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Awareness, Attitude, and Preparedness of Special Educators towards Artificial Intelligence in the Education of Students with Intellectual Disabilities in Delhi

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Abstract

Artificial intelligence (AI) offers tremendous possibilities for transforming learning in special education by allowing for personalized instruction to students with intellectual disabilities. Nevertheless, its acceptance relies significantly on special educators who act as the nexus between the technology and students, due to their awareness, attitude, and readiness for AI technologies. The study aims to examine the AI awareness, attitudes towards the adoption of AI technologies, and preparedness for integrating AI technologies in special education professionals working with students with intellectual disabilities in Delhi, India.

The present study employs survey method targeting 120 special education professionals from government and private special education institutions.

Data were collected using a self-administered survey questionnaire consisting of sections on AI awareness, attitudes towards AI integration, and AI readiness. Results showed moderate awareness on the application of AI in special education and fairly positive attitudes on its effectiveness towards individualizing the education but considerably poor level of readiness on integrating AI technologies into classroom. A significant positive association was found between AI awareness and positive attitude ($r=0.42$, $p<.01$) and positive attitude and AI preparedness ($r=0.38$, $p<.01$). Major barriers that prevent for proper use of AI are lack of professional training, poor infrastructural facility, and data privacy related concerns.

Implications emphasize the dire need for targeted teacher professionalization programmes and policy changes in order to enhance the level of readiness for effective AI usage in special education.

Keywords: Artificial Intelligence, Special Education, Intellectual Disability, Teacher Preparedness, Inclusive Education, Delhi

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1. Introduction

1.1 Background

With 35 million+ children with special needs, India lacks training for almost all of them as less than one percent of these children are serviced by a trained educator or institution. India employs approximately 120,000 special educators, at a ratio of approximately one educator for every 290 children (most of them being clinical psychology professionals with education background), which highlights the human resource constraints. Such constraints necessitate the adoption of scalable, technology-driven solutions to equip special educators to impart personalized teaching.

Global trends have seen the advent of Artificial Intelligence as a major disrupter and enhancer of education, with immense potential in the special education context.

For children with disabilities, AI can enable screening for intellectual disabilities, autism spectrum disorder and dyslexia; guide teachers with inclusive classroom strategies; track child performance over time. The applications ofAI-enabled technology for this group include use of speech recognition, affective computing and adaptive learning systems to personalize the learning environment according to individual learning profiles in order to support the children with academics as well as their socio-emotional growth. It is envisioned that the usage of AI in special education can take place in three integrated dimensions- (1) Screening and cognitive profiling; (2) Curriculum delivery; and (3) AI Copilot support for teachers. For example, AI tools in cognitive profiling has helped reduce the time to develop IEPs from 6–8 months to two weeks, which is 90% administrative burden reduction.

Although, several constraints need to be addressed for mainstreamingAI-based tools in special education, these primarily include Lack of Digital literacy amongst educators, ethical issues associated withAI usage, and lack of infrastructure and institutional support.

The most pronounced concern being in India, which lags in terms of creating awareness around the neurodiversity concept (even amongst urban, elite populations).

1.2 Statement of the Problem

Delhis special educators jugle overbooked schedules with the shift toward tech-savvy teaching. Meanwhile, national initiatives that encourage inclusive education, like New National Education Policy 2020 and Samagra Shiksha program (SPP), highlight the importance of technology integration while overlooking the chasm between policy and

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practice in the classroom. A 2018 study has showed that teachers attitudes are the most important predictor of teachers adoption of AI-supported classroom applications, whereas knowledge has a weak but positive relationship.

The KAP framework(Knowledge, Attitudes, and Practice) offers a valuable way of thinking about the relationships among underlying beliefs about the value of the technology, its presumed benefits, and what teachers are doing in the classroom when they adopt an educational technology (Cowan, et al.).

Given the unique opportunity that AI provides for enhanced personalization, inclusion, and accessibility in the classroom, special education is largely missing in research investigating AI in education. More rigorous research is needed to address how Delhi-based special educators view AI, the extent of their awareness of the technology, and their readiness to adopt it into classroom practice.

