
5. To assess the potential long-term implications of ChatGPT usage on Islamic education, spiritual development, and the preservation of Islamic knowledge.

The study acknowledges several limitations, including its geographical confinement to IUM students, the rapidly evolving nature of AI technology, potential gaps in capturing diverse Islamic interpretations on AI ethics, limited long-term impact data due to ChatGPT's novelty, challenges in addressing the depth of each field comprehensively due to the research's interdisciplinary nature, and restricted access to high-level Islamic scholars with expertise in both Islamic jurisprudence and technology.

Despite these limitations, this research represents an important step in understanding and addressing the ethical implications of ChatGPT usage in Islamic contexts. By providing a foundation for further inquiry and discussion, it aims to contribute meaningfully to the ongoing dialogue between Islamic ethics and technological innovation.

## Literature Review

This literature review examines the intersection of ChatGPT, Islamic principles, and education, highlighting the growing interest and concerns within academic circles. The review covers several key studies that contribute to our understanding of this emerging field.

Nawi et al. laid the groundwork for this field of study in their paper "*Keperluan Garis Panduan Dan Etika Islam Dalam Penyelidikan Kecerdasan Buatan*." The authors highlighted the widespread use of AI in various sectors, including healthcare, finance, economics, aviation, automotive, and education, particularly in developing countries. However, they also noted the potential misuse of AI in areas such as terrorist activities, identity forgery, and the perpetuation of inequality. The study emphasized the urgent need for Islamic guidelines in AI research, setting the stage for more focused investigations into specific AI applications like ChatGPT.<sup>11</sup>

Building on this foundation, Nawi et al. conducted another study, "A Preliminary Survey of Muslim Experts' Views on Artificial Intelligence." This quantitative research surveyed 37 Muslim experts on AI-related issues. The findings revealed a general insensitivity among respondents towards the broader impact of AI on Muslim consumers. However, most experts agreed on the urgent need for regulations to harness AI's benefits in enhancing Muslim life. This study underscored the necessity for a framework underpinned by Maqasid al-Shari'ah (the higher objectives of Islamic law) in AI development and implementation.<sup>12</sup>

El Ganadi et al. took a more practical approach in their paper "Bridging Islamic Knowledge and AI: Inquiring ChatGPT on Possible Categorizations for an Islamic Digital Library." This study evaluated ChatGPT's ability to assist in categorizing an Islamic digital library using incremental Machine Learning and Transfer Learning techniques. The research demonstrated ChatGPT's

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<sup>11</sup> Aliff Nawi et al., 'The Need for Guidelines and Islamic Ethics, 280-297.

<sup>12</sup> Aliff Nawi et al., 'A Preliminary Survey of Muslim Experts', 3-10.

remarkable familiarity with Islamic knowledge, evident in its ability to classify subjects hierarchically based on their importance, from Qur'anic Studies to Modern Islamic Thought. These findings suggested potential applications of ChatGPT in Islamic educational contexts and opened avenues for exploring its permissibility in Islam.<sup>13</sup>

De Castro broadened the scope of research in "A Discussion about the Impact of ChatGPT in Education: Benefits and Concerns." This critical literature review explored ChatGPT's impact on higher education, covering both positive and negative aspects. The analysis revealed several potential benefits, including improved student engagement, personalized learning experiences, and enhanced teaching practices. However, it also highlighted concerns over privacy, academic integrity, and the potential for bias. This balanced perspective emphasized the need for further research into Islamic ethics in using ChatGPT to mitigate potential negative implications for students.<sup>14</sup>

Nugraha et al. explored a specific application of ChatGPT in Islamic education in their study "Integrasi Tradisi Dan Teknologi Dalam Pembelajaran Fiqh Dengan Pemanfaatan ChatGPT." Using qualitative methods, the research analysed how ChatGPT could be integrated into the Fiqh curriculum. The findings indicated that ChatGPT could be a useful tool for improving understanding of Fiqh concepts, providing prompt responses to learners' questions, and stimulating in-depth discussions on specific topics. However, the study also emphasized the need for guidance from competent instructors to ensure the integrity of information and alignment with traditional Fiqh learning approaches.<sup>15</sup>

Abozaid addressed broader ethical considerations in his paper "Al-Taṭbīqāt al-Mālīyah lil-Dhakā' al-Ṣinā'ī: Masā'il Shar'īyah wa Ab'ād Maqāsidīyah" (Financial Applications of Artificial Intelligence: Sharia Issues and Maqasid Dimensions). This study focused on formulating legal rulings and maqāsidī considerations for new AI applications in Islamic finance. By providing clear guidelines and parameters for evaluating AI applications from an Islamic legal perspective, this research offered a framework that could be extended to assess the permissibility and ethical use of ChatGPT in various contexts.<sup>16</sup>

