



A Study on impact of Artificial Intelligence on Higher Education: The dynamics in educational implications with special reference to Tirunelveli City.

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Abstract- The adding frequency of Artificial Intelligence (AI) in advanced education underscores the necessity to explore its counter accusations on ethical, social, and educational dynamics within the sector. This study aims to exhaustively reviewing the impact of AI on advanced education in Tirunelveli city, probing into stakeholders' stations, comprehensions, and prospects regarding its transaction. The exploration hones in on crucial angles of AI in advanced education, encompassing its influence on tutoring and literacy, ethical and social counter accusations, and the anticipated part of AI in the future. Employing a quantitative approach through this study reveals positive stations towards AI in advanced education. Educationalist it's implicit to enhance tutoring and literacy, streamline administration, and short-term invention. Emphasis is placed on ethical considerations and guidelines for AI transaction, pressing the imperative need to address issues similar as appropriation, security, and bias. Consequently, the exploration underscores the necessity for a comprehensive understanding of AI integration, considering not only its specialized aspects but also the ethical, social, and educational confines. By admitting the part of AI uses, AI operation purposes, and addressing associated difficulties, educationalist can work towards employing the benefits of AI while glazing responsible and effective transaction in tutoring and literacy surrounds.

Keywords- Urban mental health, rapid urbanization, mental health disparities, social determinants of mental health, migration and psychosocial stress, globalization and mental well-being, urban resilience and public health, digital stress and social media impacts, mental health policy (India & LMICs), community-based mental health interventions.

I. Introduction

Preface Artificial Intelligence (AI) has come a transformative force, reshaping colorful diligence such as communication systems, software operations, data storehouse, business operations, analytics, interactive platforms, cybersecurity, and social media. Recent advancements in AI have profoundly impacted multiple aspects of life, including education and business. These advancements have unnaturally altered how we suppose, learn, operate, and thrive in a decreasingly intelligent and inter-connected world an ongoing emulsion between humans and AI, performing in the emergence of systems. AI technologies have the eventuality to epitomize literacy gets, automate executive tasks, reduce workloads, offer instant feedback, knitter courses to individual progress, enhance pupil engagement, and optimize decision-making. While the provision of AI-powered tools in advanced education originally progressed sluggishly, preceptors anticipate an unborn increase in their operation. In the monarchy of



advanced education, AI holds pledge for addressing significant challenges and driving invention in tutoring and literacy practices. Educational settings, increasingly embracing AI technologies, include intelligent training systems, adaptive literacy platforms, chatbots, automated grading systems, and data analytics tools. To unleash these implicit benefits, stakeholders in advanced education and beyond must retain advanced AI knowledge to interact effectively with AI technology. Still alongside these benefits, AI in advanced education introduces several challenges and enterprises, such as data impounding and security. The investigation of AI in advanced education is a dynamic and ever-evolving field. As AI earnings rise, it becomes essential to explore its impact on the educational, ethical, and social dynamics of the sector.

A significant knowledge gap exists regarding how colorful stakeholders in advanced education, including scholars, faculty, and directors, perceive the use of AI and fantasize its unborn part in the sector. Thus, this study aims to completely examine and understand the impact of AI on advanced education, focusing on the following aspects, of work station and comprehensions of scholars, faculty perspectives towards AI in advanced education, exploring their enterprises and prospects.

Exploring how AI influences tutoring and literacy processes, assessing implicit benefits and downsides in enhancing educational approaches, building literacy strategies, and perfecting academic issues. Examining ethical considerations and social counter accusations arising from AI transaction, including data sequestration, algorithmic bias, fairness, transparency, and responsibility. By addressing these objects, the study contributes to the understanding of AI's impact on advanced education and sheds light on the educational dynamics.

The remainder of this calligraphy is organized as follows Literature review presents a comprehensive review of the being literature, covering vital exploration areas related to AI in advanced education, including educational inventions, learning analytics and pupil support, assessment and grading, tutors' professional development, and ethical and social counter accusations. Signature and novelty of the exploration describe the methodological approach employed in this study, detailing the survey design, data collection procedures, and logical styles. Methodology sheds light on the significance and novelty of this study, high-lighting its holistic and complete presentation of the multifaceted impact of AI on advanced education.

Results present the study's findings, organized according to the survey questions, offering accessibility into tutor's work station and comprehensions, the part of AI in tutoring and literacy, dynamics counter accusations, and envisaged unborn places. Discussion provides a detailed of the findings, sticking them within the broader environment of AI in advanced education and drawing connections to literature. The sections conclude the script by insistent the study's benefactions, counter accusations, limitations, and recommendations for unnatural exploration.