1.3 Research Objectives

1. To assess the level of awareness among special educators in Delhi regarding AI applications in the education of students with intellectual disabilities.
2. To examine the attitudes of special educators toward the integration of AI tools in teaching students with intellectual disabilities.
3. To evaluate the perceived preparedness of special educators for implementing AI-based interventions and to identify the barriers affecting AI adoption in special education settings in Delhi.

1.4 Significance of the Study

This paper aims to contribute to the increasing literature on the role of AI in special education by presenting empirical evidence from Indian context especially the metro-city of Delhi. Such findings may be helpful in formulation of policy guidelines, conducting staff professional development programs and institutional planning strategies to implement AI in special education. Also the paper fills in a void about understanding how the Indian educational context effects adoption of AI in special education.

2. Review of Literature

2.1 AI in Special Education: Global Perspectives

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Special education has seen a significant amount of interest around the incorporation of AI and what can be accomplished to strengthen students with disabilities learning results. AI advances can improve instructive skills to facilitate help the instructive needs of special education, and revolutionize the educational process that outcomes by forming a learning landscape that is all the more reachable and comprehensive. AI based applications can help teachers as instructional devices for kids with gentle mental handicap. Government special education teachers' perspectives on the learning viability and usefulness of these applications were positive in that they announced the AI based applications useful and pragmatic as instructional devices (M=4.0-4.3 on a five point scale).

2.2 Teacher Readiness for AI Integration

A number of studies that address teacher readiness for AI in the classroom indicate that teachers' attitudes toward AI predict AI in classroom practices (Yiu & Chang, 2021) and teachers' knowledge of AI, to a lesser degree, has a positive correlation with AI in the classroom practices. Originally designed in public health, the KAP framework suggests that knowledge leads to positive attitude change, which eventually leads to behavioral action. With AI being applied to classroom, teacher's knowledge towards AI leads to affectivity change, and thus leads to action in classroom practice.

In UAE schools, teacher's attitudes significantly predicts classroom practices on AI and knowledge has a weaker yet positive correlation.

A mediating analysis confirmed that knowledge indirect affects practices through attitude. Moreover, a moderating effect analysis showed differences in AI practices in accordance with gender and job position. According to a study about Hungarian professionals working with children, (Molnár and Kovács, 2022) among all participants, 95.9% were familiar with artificial intelligence (AI) in any capacity, of which 52.1% had only been introduced to AI whereas 46.2% were familiar with the firsthand usage of AI, whereas the vast majority of respondents (87.7%) sees a role for artificial intelligence in teaching and education. Nevertheless, those prospective special education teachers expressed a less positive view towards artificial intelligence in the educational field compared to their primary school colleagues.

2.3 Barriers to AI Adoption in Special Education

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Barriers have been noted in studies regarding AI implementation in special education; they are as follows: lack of expertise or prior experience, insufficient training or previous negative experiences and unclear understanding of how to utilize AI to benefit students. AI needs may go unmet as the implementation is halted, or once obtained the tools might be underutilised in a classroom setting that would lead to it being unused in the future. Inclusive education research indicates that educators in classrooms often encounter difficulty in helping to deliver lessons in a classroom that accommodate students with varying needs.

Teachers in the UAE described not being educated or adequately provided with tools to effectively educate students requiring special needs, which has come to pass since approximately one third (33 percent) of students on special education are considered to have specific learning disabilities.

Additionally, the small number of special education professionals has been a concern particularly since majority of those that are trained have been concentrated in urban centers that leave more areas underserved. AI tools might be a viable solution to these challenges, but this implementation would require solving systemic issues with infrastructure and training.