Islam and Islam conducted a conceptual analysis in their paper "Opportunities and Challenges of ChatGPT in Academia." The study explored the potential opportunities and challenges of ChatGPT in the academic domain, categorizing them into four areas: research, education, personal skill development, and social aspects. This comprehensive approach highlighted the multifaceted nature of ChatGPT's impact on academia and underscored the need for thorough Islamic guidelines to address these diverse challenges.<sup>17</sup>

Bhojani and Schwarting raised critical ethical concerns in their paper "Truth and Regret: Large Language Models, the Quran, and Misinformation." The study highlighted the ethical issues surrounding the rapid adoption of large language models like ChatGPT, particularly focusing on the risks of misinformation in religious contexts. This research emphasized the

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<sup>13</sup> El Ganadi et al., 'Bridging Islamic Knowledge and AI, 1-15.

<sup>14</sup> De Castro, C. Alves. "A discussion about the impact of ChatGPT in education, 28-31.

<sup>15</sup> Nugraha, M. T., M. R. Fahmi, and I. A., 'Integrasi Tradisi Dan Teknologi Dalam Pembelajaran Fiqh Dengan Pemanfaatan ChatGPT,' *Innovative: Journal of Social Science Research*, 3(6)(2023): 4486-4495.

<sup>16</sup> 'Abd al-'Azīm Abū Zayd, 'Al-Taṭbīqāt al-Mālīyah lil-Dhakā' al-Ṣinā'ī Masā'il Shar'īyah wa Ab'ādun Maqāsidīyah,' *Majallat Isrā al-Dawliyah lil-Mālīyah al-Islāmiyah*, 13(3)(2022): 1-30.

<sup>17</sup> Islam, Iyolita, and Muhammad Nazrul Islam, 'Opportunities and Challenges of ChatGPT in Academia: A Conceptual Analysis,' *Authorea Preprints*, (2023): 1-12.

potential dangers of using ChatGPT without proper Islamic guidelines, especially when dealing with sensitive religious information.<sup>18</sup>

The literature review reveals a growing interest in the intersection of ChatGPT, Islamic principles, and education. While initial studies focused on broad AI ethics in Islamic contexts, recent research has begun to explore specific applications of ChatGPT in Islamic education and knowledge dissemination. There is a consensus on the potential benefits of ChatGPT in enhancing Islamic education and research, balanced with concerns about ethical implications, the need for human oversight, and the risks of misinformation.

Despite the growing body of research, several significant gaps remain in the literature:

1. Absence of a comprehensive Islamic ethical framework specifically tailored for ChatGPT use, which would provide clear guidelines for its application in various Islamic settings.
2. Lack of long-term impact studies on how ChatGPT affects Islamic education and spiritual development, leaving uncertainties about its prolonged effects.
3. Insufficient focus on the perspectives and experiences of Muslim users, particularly students and professionals who interact with ChatGPT regularly.
4. Scarcity of concrete, implementable guidelines for the ethical use of ChatGPT in Islamic contexts.
5. Inadequate deep analysis of how ChatGPT aligns with or challenges the objectives of Islamic law (Maqasid al-Shariah).
6. Limited interdisciplinary research that comprehensively addresses both the technological and Islamic aspects of ChatGPT use.

Addressing these gaps is crucial for developing a holistic understanding of ChatGPT's role and ethical implementation within Islamic frameworks. Future research should focus on these areas to guide the ethical and effective integration of ChatGPT and similar AI technologies in Islamic contexts.

## **Research Methodology**

This study employs a mixed-methods approach, combining both quantitative and qualitative research strategies to address the research objectives comprehensively.

### **Quantitative Method:**

For the first research objective, a survey method will be utilized. A structured questionnaire will be distributed to a sample of 83 students from seven different Kulliyahs (faculties) at the International Islamic University Malaysia (IIUM) Gombak campus. This sample size and distribution ensure representation across various academic disciplines, including Islamic Revealed Knowledge and Human Sciences, Architecture, Engineering, Economics and Management Sciences, Information and Communication Technology, Law, and Education. The

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<sup>18</sup> Bhojani, Ali-Reza, and Marcus Schwarting. "Truth and regret: Large language models, the Quran, and misinformation." *Theology and Science* 21(4)(2023): 557-563.

survey aims to identify and quantify the reasons for reliance on chatbots among students, providing a broad perspective on usage patterns and motivations.

### **Qualitative Methods:**

1. Library Research: To address the theoretical aspects of the study, particularly in defining and explaining ChatGPT within the broader context of AI and chatbots, a comprehensive literature review will be conducted. This will involve analysing relevant journal articles, research papers, and scholarly publications to establish a solid theoretical foundation for the study.
2. Expert Interviews: For the second and third research objectives, semi-structured interviews will be conducted with three experts from IIUM:
  - i. Associate Professor Dr. Mohd Fuad bin Md Sawari from the Department of Fiqh & Usul al-Fiqh.
  - ii. Assistant Professor Dr. Sayyed Mohamed Muhsin, also from the Department of Fiqh & Usul al-Fiqh, specializing in contemporary issues.
  - iii. Assistant Professor Dr. Aznan Zuhid bin Saidin, an expert on Islamic perspectives of ICT focusing on Islam and AI.

