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The Impact of Artificial Intelligence (AI) on Arab Students at Higher Education Institutions in Israel

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Abstract
This study examined the effects of Artificial Intelligence (AI) on Arab students at institutions of higher education in Israel and attempted to find out how AI can affect students' academic performance, engagement, motivation, learning outcomes, ethical dilemmas. Employing qualitative design methodology, semi-structured interviews with 40 Arab students from various disciplines and institutions, thematic analysis revealed four principal findings - ambivalence toward AI, AI had both positive and negative implications for academic achievement and critical thinking skills, AI had only a positive implication on motivation and engagement, and concerns about data privacy and cultural moral values related to the use of AI. In conclusion AI has the potential to have profound educational consequences on learning and knowledge, but when adopting AI, the authors believe culturally relevant norms and ethical concerns must not be neglected. the authors suggest universities establish guidelines for the ethical use of AI, be culturally responsive regarding how the use of AI is added to their literacies and professional learning, and help influence AI's future direction for positive impact, accessibility, and application to both education and society.
Keywords: *Artificial Intelligence (AI), Arab students, higher education, academic performance, student engagement, motivation, ethical considerations, cultural sensitivity,*

1. INTRODUCTION

This study examines a variety of ways that Artificial Intelligence (AI) affects the academic performance, engagement, learning outcomes, motivation, and associated ethical perceptions of Arab students enrolled in higher education institutions in Israel, with the aim of understanding: 1. How are Arab students perceiving the adoption of AI in their academic programs? 2. What impacts does AI have on their academic performance, and motivation? 3. What ethical and cultural dilemmas arise in connection with this? The main goals for this study were to investigate attitudes toward AI and potential use in educational outcomes, as well as determining culturally-bound issues related to AI usage. Using qualitative methods as a form of research, this study employed semi-structured interviews with 40 Arab students, and through thematic analysis identified four primary themes: ambivalent attitudes of students toward AI, perceived positive and negative outcomes to performance and critical thinking; the positive added impact on motivation, and finally the ethical-cultural dilemmas of data privacy and academic integrity. This study adds to the contemporary literature on technology and education by bringing the unique voice of Arab students' perspective on AI implementation and use in education, and culturally situates the possible issues with adopting AI.

Artificial intelligence (AI), or the ability of machines to replicate human cognitive abilities (such as learning, reasoning, and problem solving) has been defined by Mueller and Massaron (2018). AI within the realm of higher education would typically include the many forms of intelligent tutoring systems, automated feedback systems, adaptive learning systems (Holmes et al., 2019), Early on in this study, we set the scope to investigate Arab students at Israeli universities whose academic journey has been affected by AI technologies. The study aims to understand the behavior of students within the academic institution, the behavior of students as it relates to academic achievement, and their behaviors so it relates to their (wide spectrum of) ethical orientations as aspects of a minority cultural group. Two inherent technical terms are influential for a prudent and systematic discussion of this topic,
are the notion of machine learning (the process of algorithms 'learning' patterns within data), and neural networks (AI models meant to resemble human brain structures) (Yadav, 2023; Pustylnik, 2023).

The importance of the study is highlighted in contributing to the understanding of how AI can assist student learning and also hinder student learning among underrepresented populations. Arab students in Israel, in particular, face both difficult social and cultural implications, which present complex cultural and linguistic barriers and also produce deep insightful ways to consider how AI can provide different results for the majority of academic progress or support learning. The study was also unique since it sought to bridge the gap regarding addressing the current literature such as research on the role of AI in non-Western contexts of learning, and it underscored the centrality of cultural considerations in developing

policy. The study suggests three recommendations in making policy: first, having clear institutional guidelines on ethical use of AI; second, creating levels of community engagement surrounding guidance with AI literacy for the minority community; third, preserving cultures within the design of AI recommendation engines. This study and surrounding recommendations have implications for stakeholders adopting AI tools and resources, most importantly, policy makers, curriculum writers, and designers of AI tools. The findings and recommendations suggest a use future for AI in that it is possible it could be developed, designed, and even implemented in ways that benefit not only efficiency but also socially equitable use for all learners, as well as responsibly engaging with the whole educational community.