2.4 AI Applications for Students with Intellectual Disabilities

In a child who has Intellectual Disability (ID) will find it difficult to be able to communicate, learn, socialize and be independent of the day-to-day activities. Some AI powered tools like real-time captioning, sign language translation, robots, Virtual Reality, BCI can play a game changing role by helping children with ID to participate more effectively in education and day to day life thus enhancing the participation and independence. For instance, the AI based Cognitii platform for screening, monitoring and support in classroom using three layers – AI-powered screening through games, curriculum based on cognition of child and AI copilot for educators is now available in 5 schools in India, benefiting 643 learners with its screening and in-app engagement. This has further extended through AI integration with Universal Design for Learning (UDL) principles; AI integration with UDL has proven to enhance accessibility with creation of multimodal learning spaces; AI is able to operationalise UDL by having custom content, representation and assessment of learners thereby transforming UDL to an adaptive, data-driven inclusive practice.

2.5 Theoretical Framework

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The conceptual underpinnings of this research include the KAP (Knowledge, Attitudes, and Practices) Model. This framework is widely applied in innovation research for examining how basic knowledge, valued attitudes and application of the innovation in classrooms align. KAP typically presumes a progression from acquisition of knowledge to changed attitudes to changed behavior (22, 23).

We apply the framework to assess how teacher knowledge about and beliefs aboutAIwill be associated with their use ofAIin the classroom.

Also included is the Technology Acceptance Model (TAM). The core idea of TAM is that "perceived usefulness" and "perceived ease of use" directly affect attitudes and behavioral intentions of individuals toward technology. In the application to AI in classrooms, these concepts correspond to perceived usefulness ofAIfor effective teaching (performance expectancy) and perceive difficulty of implementing AI into a classroom (effort expectancy). Finally, the present research is supported by the Universal Design for Learning (UDL) framework which argues for providing access to technologies to students in their classrooms, positioningAIas a technology to ensure student participation and meaningful learning.

3. Research Method

3.1 Research Design

This study employed a quantitative survey research design to examine the awareness, attitudes, and preparedness of special educators toward AI in the education of students with intellectual disabilities. The survey method was chosen for its suitability in capturing data from a geographically dispersed population and its efficiency in collecting standardized data across multiple dimensions.

3.2 Study Population and Sample

The study population comprised special educators working with students with intellectual disabilities in Delhi. Using purposive and convenience sampling, a sample of 120 special educators was drawn from government and private special education institutions across Delhi.

Inclusion Criteria:

- Currently employed as a special educator in Delhi
- Working with students with intellectual disabilities for at least one year

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- Willing to participate in the study

Exclusion Criteria:

- Special educators on long-term leave
- Educators working exclusively with students with disabilities other than intellectual disabilities

3.3 Research Instrument

A structured questionnaire was developed based on the KAP model framework and validated instruments from previous studies. The questionnaire comprised five sections:

Section A: Demographic Information - Age, gender, teaching experience, educational qualifications, type of institution, prior AI training

Section B: Awareness of AI in Special Education - 15 items measuring awareness of AI concepts, applications, and tools in special education (Cronbach's $\alpha = 0.82$)

Section C: Attitudes toward AI Integration - 15 items measuring attitudes toward AI use in special education, including perceived usefulness, ease of use, and concerns (Cronbach's $\alpha = 0.85$)

Section D: Perceived Preparedness for AI Implementation - 12 items measuring self-reported preparedness for AI integration, including technical skills, pedagogical adaptation, and institutional support (Cronbach's $\alpha = 0.79$)

Section E: Barriers to AI Adoption - Open-ended and Likert-scale items identifying challenges to AI integration

Items were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The instrument was validated through expert review and pilot testing with 20 special educators, resulting in refinement of item wording and content validity.

3.4 Data Collection Procedure

Data collection was conducted over a three-month period (April-June 2026). Questionnaires were distributed through:

1. Direct administration in special education institutions
2. Online distribution via Google Forms with institutional support
3. Professional networks and special educator associations

Ethical considerations included informed consent, anonymity, and voluntary participation. Participants were assured of confidentiality and the right to withdraw at any time.