These interviews aim to gather in-depth insights on the Islamic perspective of chatbot use, particularly focusing on Ijtihad and Maqasid Shariah principles.

### **Data Analysis:**

Quantitative data from the survey will be analysed using descriptive statistics to identify trends and patterns in chatbot usage among students. Qualitative data from the literature review and expert interviews will be subjected to thematic analysis to identify key themes and concepts related to the Islamic perspective on chatbot use.

This mixed-methods approach allows for a comprehensive examination of the research topic, combining broad quantitative data with rich qualitative insights to address the complex interplay between technology use and Islamic principles.

### **Research Discussion**

This thematic analysis of ChatGPT in Islamic contexts reveals six main themes: Definition and Functionality, Accuracy and Limitations, Alternatives and Ecosystem, Cybersecurity Risks, Islamic Permissibility, and Ethical Guidelines.

#### **Theme 1: Definition and Functionality of ChatGPT**

ChatGPT is an advanced artificial intelligence chatbot that has gained significant attention recently. Wu et al. describe it as "a smart chatting robot capable of delivering detailed responses

based on the instructions given in a prompt."<sup>19</sup> As part of the Artificial Intelligence Generated Content (AIGC) category, ChatGPT demonstrates impressive capabilities in various language-related tasks.

Dr. Fuad Sawari and Dr. Sayyed Muhsin describe ChatGPT as "a computer program designed to simulate conversation with human users through text or voice interactions." They emphasize its use of AI to understand user inputs and provide relevant responses, effectively thinking on behalf of its user.

Dr. Aznan, an AI and Islam expert, explains that ChatGPT is powered by a specific AI model called GPT (Generative Pre-trained Transformer). He notes, "GPT is a model that has been developed by the company for many years. Even before the release of ChatGPT in late 2022, they already had a GPT model capable of generating essays and other content."

A key feature distinguishing ChatGPT from earlier chatbots is its ability to generate output based on prompts rather than relying solely on pre-programmed responses. As Dr. Aznan explained, "What makes Generative AI different is that it is able to generate output based on prompts and not from input like normal systems because ChatGPT is trained with vast amounts of data."

In the context of Islamic studies, ChatGPT and similar AI technologies have shown potential in various applications. Munshi et al. explored the use of AI for automated Islamic jurisprudential legal opinions generation, demonstrating the potential of AI in assisting with complex religious tasks.<sup>20</sup> However, Hemmet cautions that while AI can aid in interpreting Qur'anic quotes and Hadith, it cannot replace the profound knowledge of Islamic jurists.<sup>21</sup>

The application of ChatGPT in Islamic contexts extends beyond jurisprudence. Battour et al. investigated the potential of AI applications in Halal tourism to assist Muslim tourists.<sup>22</sup>

## **Theme 2: Accuracy and Limitations of ChatGPT**

The accuracy of ChatGPT is crucial in determining its reliability and usefulness. Dr. Aznan states, "ChatGPT is as accurate as it has been trained. Therefore, AI training is really important." This underscores that ChatGPT's accuracy directly relates to the quality and breadth of its training data.

Dr. Aznan introduces the concept of "AI hallucination," which occurs when ChatGPT provides inaccurate or incorrect answers. He explains, "In generating AI, it is known as AI hallucination where we ask ChatGPT, and the answer given is not accurate or it is wrong, it is because ChatGPT is hallucinating that it is the right answer."

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<sup>19</sup> Wu, Tianyu, Shizhu He, Jingping Liu, Siqi Sun, Kang Liu, Qing-Long Han, and Yang Tang, "A Brief Overview of ChatGPT: The History, Status Quo and Potential Future Development," *IEEE/CAA Journal of Automatica Sinica* 10(5)(2023): 1122-1134.

<sup>20</sup> Amr Abdullah Munshi, Akram Salah, and Faris Alotaibi, "Automated Islamic Jurisprudential Legal Opinions Generation Using Artificial Intelligence," *Pertanika Journal of Science & Technology* 30(2)(2022): 1135-1156.

<sup>21</sup> Abdullah Hemmet, "Harmonizing Artificial Intelligence with Islamic Values: A Thoughtful Analysis of Religious, Social, and Economic Impacts of Technological Advancements," *American Journal of Smart Technology and Solutions* 2(2)(2023): 65-76.