2. LITERATURE REVIEW

2.1 What is Artificial Intelligence (AI)?

The word intelligence can be defined by the following activities: being able to learn new information, being able to manipulate information in different ways, understand and validate the manipulated information, see relationships between data, considering meanings, and being able to differ facts from beliefs. This is done by creating algorithms and providing data for a computer. (Mueller & Massaron 2018) Based on this definition, artificial intelligence could be explained as intelligence that is reached in an artificial way, something that does not exist naturally, but is created as a copy of something that already exists, in this case the human intelligence. In the Encyclopedia Britannica artificial intelligence is described as the capability of a computer or a computer-controlled robot to do things that normally require human intelligence and judgement, things that previously could have been done only by humans. Since it learns from previous mistakes, AI can reduce human error. It can also make decisions that are unbiased, whereas a human might be influenced by something in their decision (Baldoni, et al., 2023.)

Intelligence can be defined through various activities, such as the ability to acquire new information, manipulate data, comprehend and verify manipulated information, identify connections between data points, discern meanings, and distinguish facts from beliefs. These tasks are achieved by devising algorithms and supplying data to a computer (Mueller & Massaron, 2018).

Following this definition, artificial intelligence can be described as a form of intelligence that is artificially created, not occurring naturally but emulating human intelligence. In essence, it replicates human cognitive capabilities. According to the Encyclopedia Britannica, artificial intelligence refers to the capacity of a computer or computer-controlled robot to perform tasks typically necessitating human intelligence and judgment, tasks that were previously exclusive to humans. AI has the advantage of learning from past mistakes, reducing the potential for human errors, and making impartial decisions unaffected by personal biases, in contrast to human decision-making (Yu, 2020).

Artificial intelligence (AI) began in 1950 when Alan Turing, a computer pioneer, created the concept of intelligent machines. In that same year, Turing conducted the Turing Test to determine if a computer could mimic human thinking. This test involved a computer, a human interrogator, and a human respondent. The interrogator asked questions to both the computer and the human and had to guess which one was the computer based on their answers. While the human respondent tried to help the interrogator make the correct guess, the computer could respond in any way to avoid detection (Ouyang & Jiao, 2021).

In 1955, three researchers – Allen Newell, Cliff Shaw, and Herbert A. Simon – developed the Logic Theorist, considered one of the earliest AI programs aimed at replicating human problem-solving abilities. However, it wasn't until 1956 that John McCarthy coined the term "artificial intelligence" during a conference at Dartmouth College, marking the official start of AI research. Despite some disagreements on standardized methods, AI research gained momentum (Rampersad, 2020).

Over the following decades, AI progressed with innovations such as ELIZA, a chatbot created by Joseph Weizenbaum in the 1970s. Expert systems, designed to make decisions like human experts using rule-based, frame-based, or logic-based processes, also emerged. In the 1990s and 2000s, AI achieved significant milestones, notably when chess champion Gary Kasparov lost to IBM's Deep Blue computer program in 1997 (Mhlanga, 2021).

Many significant accomplishments occurred in the 2010s. For example, Apple introduced the personal assistant Siri for their devices, and Tesla developed an AI-based autopilot system. Today, numerous new AI tools are regularly released, each designed for various tasks. Some of the latest noteworthy

advancements in AI include OpenAI's ChatGPT, DeepL's translator program, and Google's Bard chatbot.

2.2 How does Artificial Intelligence Work?

Artificial intelligence (AI) is a complex and multifaceted field that aims to develop machines and computer systems capable of performing tasks that typically require human intelligence. At its core, AI works by simulating human-like thinking processes and decision-making abilities through the use of algorithms, data, and computational power. There are various approaches to AI, but I will provide an overview of the general principles that underlie how AI systems work (Makridakis, 2017).

One fundamental concept in AI is machine learning, which is a subset of AI that focuses on enabling machines to learn from data. Machine learning algorithms use large datasets to identify patterns, relationships, and trends within the data. These algorithms "learn" by adjusting their parameters to make accurate predictions or decisions based on new, unseen data. For example, in image recognition, a machine learning model might analyze thousands of labeled images to recognize patterns and features that differentiate different objects or entities. Once trained, the model can classify new, unlabeled images (Pustylnik, 2023).