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3.5 Data Analysis

Data were analyzed using SPSS Version 27. Statistical procedures included:

1. Descriptive statistics (frequencies, means, standard deviations) for demographic data
2. Descriptive statistics for awareness, attitude, and preparedness scores
3. Pearson correlation analysis to examine relationships among variables
4. Independent t-tests to compare groups based on demographic variables
5. Thematic analysis of open-ended responses

4. Findings

4.1 Demographic Profile of Respondents

Table 1: Demographic Characteristics of Respondents

Variable	Category	Frequency (n)	Percentage (%)
Gender	Female	106	88.3
	Male	14	11.7
Age Group	25-35 years	58	48.3
	36-45 years	42	35.0
	46 years and above	20	16.7
Teaching Experience	1-5 years	32	26.7
	6-10 years	48	40.0
	11-15 years	25	20.8
	16+ years	15	12.5
Educational Qualification	Bachelor's in Special Education	40	33.3
	Master's in Special Education	62	51.7
	Other (including certifications)	18	15.0
Type of Institution	Government	48	40.0
	Private	72	60.0
Prior AI Training	Yes	18	15.0
	No	102	85.0

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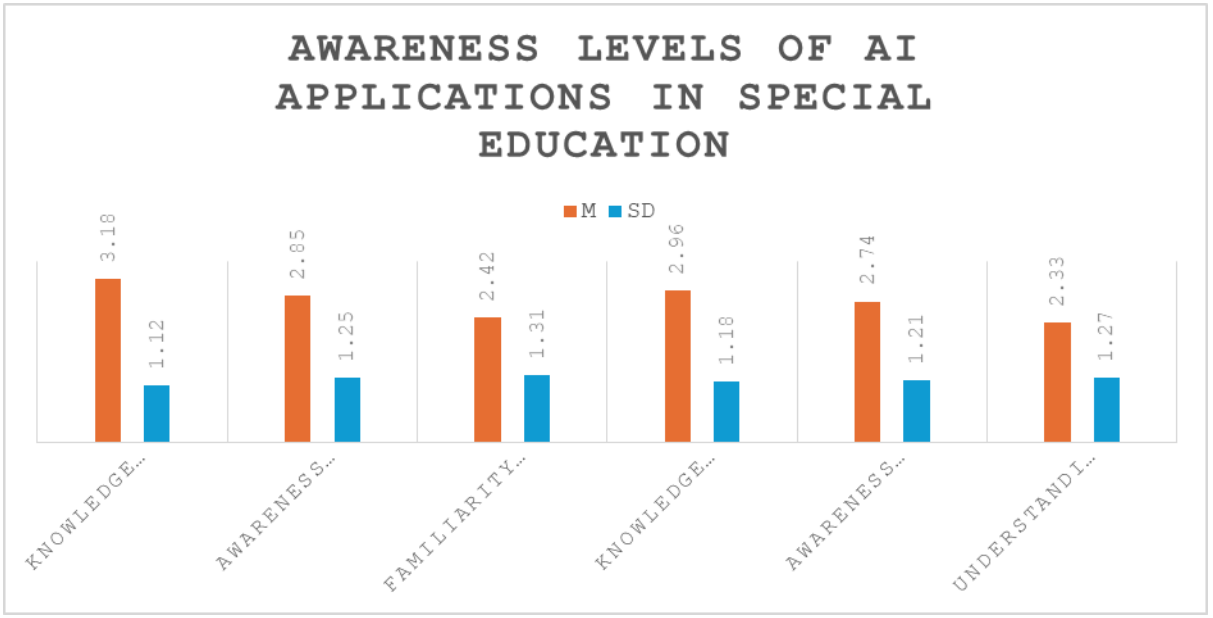
The demographic profile reveals that the sample was predominantly female (88.3%), reflecting the gender distribution in the special education field in India. The majority of respondents (48.3%) were in the 25-35 age group, with 40% having 6-10 years of teaching experience. Most respondents (51.7%) held a Master's degree in Special Education. Notably, only 15% of respondents had received any form of prior AI training.