<sup>22</sup> Battour, Mohamed et al., "Artificial Intelligence Applications in Halal Tourism to Assist Muslim Tourist Journey," in Proceedings of International Conference on Emerging Technologies and Intelligent Systems, ICETIS 2021, *Lecture Notes in Networks and Systems*, 322 (2021): 1-10.



The issue of data availability and currency also affects ChatGPT's accuracy. Dr. Aznan notes, "This problem also caused by the data availability, was access by the GPT created the connection and gives the answer. The data could not be updated so that might cause inaccuracy in answering questions."

However, the accuracy of ChatGPT and similar AI models is not static. Dr. Aznan observes, "Over time, GPT and other AI models, with the training becoming better and better, the accuracy becoming better as well."

In Islamic applications, the accuracy of AI models like ChatGPT is particularly crucial. Khoirunisa et al. note that while AI can benefit Muslims if developed and implemented properly, there are risks of it being misused to instill values contrary to Islamic teachings.<sup>23</sup>

Abu Bakar and Rosbi proposed a framework for integrating AI methods into the Halal certification process.<sup>24</sup> While this application doesn't directly involve chatbots like ChatGPT, it demonstrates the potential for AI to enhance accuracy in Islamic-related processes.

### **Theme 3: Alternatives and AI Ecosystem**

While ChatGPT has gained significant popularity, it is not the only player in the field of large language models and AI chatbots. Dr. Aznan highlights alternatives such as Google's Gemini and Gemma, which fall under the category of Large Language Models (LLMs).

Dr. Aznan explains, "A large language model (LLM) is an artificial intelligence (AI) program designed to recognize and generate text, among other functions. These models are termed 'large' because they are trained on vast datasets." Other notable alternatives include Microsoft Copilot, Meta's Llama, and Anthropic's Claude.

In the context of Islamic applications, several AI-based tools have been developed specifically for religious purposes. Hemmet mentions several AI-based Qur'an tools, including KSU Qur'an, Islam web, Qur'anic Arabic Corpus, and others.<sup>25</sup>

In Islamic finance, AI virtual assistants like 'Aisyah' are being adopted by Islamic banks to streamline transactions and eliminate risks like leverage and uneven maturity.<sup>26</sup>

### **Theme 4: Cybersecurity Risks of ChatGPT**

The use of ChatGPT and similar AI models raises significant cybersecurity concerns. Dr. Aznan highlights several key areas of risk:

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<sup>23</sup> Khoirunnisa, Ana, Fathur Rohman, Hilda Aulya Azizah, Devi Ardianti, Arinta Lailatul Maghfiroh, and Aditya Muhammad Noor. "Islam in the Midst of AI (Artificial Intelligence) Struggles: Between Opportunities and Threats." *SUHUF* 35, no. 1 (2023): 26-30.

<sup>24</sup> Nashirah Abu Bakar and Sofian Rosbi, "Robust Framework of Halal Certification Process with Integration of Artificial Intelligent Method," *Journal of Islamic, Social, Economics and Development (JISED)* 4(20)(2019): 47-55.

<sup>25</sup> Hemmet, Abdullah. "Harmonizing Artificial Intelligence with Islamic Values-A Thoughtful Analysis of Religious, Social, and Economic Impacts of Technological Advancements." *American Journal of Smart Technology and Solutions* 2, no. 2 (2023): 65-76.

<sup>26</sup> *Ibid.*

Risk	Description
Confidentiality Issues	Potential exposure of sensitive or personal information through AI interactions
Data Leakage	Instances where confidential information became accessible through AI models
ChatGPT Phishing	Use of ChatGPT for sophisticated phishing attempts
Malicious Code Generation	ChatGPT's capability to generate harmful code
Obfuscation of Malicious Actions	Ability to generate obfuscated code, complicating detection and analysis
Lowering the Entry Barrier for Hackers	Reducing the technical knowledge required for creating harmful code
Rapid Adaptation of Malicious Code	Quick alteration of code to bypass conventional security measures

These cybersecurity risks are particularly concerning in the context of Islamic applications of AI. Khoirunisa et al. point out risks of AI being misused to instill values contrary to Islamic teachings or to spread misinformation about Islam.<sup>27</sup>