II. Literature review

Exploration examining the impact of AI on advanced education has witnessed substantial growth in recent times, as stressed by notable studies (Al - Zahrani, 2023;



Al- Zahrani, 2024 a; Bozkurt et al. 2021; Chu et al. 2022; Dai and Ke, 2022; Laupichler et al. 2022; Zawacki- Richter et al. 2019). Scholars from different fields, including education, computer wisdom, psychology, and ethics, have explored colorful angles of AI perpetration in advanced education settings.

Chu et al. (2022) scanned the top 50 AI studies in advanced education from the Web of Science (database) Their analysis revealed a current focus on prognosticating learners' learning status, particularly power house and rates, pupil models, academic achievement. still, there's conspicuous lack of emphasis on advanced- order thinking chops, gaplaboration, communication, tone- efficacy, and AI chops in advanced education studies.

Laupichler et al. (2022) stress that exploration on AI in advanced education is still in its early stages, challenging refinement in defining AI knowledge and determining applicable content for non-experts to enhance their understanding of AI. This literature review provides an overview of crucial exploration areas and offers perceptivity into being knowledge. Pedagogical inventions. One vital exploration sphere explores the pedagogical counteraccusations of AI in advanced education, recognizing its eventuality to revise the educational process and enhance effectiveness.

III. Methodology

In this study, a quantitative approach was employed using a questionnaire to comprehensively explore the multifaceted impact of AI on higher education.

Research design. To gather insights into the attitudes, observations, and experiences of faculty members regarding AI in higher education, a questionnaire was precisely developed. The questionnaire explored into respondents' demographics, encompassing age, gender, current occupation, education level, subjective AI expertise, utilized AI tools and services, frequency of usage, and purpose of usage designed to perspectives on AI in higher education. These items were carefully developed based on the review of the literature and aligned with the study's research questions and objectives.

Sampling. The sampling approach employed in this study aims to secure a representative sample that range present in higher education institutions in Tirunelveli city area. To achieve this research both the govt and private colleges faculty are included, thereby ensuring a complete image of various institutional contexts. The snowball technique, a method where existing participants recruit from among their connections, is occupied to systematically identify partakers for the current study.

Table 1 Demographics Profile of the Respondents

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Age Group	Factors	No. of Respondents	Percentage (%)
	24 or less	25	21
	25 to 34	30	25
	35 to 44	35	29
	45 or more	30	25



	Total	120	100
Gender	Male	85	71
	Female	35	29
	Total	120	100
Education level	PhD	50	42
	Medicine, engineering, or computer science	25	21
	Business, commerce, or law	25	21
	Literary, humanities, or education	20	16
	Total	120	100
Subjective expertise	Low	42	35
	Medium	53	44
	High	25	21
	Total	120	100
Usage frequency	Rarely	20	17
	Monthly	43	35
	Weekly	25	21
	Daily	32	27
	Total	120	100

IV. Results

Demographics. Table 1 presents an overview of the demographic characteristics of the study respondents.

A significant majority (29 %) falls within the age bracket of 35 to 44 years, with comparatively bigger proportions.

Gender distribution reveals that Males constitute a slightly higher percentage (71%) than females.

Educational attainment varies with the majority (42 %) holding a Phd.

Participants' academic pursuits are diverse, with the most prevalent fields of study being Medicine, Engineering, or Computer Science (21%), and Business, Commerce, or Law (21%) followed by Literary, Humanities, or Education (16%).

In terms of self-perceived AI expertise, a significant portion (35%) rates their proficiency as low, while a slightly smaller percentage (44%) considers it to be medium, and a smaller fraction (21%) deems their AI expertise as high.

Lastly, examining usage frequency, a noteworthy segment of participants (35%) engages with AI on a monthly basis, while others utilize it on a weekly (21%), daily (27%), or infrequent rarely basis (17%).

Table 2 AI Tools, Usage Purposes, and Negative Experiences

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Groups	Items	M	SD
AI Tools and Services	Face recognition services	4.32	1.11



	Speech recognition services	3.92	1.18
	AI-chatting tools	3.85	1.25
	AI-powered design and creativity tools	3.60	1.37
	Google AI services	3.60	1.30
Purpose of Usage	General purposes	4.38	0.80
	Educational purposes	4.35	0.90
	Research purposes	4.18	1.06
	Entertainment purposes	3.96	1.07
	e-Government purposes	3.49	1.38
	Commercial purposes	3.34	1.36
Negative Experiences	Privacy and security issues	3.57	1.25
	Technical issues during usage	3.35	1.16
	Technical issues during installations	3.35	1.27
	Financial costs	3.27	1.30
	Usage difficulties	3.02	1.27

Table 2 presents an inclusive overview of participants evaluations concerning AI tools, their purposes, and encountered negative experiences. When it comes to AI tools and services, face recognition services garnered the highest mean score of 4.32, signifying a positive evaluation among participants. Speech recognition services also received favorable ratings, boasting a mean score of 3.92. AI-Chatting tools obtained a commendable mean score of 3.85, reflecting a positive perception. On the other hand, AI-powered design, and creativity tools, along with Google AI services, received slightly lower mean scores of 3.60 each.