.2 Research Objective 1: Awareness of AI Applications

Table 2: Awareness Levels of AI Applications in Special Education

Item	M	SD	Interpretation
Knowledge of AI concepts	3.18	1.12	Moderate
Awareness of AI-based screening tools	2.85	1.25	Low-Moderate
Familiarity with AI-assisted IEP development	2.42	1.31	Low
Knowledge of AI-based learning platforms	2.96	1.18	Moderate
Awareness of AI tools for assessment	2.74	1.21	Low-Moderate
Understanding of AI ethics in special education	2.33	1.27	Low
Overall Awareness Score	**2.78**	**0.95**	**Moderate-Low**

Note: Scores interpreted as: 1.00-1.99 = Very Low, 2.00-2.99 = Low-Moderate, 3.00-3.99 = Moderate, 4.00-5.00 = High



Graph 1: **Awareness Levels of AI Applications in Special Education**

The overall awareness score (M = 2.78, SD = 0.95) indicates a moderate-low level of awareness among special educators regarding AI applications. The highest awareness was

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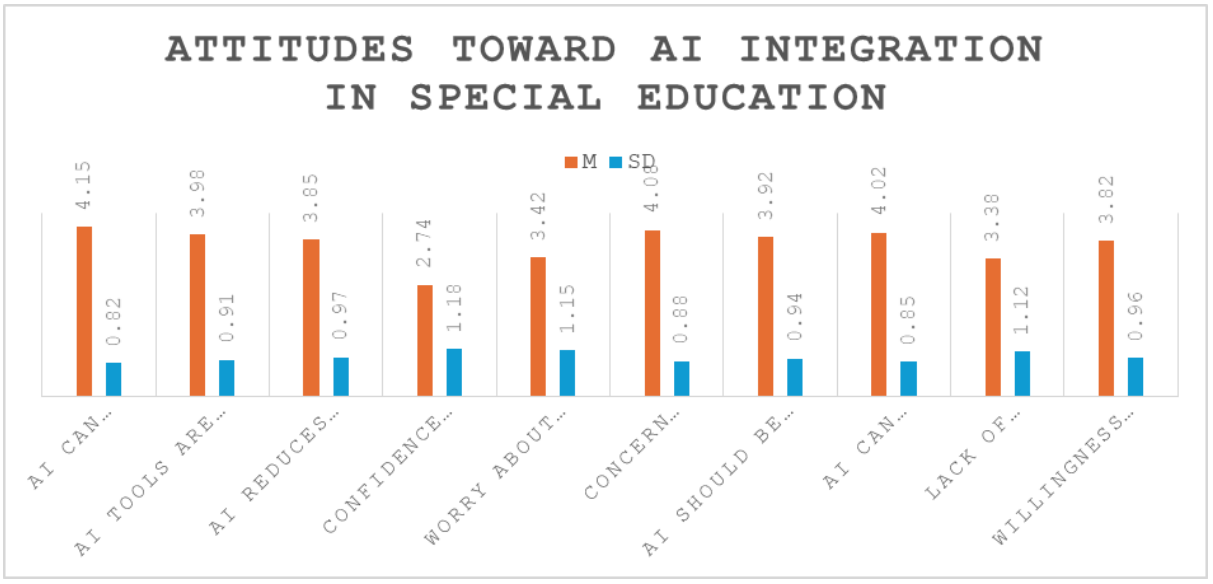
reported for general knowledge of AI concepts (M = 3.18), while understanding of AI ethics (M = 2.33) and AI-assisted IEP development (M = 2.42) were the lowest.