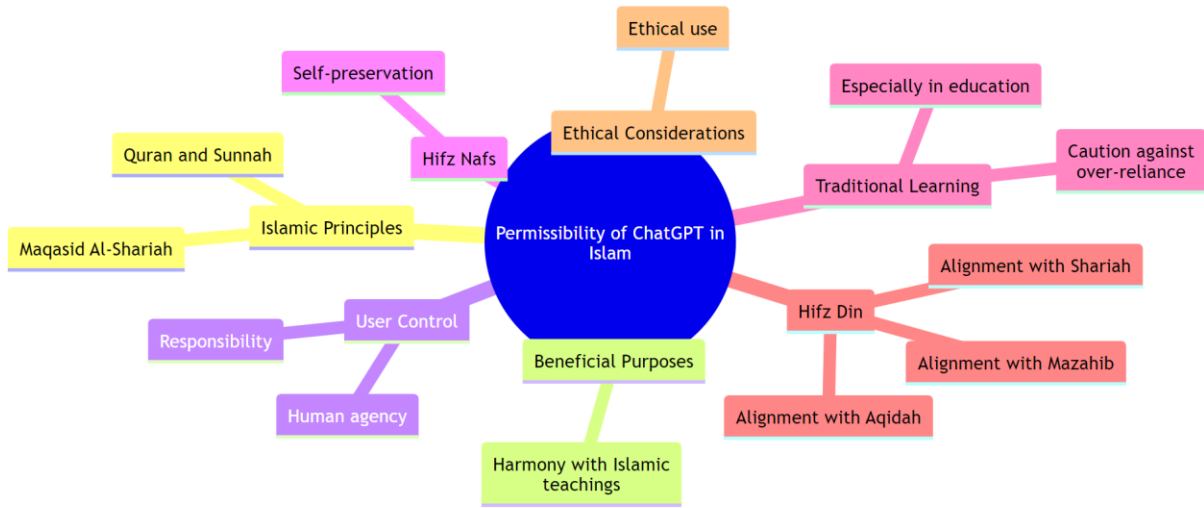
#### **Theme 5: Islamic Permissibility of ChatGPT**

The permissibility of ChatGPT in Islam is a complex issue requiring careful consideration of Islamic principles and the objectives of Shariah (Maqasid al-Shariah). Dr. Fuad Sawari and Dr. Sayyed Muhsin provide insights into this matter from an Islamic perspective.

They emphasize the unique position of human beings in Islam: "In Islam, human beings are the only creation of Allah that have been given the responsibility of taklif - being accountable for their actions and choices." The scholars view ChatGPT and similar AI tools as means rather than ends in themselves.

In evaluating the permissibility of ChatGPT, Muslim scholars consider various factors:

<sup>27</sup> Khoirunisa et al., "Islam in the Midst of AI (Artificial Intelligence) Struggles," 45-52.



These considerations align with the broader discussion in the field of Islamic ethics and AI. Nawi et al. emphasized the need for Islamic guidelines and ethics in AI research.<sup>28</sup> Hemmet further explored the integration of AI technologies with Islamic principles, emphasizing that while AI can be a valuable tool in Islamic contexts, it cannot replace human reasoning and intellectual competence in matters of faith.<sup>29</sup>

### Theme 6: Islamic Ethical Guidelines for Using ChatGPT

Based on the interviews with Dr. Fuad Sawari and Dr. Sayyed Muhsin, several key guidelines and ethical considerations for using ChatGPT in accordance with Islamic principles can be identified:

Category	Guideline	Description
Approach	Critical Thinking	Users should not blindly accept everything a chatbot says as absolute truth. Question and analyze information.
	Recognizing Limitations	Users should be aware of the limitations of ChatGPT in knowledge, understanding, and potential biases.
	Prioritizing Human Wisdom	For important matters, especially those related to faith and personal life, consulting human experts is strongly recommended.
Usage	Moderation in Use	Excessive dependence on ChatGPT should be avoided. Balance its use with other forms of learning and interaction.
	Lawful Purposes	The use of ChatGPT should be limited to lawful activities according to Islamic law.
Content	Truthfulness and Honesty	ChatGPT should not be used to spread misinformation, deceive, or make false claims.
	Verification of	Users are advised to verify Islamic-related information with

<sup>28</sup> Aliff Nawi et al., "The Need for Guidelines and Islamic Ethics in Artificial Intelligence (AI) Research," 280-297.

<sup>29</sup> Hemmet, Abdullah, "Harmonizing Artificial Intelligence with Islamic Values," 65-76.

Category	Guideline	Description
	Religious Information	reliable human sources or authenticated Islamic texts.
Responsibility	Social Responsibility	Those developing and deploying chatbots have a social responsibility to ensure their ethical use and consider broader impacts.
	Harmlessness	The content and interactions with chatbots must not cause harm to individuals, communities, or society at large.
Ongoing Practices	Maintaining Human Agency	ChatGPT should be managed by users rather than allowing it to manage them. Users should make their own decisions.
	Continuous Evaluation	Regularly reflect on the use of ChatGPT and adjust usage patterns if they conflict with any of the guidelines.

These guidelines provide a framework for using ChatGPT in a manner consistent with Islamic principles. They emphasize the need for critical thinking, ethical use, moderation, and the preservation of human agency and expertise.