Another key element in AI is neural networks, which are inspired by the structure and function of the human brain. Neural networks consist of interconnected layers of artificial neurons that process and transform data. These networks excel in tasks such as natural language processing, speech recognition, and image analysis. During training, neural networks adjust the connections between neurons (weights) to minimize the error in their predictions. This process, known as backpropagation, involves propagating the error backward through the network to update the weights and improve the model's performance (Yadav, 2023).

AI systems also rely on data preprocessing and feature engineering to prepare input data for analysis. This involves cleaning, transforming, and extracting relevant features from raw data to ensure that AI algorithms can effectively learn from it. In addition, AI systems often require substantial computational resources, including powerful hardware such as graphics processing units (GPUs) and specialized hardware designed for AI tasks. These resources enable AI models to process vast amounts of data and perform complex calculations quickly, which is essential for real-time applications and deep learning tasks (Hwang, et al., 2020).

Finally, AI models can operate in various modes, including supervised learning, unsupervised learning, and reinforcement learning, each with its own set of principles and methodologies. In supervised learning, the model is trained on labeled data with clear input-output pairs. In unsupervised learning, the model explores data without predefined labels to discover hidden patterns or structures. Reinforcement learning involves learning through trial and error, where an AI agent interacts with an environment and receives rewards or penalties based on its actions, ultimately aiming to maximize its cumulative reward over time (Selwyn, 2016).

2.3 Artificial Intelligence in Higher Education

The concept of employing artificial intelligence (AI) in 2023 is no longer considered groundbreaking, as it has been the subject of academic research for more than three decades. This approach to education has gained traction due to its multidisciplinary nature and its ability to adapt to different learning environments (Luckin, et al., 2016). The earliest mentions of utilizing these innovative technologies in education date back to 1983 (O'Shea & Self, 1983), where they were explored extensively, highlighting the potential of computer technology in supporting learning and evaluating knowledge acquisition. Despite the predominant role of human educators, there is evidence suggesting that the application of these new technologies can lead to significantly higher effectiveness and reduced costs (Koedinger & Corbett, 2006). The scientific exploration of AI in education began around 2004, with an increasing number of publications appearing each year. Researchers have examined various approaches and potential uses of AI tools in collaborative learning contexts (Tan, et al., 2022). Additionally, the interest in the topic of AI has led to its integration with fields such as digital transformation, industry 4.0, and the internet of things, indicating the higher education sector's inclination towards exploring diverse avenues for technological advancement (Yavuz, 2022).

When assessing the research conducted between 2010 and 2020, there are three main areas of focus: classification, matching, recommendations, and deep learning; feedback analysis, adaptive learning, and reasoning; and application domains such as role playing, gamification, and deep learning. The

International Artificial Intelligence in Education Society (IAIED), an organization comprising more than 1000 researchers from over 40 countries with over 25 years of experience in various scientific fields, underscores the significance of artificial intelligence in education. Their mission is to promote and support the global application of artificial intelligence in education (Zhai, et al., 2021).

Artificial intelligence serves various purposes in education, including stimulating creativity, harnessing emotions to enhance knowledge acquisition, and engaging human senses through text, videos, images, and audio (Price & Flach, 2017). Consequently, technology represents a collection of tools that enhance educational communication and offer a means to actively tailor individual learning pathways (Della Ventura, 2017). Simultaneously, there exists a noticeable synergy between the adoption of new technologies and increased student engagement, resulting in improved educational outcomes (Verma, S. et al., 2021).

The roots of technological influence on education are closely tied to the proliferation of computer technology. The ability to gather and process data and integrate various devices led to the development of artificial intelligence, which in turn found applications in academic administration and substantial support for the educational process. Besides educational platforms, robots are employed to facilitate interaction with stakeholders by simulating human behavior. Furthermore, artificial intelligence enables the customization of educational materials and the adjustment of the educational level to students' abilities and preferences (Chen, et al., 2020).