Examining the purposes of usage, general purposes received the highest mean score of 4.38, indicating strong positive evaluations. Educational purposes were also highly rated, achieving a mean score of 4.35. Research purposes garnered a positive evaluation with a mean score of 4.18, while entertainment purposes scored slightly lower at 3.96. e-Government and commercial purposes obtained lower mean scores of 3.49 and 3.34, respectively.

Researching into negative experiences, privacy and security concerns received a mean score of 3.57, indicating a moderate level of concern among participants. Technical issues during usage and installation both scored mean scores of 3.35, reflecting moderate challenges. Financial costs were rated with a mean score of 3.27, indicating a moderate level of cost-related concerns. Additionally, participants reported usage difficulties, which received a mean score of 3.02, suggesting a moderate level of difficulty encountered.

Likewise, the significant goods of total purposes punctuate the critical part of intentionality in AI perpetration. The purposes for which AI is used in tutoring and



literacy mainly impact stations, comprehensions, and unborn counteraccusations. This underscores the need for clear pretensions and careful consideration of the ethical and social counteraccusations associated with AI combination. Incipiently, it's noteworthy that total difficulties had a significant influence on stations, comprehensions, and the unborn part of AI, although to a lower extent compared to total uses and total purposes. These findings indicate that addressing challenges and furnishing acceptable support in AI perpetration can contribute to more positive stations and comprehensions, leading to effective integration of AI in advanced education.

To add up, these results illuminate the complicated interplay between AI operation, purposes, difficulties, and their impact on stations, comprehensions, and unborn counteraccusations. They emphasize the necessity for a wide-ranging understanding of AI integration, considering not only its specialized aspects but also the educational confines. By admitting the part of AI uses, AI operation purposes, and addressing associated difficulties, instructor can work towards attaching the benefits of AI while icing responsible and effective perpetration in tutoring and literacy surrounds.

V. Conclusion

This study sheds light on the favorable stations and comprehensions of educationalists in advanced education towards the perpetration of AI. Repliers not only conceded the value of AI in perfecting tutoring and literacy gests but also in perfecting resource availability, streamlining executive processes, and nurturing invention within advanced education institutions. Their enthusiasm extended particularly to AI tools and services, similar as facial recognition, speech processing, and chatbots. still, they also honored the imperative for progressions in more sophisticated AI technologies. sequestration, security, and bias were linked as critical issues taking attention. Despite these enterprises, there was a prevailing sanguinity regarding AI's unborn part in advanced education, with repliers prognosticating substantiated literacy gests, ethical AI integration, cooperative trials, and ongoing support for lifelong literacy.

References

1. Chen C (2023) AI Will Transform Teaching and Learning. Let's Get it Right. <https://hai.stanford.edu/news/ai-will-transform-teaching-and-learning-lets-get-it-right>
2. Chu HC, Hwang GH, Tu YF, Yang KH (2022) Roles and research trends of artificial intelligence in higher education: A systematic review of the top 50 most-cited articles. *Australasian Journal of Educational Technology* 38(3):22–42
3. Laupichler MC, Aster A, Schirch J, Raupach T (2022) Artificial intelligence literacy in higher and adult education: A scoping literature review. *Computers and Education: Artificial Intelligence* 3:100101. <https://doi.org/10.1016/j.caeai.2022.100101>
4. Al-Zahrani AM (2023) The impact of generative AI tools on researchers and research: Implications for academia in higher education. *Innovations in Education and Teaching International*, 1-15. <https://doi.org/10.1080/14703297.2023.2271445>



5. Al-Zahrani AM (2024a) From Traditionalism to Algorithms: Embracing Artificial Intelligence for Effective University Teaching and Learning. Educational Technology at IgMin 2(2):102–0112. <https://doi.org/10.61927/igmin151>
6. Al-Zahrani AM (2024b) Unveiling the shadows: Beyond the hype of AI in education. Heliyon 10(9):e30696. <https://doi.org/10.1016/j.heliyon.2024.e30696>