The importance of such guidelines is further emphasized in the broader literature on AI and Islam. Nawi et al. explored the opportunities and risks of AI research for Islamic ethical guidelines, recommending the use of Maqasid al-Shari'ah as a parameter for developing Islamic ethical guidelines in AI research.<sup>30</sup>

In practical applications, several studies have explored the use of AI in various Islamic contexts. Battour et al. investigated the use of AI-enabled technologies to assist Muslim tourists in Halal-friendly tourism.<sup>31</sup> Rahman et al. examined the application of AI in Halal marketing, emphasizing the need to navigate ethical crossroads.<sup>32</sup> In the financial sector, Ahmad et al. studied the utilization of AI-based chatbots for maximizing value and profitability of Islamic Financial Institutions (IFIs).<sup>33</sup>

These studies collectively underscore the potential of AI technologies like ChatGPT in various Islamic contexts while highlighting the critical need for ethical guidelines and considerations. They reinforce the importance of the guidelines provided by Dr. Fuad Sawari and Dr. Sayyed Muhsin, demonstrating that these principles have practical implications across various sectors of Muslim society.

The use of ChatGPT and similar AI technologies in Islamic contexts presents both opportunities and challenges. While these technologies have the potential to enhance various aspects of Muslim life - from education and tourism to finance and marketing - their use must be carefully regulated and guided by Islamic principles.

<sup>30</sup> Aliff Nawi et al., "Exploring Opportunities and Risks of Artificial Intelligence Research for Islamic Ethical Guidelines," 1-34.

<sup>31</sup> Battour, Mohamed et al., "AI-Enabled Technologies to Assist Muslim Tourists in Halal-Friendly Tourism," *Journal of Islamic Marketing* 14(5)(2023): 1291-1309.

<sup>32</sup> Md Mahfujur Rahman, Abdullah Al Mahi, and Md Abu Zarif Hossian, "Application of AI In Halal Marketing: Navigating the Ethical Crossroads," *West Science Interdisciplinary Studies* 2(4) (2024): 920-926.

<sup>33</sup> Zaki Ahmad, Ikhlas al-Amatullah, and Mohamed Nafeel Mahboob, "Utilising AI-Based Chatbot for Maximising Value and Profitability of Islamic Financial Institutions," *Bait al-Mashura Journal* 21 (2024): 243-275.

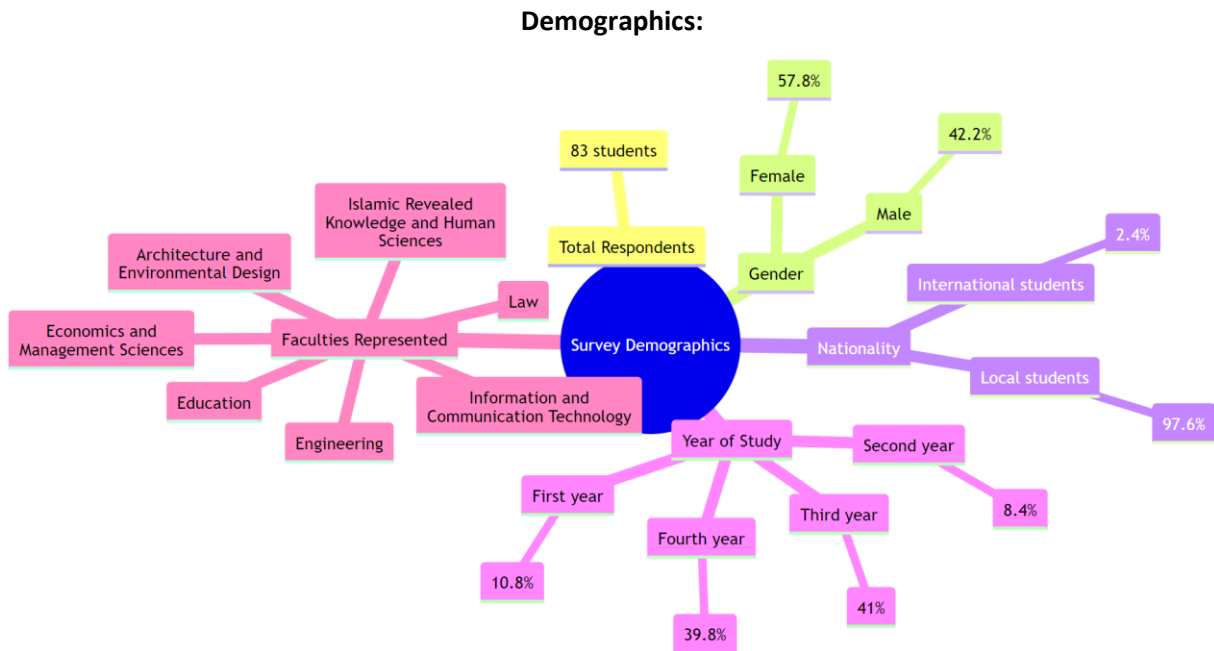
The six themes identified in this analysis - Definition and Functionality, Accuracy and Limitations, Alternatives and Ecosystem, Cybersecurity Risks, Islamic Permissibility, and Ethical Guidelines - provide a comprehensive framework for understanding the complex relationship between ChatGPT and Islamic principles.