It is evident that universities are committed to delivering the latest scientific advancements to their students, supported by state-of-the-art technologies. This commitment extends to both the quality of knowledge dissemination and the use of tools that enhance the educational experience. This aligns with changing student expectations and the evolving role of academic instructors in the knowledge transmission process (Chaudhary, 2017). Recognizing that students have diverse learning styles, the integration of various technological aids helps improve knowledge transfer, catering to those who prefer active participation, passive learning, systematic study, sporadic work, or rely on existing knowledge and intuition (García et al., 2007).

Additionally, students often face varying requirements based on the semester they begin their studies. They typically have the freedom to choose from a wide range of courses independently. This underscores the importance of a personalized approach and the utilization of artificial intelligence tools (Haderer & Ciolacu, 2022). Overall, it is essential to recognize that a fundamental mission of higher education is to equip students with the skills to effectively harness artificial intelligence (AI) (Luckin, et al., 2022). Achieving this goal necessitates not only acquiring knowledge but also developing communication skills. Integrating AI topics into individual course curricula can enhance awareness and understanding of the capabilities of this technology (Su, et al., 2022).

An excellent illustration of AI's application is engaging more than 6000 university students in active learning to familiarize them with various technological tools for future careers. This approach serves as a foundation for educational programs across diverse subjects, allowing students to grasp the interdisciplinary nature of AI, its specialized knowledge, and unique communication methods (Southworth et al., 2023). It's important to note that AI's application in education extends beyond technology. Successful implementation involves effectively blending various complex facets related to knowledge transfer, including pedagogical, cultural, economic, and social considerations (Castañeda, Selwyn, 2018).

When considering the use of AI in education, it is critical to address significant ethical, social, cultural, and pedagogical issues. The focus should not be limited to algorithms or data processing but should emphasize the broader importance of education. Furthermore, the introduction of new technologies prompts discussions on the philosophical aspects of education, introducing additional challenges to educational quality. Ethical concerns are particularly pertinent in higher education, where AI systems should enhance students' creative abilities rather than overly control them. Developing intelligent support systems tailored to individual student needs may mitigate issues associated with the massification of higher education institutions (Zawacki-Richter, et al., 2019).

It is noteworthy that an increasing number of higher education institutions recognize the advantages of integrating AI into educational support processes. This integration boosts student motivation and contributes to skill improvement, including computational skills, through interaction, feedback, and learning from mistakes (Martín-Núñez et al., 2023).

The advantages of artificial intelligence (AI) hold great promise, as it has the potential to revolutionize how knowledge is imparted. The transformative impact of AI in terms of promoting educational equity

and expanding access to knowledge, including content in diverse languages, cannot be underestimated. Additionally, AI may redefine the role of teachers and the methods of evaluating student performance (Tuomi, 2018). Furthermore, AI has the capacity to simulate or replicate the expertise and experience of educators, potentially replacing their roles. Consequently, students can receive customized learning experiences tailored to their unique cognitive abilities (Pai et al., 2021).

This facet of AI's application is of paramount importance because many scholars envision its future as primarily focused on enhancing student outcomes through personalized knowledge acquisition based on available data and considering the learner's perspective. However, concerns about the challenges AI poses to higher education employment persist. While some anticipate the potential threat of more efficient machines replacing teachers, others anticipate various scenarios of AI technological development (Lacity, 2017).

3. MATERIAL AND METHODS

The research is qualitative in order to understand the depth of Arab students' perceptions, experiences, and attitudes toward the use of Artificial Intelligence (AI) in their academic contexts. A qualitative study is appropriate for this research as it seeks to discover the layers of complex human experience and subjectivity in evaluating multidimensional constructs such as academic motivation, engagement, learning outcomes, and ethical considerations. It aims to develop deep, rich description that quantitative tools may not, and therefore capture the details of the students' academic and affective experience in relation to AI (Hameed, 2020) .

The study used semi-structured interviews to collect the information needed. Semi-structured interviews were an appropriate data collection method to achieve the range and depth of detail desired for the study. The semi-structured interview format allows participants to discuss their thought processes freely, while allowing the researcher to provide a consistent structure to the interview goals (Bearman, 2019). For this study, the interview questions were intended to address the students' perceptions of AI and its role, in relation to their academic performance, engagement, learning outcomes, and ethical-decision making. The semi-structured format of the interviews also led to the emergence of unforeseen themes that added depth to the conclusions and ensured students' voices were authentically represented.

The study's population involved Arab students studying at higher education institutions in Israel. A purposive sample of 40 students was selected to encompass a range of disciplines, genders, and institutions. The purposive sample ensured diversity in the sample, while focusing specifically on students who were most likely to have had experiences with AI use in their academic settings. Thematic analysis was used to analyze the information collected from the interviews. Thematic analysis allowed to identify common patterns and themes that were evident across participant responses, thus providing an opportunity to systematically and meaningfully answer the research questions and achieve the study's objectives (Kiger & Varpio, 2020).

4. THE RESULTS

The main findings, which emerged from a thematic analysis of interviews with Arab students who currently attend higher education institutions in Israel, report how students perceive and experience the integration of artificial intelligence (AI) into their academic contexts. The themes that emerged relate to the following: the students' perceptions and attitudes towards AI; the impact of AI on academic performance and learning outcomes; the impact of AI on engagement and motivation; and the ethical and cultural issues regarding the use of AI. Each of the themes represent the students' unique and contextual experiences, and give an understanding of the educational, affective, and ethical perspectives of AI adoption in higher education.

Theme 1: Perceptions and Attitudes Toward AI among Higher Education Students in Israel

This theme was particularly pronounced throughout the interviews during the exploration of Arab student opinions on the incorporation of Artificial Intelligence (AI) into their academic experiences. Several participants noted that they were, overall, cautiously optimistic about AI and said that it even helps the student's experience because AI software "makes studying easier, especially with summaries and quick explanations," but others would frequently counter by saying that "AI can't replace the human aspects that interact with students." One student said, “I enjoy using ChatGPT for ideas, but I always feel some uncertainty whether it is really correct or am I essentially cheating.” The variety of opinions express a core tension: Students liked the convenience and speed of AI tools, but also verbalized concerns

around accuracy, especially because they were unsure of the ethical limits of using it, or the issues around academic honesty in higher education. It reflects the ongoing internal negotiation process of visualizing the values of both innovations, and the core tenets of educational values. These findings are closely linked to a recent study by Tierney and others (2025) which highlighted that university students often felt ambivalent towards AI based on its perceived usefulness and their uncertainty regarding reliability. Similarly, Zawacki- Richter and others (2019) emphasize that students develop complex attitudes towards AI implementation in educational contexts, especially when AI alters pre-existing expectations of learning and student-teacher relationships. These studies demonstrate the extent to which a student's perceptions of AI are shaped by their own values, course expectations, and cultural contexts.

Theme 2: The Impact of AI on the Students' Academic Performance and Learning Outcomes

This theme was evident through participants being able to reflect on ways AI tools influenced their academic performance and acquisition of knowledge. Many students articulated AI to be a resource that offered support, and positively impacting their academic performance. As one participant explained they said, "AI helps me understand difficult readings because it's explaining it in simple language." Another participant said, "I use AI to generate summaries that save me time and make studying efficient." Students also reflected on how AI-supported quizzes and feedback helped prepare for exams more efficiently, stating: "I practiced on AI tools and I felt more ready going into the test." However, concerns were evident as well; for example, one student reflected, "Sometimes I feel like I lean on AI too much and I'm not thinking about things on my own." These comments suggest that AI could provide more benefit in relation to academic performance, as well as serve as an impediment to deeper learning and critical thinking, if overconsumed. This reflects findings from Martín- Núñez and others (2023) that assert AI improves academic efficiency and that poorer student independence might occur when it is not guided. Reviewers notated that Smutny and Schreiberova (2020) also found that students benefited from AI use when it is supplementary to their active engagement and experience. These two studies supports the mixed experiences of participants, indicating both an ability to enhance academic performance, as well as cognitive ramifications when using AI for academic purposes in higher education.