The guidelines provided by Islamic scholars offer a robust framework for navigating these challenges, emphasizing the importance of critical thinking, ethical use, and the preservation of human agency. As AI continues to advance, it will be crucial for the Muslim community to engage in ongoing dialogue and research to ensure that these technologies are developed and used in ways that are consistent with Islamic values and beneficial to society.

The development and application of these guidelines is an ongoing process that requires continuous dialogue between Islamic scholars, AI experts, and practitioners. As AI technologies continue to evolve, so too must the ethical frameworks that guide their use in Islamic contexts. This dynamic process ensures that Muslims can benefit from technological advancements while remaining true to their religious principles and values.

### Data Analysis

This analysis presents results from a survey of 83 students at the International Islamic University Malaysia regarding their perceptions and use of ChatGPT. The survey covered several areas including reliance on ChatGPT, reasons for using it, views on its permissibility in Islam, and opinions on ethical usage.

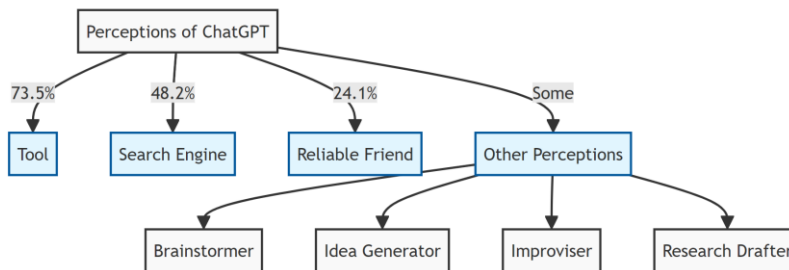


### Key Findings:

1. Reliance on ChatGPT: The survey found that more than half of respondents reported commonly relying on ChatGPT.
2. Reasons for Using ChatGPT: The study explored reasons for relying on ChatGPT across four aspects:

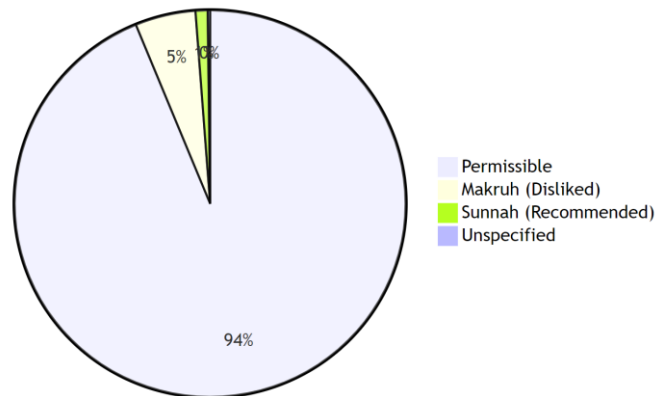
Aspect	Reason	Percentage
Family	Non-judgmental responses	66.7%
	Privacy and confidentiality	45.3%
	Avoiding conflict	44.0%
	Strict family environment	26.7%
Peer	Problem-solving and decision-making	80.5%
	Social learning	51.2%
	Peer pressure and influence	32.9%
	Mental and emotional support	13.2%
Personal	Efficiency and convenience	83.1%
	Exploration and creativity	69.9%
	Skill enhancement	39.8%
	Personal growth and development	34.9%
Social media	Personal assistance	69.5%
	Influence and trends	64.6%
	Content creation	34.1%

3. Perceptions of ChatGPT: When asked to define ChatGPT:



4. Islamic Ruling on ChatGPT Use: When asked about the Islamic ruling (hukum) on using ChatGPT:

Perceived Islamic Rulings on ChatGPT Usage



5. Ethical Considerations: The survey asked respondents to judge the ethics of various ChatGPT-related behaviors:

Behavior	Ethical (%)	Unethical (%)
Using ChatGPT to complete tasks without checking	0	100
Presenting ChatGPT-generated work as original without acknowledgment	1.2	98.8
Using ChatGPT for illegal activities like shoplifting	4.9	95.1
Generating hate speech or threats with ChatGPT	3.7	96.3
Using ChatGPT to summarize content	90.4	9.6
Using ChatGPT to paraphrase content	87.8	12.2
Acknowledging creators of ChatGPT-assisted content	89.0	11.0
Using ChatGPT without disclosing sensitive information	51.2	48.8
Disclosing when responses are ChatGPT-generated	42.7	57.3

6. Guidelines for ChatGPT Use: The survey presented guidelines for using chatbots from an Islamic perspective and asked respondents if they agreed:

- The majority agreed with all guidelines presented
- A small number disagreed with some guidelines

A survey of students reveals significant reliance on ChatGPT for various purposes, including problem-solving and content creation. Motivations span personal, social, and academic domains, with efficiency, creativity, and problem-solving being key drivers. While most students view ChatGPT use as permissible in Islam, some uncertainty exists, suggesting a need for further scholarly discussion. There's general agreement on what constitutes unethical use of ChatGPT, such as plagiarism and generating harmful content. However, opinions are mixed on using it for tasks like summarizing or paraphrasing, indicating a need for clearer guidelines on responsible use, especially in academic contexts. The positive reception to proposed Islamic guidelines for chatbot use suggests openness to ethical frameworks aligned with Islamic principles.