Theme 3: AI and Students' Engagement and Motivation

This theme was prominent in the interviews; and many Arab students reported on how AI tools shaped the way they interacted with and felt in higher education. “AI keeps me interested—I feel like I’m learning with a tutor who is always available” explained one student. “Sometimes I don’t feel like studying. But when I use AI tools, it is more interactive and more fun,” said another participant. Others shared their experiences where AI allowed them to work at their own pace: “With AI I can go over the material again and again without being embarrassed, which keeps me engaged.” These experiences show that AI technologies, primarily those that offer personalized feedback or adaptive learning, have the potential to increase both emotional and cognitive engagement. Students felt more in control of their learning, which added to their intrinsic motivation. This finding is echoed in Holmes and others (2019) highlighted that AI could support self-directed learning and engagement by adapting to students learning needs. Verma and others (2021) similarly stated that AI's interactivity and real-time feedback mechanisms could improve the engagement of the learners by enhancing motivation through adaptive learning—particularly in digital learning environments. The analogies in the literature help substantiate the students' lived experiences, as each indicates that AI, when well-designed and implemented, has a constructive impact on learners’ academic interest and engagement.

Theme 4: Ethical and Cultural Considerations of AI Use in Higher Education

Many of the students using AI highlighted a substantial concern about the ethical and cultural dimensions of employing AI technology in their academic situations. One student remarked: "I’m not comfortable using AI when I don’t know here my data is going." Another student stated: "In our culture, it feels wrong for me to copy or use ready answers, we were taught to only use ourselves." A third student brought up: "AI can’t ever know how we think or what is proper for our society, it just spits answers out minus value." These examples identified a strong awareness of privacy, fairness, and cultural disparity. Students clearly articulated the gap between technological advancement and traditional values, including academic integrity, surveillance, and culturally appropriate responses to AI prompts. This theme is strongly aligned with Castañeda and Selwyn (2018) who argue that when using digital tools in education, the cultural and ethical environments must be considered separately from technical functionality.

Likewise, Wang and Chen (2022) who posit ethical AI in education needs to meet cultural expectations in addition to the needs for autonomy and privacy of the students involved (Thelma et al., 2024). Taken together, these studies help to position students' concerns as valid reflections of ethical discomfort and cultural dissonance, which are barriers to their ability to interact with AI tools at will within higher education contexts.).

5. DISCUSSION

The first main finding demonstrates the complexity and ambivalence towards AI among Arab students in higher institutions of learning in small scale case study in Israel. Students found it convenient and useful - especially around speed, accessibility, and summarization - yet were concerned with reliability, ethical parameters, and use in learning. This aligns with Tierney and others (2025) who found university students struggle with the duality of AI: its convenience and potential loss of academic integrity. Zawacki-Richter and others (2019) similarly identified that students considered it especially difficult when AI tools introduced dissonance between independent work and external help in their learning. This finding highlights how important it is for institutions to develop clear ethical standards and AI literacy programs that help students navigating the boundaries and responsible use of AI in the academic context (Zawacki-Richter et al., 2019; Luckin et al., 2022).

Second, students indicated that AI positively affected their academic performance and learning outcomes by helping them make sense of difficult content, providing timely feedback and saving them time. At the same time, there were a number of participants who were concerned that overly reliance on AI might diminish their critical thinking and independence. This is a clear duality, as noted by Martín-Núñez and others (2023), who noted that AI can provide students with increased academic productivity, but it also can also make them passive consumers of AI if they don't use it strategically. Smutny and Schreiberova (2020) emphasized that AI is best in conjunction with student work rather than an endorsement. The study's results indicate that educators should encourage "scaffolded AI use", which is to produce students who can reflect and critically evaluate AI content and not blindly accept it as given to help maintain intellectual growth and academic rigor.

The third revealed theme illustrated the ways in which AI can alter students' level of motivation and engagement. A number of participants discussed feeling more empowered and interested in their studies as a result of AI's personalized, interactive, and flexible support. Participants appreciated that AI tools allowed them to learn at their own pace and sometimes to revisit content without feeling embarrassed or judged. Finding complimentary evidence, Holmes and others (2019) found that adaptive AI systems can enhance intrinsic motivation and cognitive engagement by allowing learners a higher level of autonomy and control. In the same vein, Verma and others (2021) demonstrated that AI tools that provided immediate or real-time feedback increased learner participation, persistence. Overall, these findings confirm that AI, when deployed as a learner-centered tool rather than teacher-centered tool, can greatly augment students' engagement in higher education, particularly learners from populations that may have barriers to study because of their linguistic or social background.

The fourth finding highlights the ethical and cultural dilemmas that Arab students grappled with in understanding how to use AI within an academic context that has its own cultural bits. Students raised the following ethical dilemmas: privacy and data usage, academic dishonesty, and the ability to use AI to reflect their cultural norms and values. The previous study in the literature by Wang, and Chen (2022), with respect to students' ethical dilemmas in using AI, also said AI must consider cultural and educational expectations when used (Lim et al., 2023). Castañeda and Selwyn (2018) also made the point that technology should not only be human-centered but also context-sensitive, or risk further alienating marginalized student populations. Moving forward, it is proposed that in order to use AI in the educational systems of the Arab sector in Israel, ethical design, transparency, and particular attention to culturally relevant policy and practices is critical.

Finally, the study clearly points to the pressing need for higher education institutions to view the integration of AI holistically and inclusively, meaning again that AI can't simply viewed only as a tool to improve efficiency. In reality, AI is a never- ending system that seems to operate independently, when in fact it interacts with students' values, culture, other identities, academic practices and ethical values. The study's findings also point to a widening digital divide, not just in terms of access, but in terms of preparedness, comfort, and trust. At the educational level, digital opportunities cannot simply be left to chance and important work needs to happen in providing culturally adapted AI training for students as

well as awareness of digital ethics training as well as support systems for students. Finally, it is critical that future research is also developed with consideration to gender, socio-economic status, and discipline differences in students' perception and use of AI, which is consistent with research by Martín-Gutiérrez and others (2024), to create more targeted interventions to encourage ethical and equitable use of AI across a diversity of contexts to support students' success.

6. CONCLUSION

This paper examined the impact of artificial intelligence (AI) technology on Arab students in higher education in the state of Israel, which gave rise to various nuanced perceptions and experiences from the students. The results present four overarching themes: students' mixed perceptions of AI, the impact on academic performance and academic learning, the impact on motivation and engagement, and ethical and cultural limitations associated with AI technology. Students were aware of the value of AI technology in facilitating their study behaviors and providing academic support, but many expressed concerns about over-reliance on AI technology and its potential impact on academic integrity and independent thinking. The multi-faceted nature of students' perceptions of AI and its impact on academic experiences highlighted the importance of examining both functional and emotional aspects of AI- supported learning experiences.

One of the key messages from the research is that while AI has the potential to customize learning, enhance engagement, and complement learning outcomes, its potential is not equally realized by all students. Rather, students' experiences with AI are filtered by their cultural norms, values around ethics, and personalized learning needs. Several students raised questions about AI equity, transparency, and cultural responsiveness, reminding us that technology is not simply a matter of access; rather we must work towards ethical, inclusive, and student-centered institutional strategies if we are to integrate technology well. Furthermore, our findings suggest that when a significant AI uptake takes place (i.e., users actually using AI as part of their learning) it requires a significant amount of scaffolding by educators (i.e., institutional policies, digital literacy teaching, ethics education) to avoid poor practice and dependence. The discussion also raises the issue of a larger digital divide—not simply one of access, but of trust, readiness, and alignment of cultures. In spite of its contributions, this inquiry brings to the forefront other potential questions. Namely, how do gender, discipline, and socio-economic dynamics influence Arab students' view of and use of AI? How can culturally responsive AI policies open doors for equity in spaces of learning? Where does future inquiry interface with these questions, perhaps with comparative or longitudinal designs that could explore several kinds of student populations and surroundings? Given that AI is evolving, higher education institutions need to recognize the importance of inclusive design, ethical frameworks, and culturally adaptive pedagogies to ensure that the benefits of AI will be available to all learners and utilized responsively. In the end, the value of AI in education will not simply depend on AI's prowess; it will depend on our ability to utilize it humanely and responsibly, in equitable ways, for the benefit of society.

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