Overall, the study highlights the need for ongoing discussions about the ethical implications of AI tools like ChatGPT in educational and Islamic contexts. As these technologies become more integrated into academic and personal life, it's crucial to establish ethical frameworks that balance technological benefits with cultural and religious values. This analysis provides valuable insights into how students perceive and use ChatGPT and raises important questions about the ethical and religious implications of AI use in education and daily life. It suggests a need for further guidance and discussion on these topics as AI tools become increasingly prevalent.

## Conclusion

This research contributes significantly to the understanding of ChatGPT usage among Muslim students, particularly at the International Islamic University Malaysia (IIUM). It bridges the gap between technological advancement and Islamic principles, providing valuable insights into the ethical considerations and religious implications of AI use in academic and personal contexts.

The study offers a comprehensive analysis of student perceptions, usage patterns, and ethical concerns, while also synthesizing expert opinions to develop guidelines for responsible ChatGPT use aligned with Islamic values.

Regarding the first objective, the study reveals that a significant portion of IUM Muslim students rely on ChatGPT for various purposes, including problem-solving, content creation, and academic tasks. The motivations for using ChatGPT span personal, social, and academic domains, with efficiency, creativity, and problem-solving being key drivers. More than half of the surveyed students reported commonly relying on ChatGPT, indicating its widespread adoption. The reasons for using ChatGPT varied across different aspects of life, with problem-solving and decision-making (80.5%) being the most common reason in the peer aspect, and efficiency and convenience (83.1%) in the personal aspect.

Concerning the second objective, the research findings suggest a general alignment of ChatGPT usage with Maqasid al-Shariah principles, particularly in relation to the preservation of intellect (Hifz al-Aql). The majority of students (93.8%) view ChatGPT use as permissible in Islam, indicating a perceived harmony between this technology and Islamic principles. However, the study also highlights the need for critical thinking and awareness of ChatGPT's limitations, especially in matters related to faith. The emphasis on using ChatGPT as a tool for knowledge enhancement rather than a replacement for human wisdom aligns with the preservation of intellect.

Addressing the third objective, the study synthesizes perspectives from Islamic scholars and AI experts, providing a nuanced view of ChatGPT's permissibility and ethical use within Islamic contexts. Experts emphasize the importance of approaching ChatGPT critically, recognizing its limitations, and prioritizing human wisdom, especially in matters of faith. The research highlights potential risks, including cybersecurity concerns and the possibility of AI being misused to spread misinformation about Islam. These expert insights form the basis for developing ethical guidelines that align with Islamic principles.

In line with the fourth objective, the study proposes comprehensive guidelines for the ethical use of ChatGPT in accordance with Islamic principles. These guidelines cover various aspects, including critical thinking, recognizing limitations, prioritizing human wisdom, moderation in use, truthfulness, and social responsibility. The guidelines emphasize the importance of verifying religious information with reliable human sources or authenticated Islamic texts. The positive reception of these proposed guidelines among surveyed students suggests a willingness to adopt ethical frameworks that align with Islamic principles in the use of AI technologies.

Addressing the fifth objective, the research assesses potential long-term implications of ChatGPT usage on Islamic education and knowledge preservation. While ChatGPT offers opportunities for enhancing learning and problem-solving in Islamic contexts, the study underscores the importance of maintaining human agency and expertise. The findings suggest that while AI can aid in interpreting Qur'anic quotes and Hadith, it cannot replace the profound knowledge of Islamic jurists. The research emphasizes the need for ongoing evaluation and adjustment of ChatGPT usage to ensure it complements rather than compromises Islamic education and spiritual development.

Future studies should focus on longitudinal assessments of ChatGPT's impact on Islamic education and knowledge preservation. Research is needed to explore the development of AI models specifically trained on Islamic texts and principles, potentially offering more accurate



and culturally sensitive tools for Muslim users. Additionally, studies should investigate the practical implementation of the proposed ethical guidelines in various Islamic institutions and evaluate their effectiveness. Further research could also explore the potential of AI in enhancing Halal certifications, Islamic finance, and other specific applications within Muslim societies, always ensuring alignment with Islamic principles and values.

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