4.3 Research Objective 2: Attitudes toward AI Integration

Table 3: Attitudes toward AI Integration in Special Education

Attitude Item	M	SD	Interpretation
AI can enhance individualized learning	4.15	0.82	Positive
AI tools are useful for students with ID	3.98	0.91	Positive
AI reduces administrative burden	3.85	0.97	Positive
Confidence in using AI tools	2.74	1.18	Neutral-Negative
Worry about AI replacing teachers	3.42	1.15	Neutral
Concern about data privacy	4.08	0.88	Positive Concern
AI should be integrated in special education	3.92	0.94	Positive
AI can support differentiated instruction	4.02	0.85	Positive
Lack of human touch in AI tools	3.38	1.12	Neutral
Willingness to learn about AI	3.82	0.96	Positive
Overall Attitude Score	**3.72**	**0.72**	**Positive**

Note: Scores interpreted as: 1.00-2.49 = Negative, 2.50-3.49 = Neutral, 3.50-5.00 = Positive



Graph 2: **Attitudes toward AI Integration in Special Education**

The overall attitude score (M = 3.72, SD = 0.72) indicates positive attitudes toward AI integration. Special educators strongly agreed that AI can enhance individualized learning (M = 4.15) and that AI tools are useful for students with intellectual disabilities (M = 3.98).

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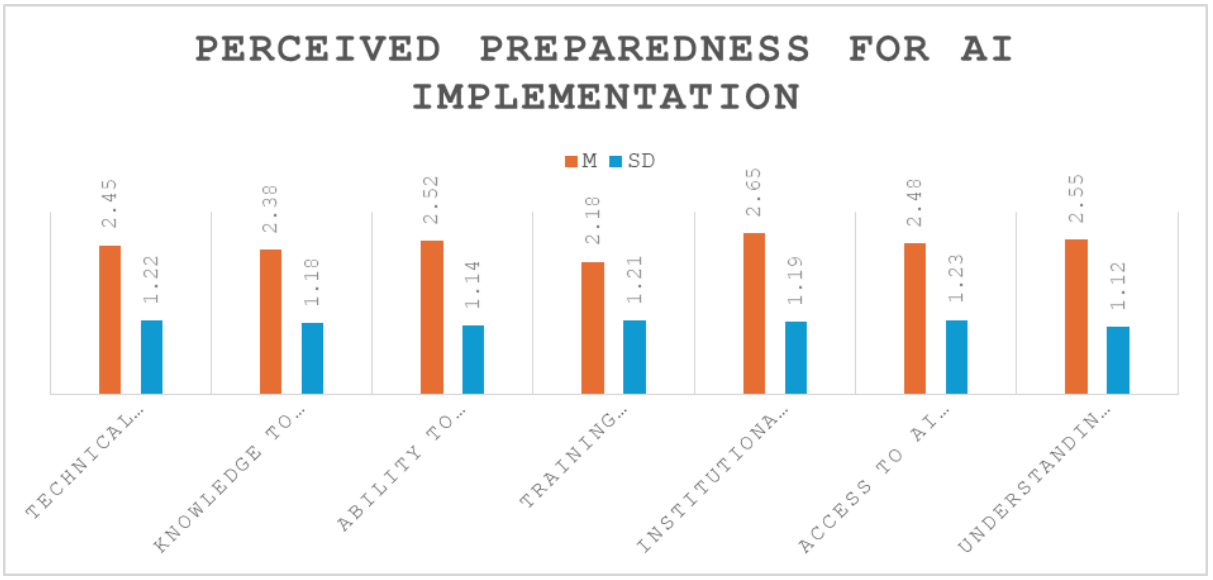
However, there was significant concern regarding data privacy (M = 4.08) and low confidence in using AI tools (M = 2.74).

4.4 Research Objective 3: Perceived Preparedness and Barriers

Table 4: Perceived Preparedness for AI Implementation

Preparedness Item	M	SD	Interpretation
Technical skills for AI use	2.45	1.22	Low
Knowledge to select appropriate AI tools	2.38	1.18	Low
Ability to integrate AI in lesson planning	2.52	1.14	Low
Training received in AI	2.18	1.21	Very Low
Institutional support for AI	2.65	1.19	Low
Access to AI resources	2.48	1.23	Low
Understanding of AI ethical issues	2.55	1.12	Low
Overall Preparedness Score	**2.46**	**0.92**	**Low**

Note: Scores interpreted as: 1.00-1.99 = Very Low, 2.00-2.99 = Low, 3.00-3.99 = Moderate, 4.00-5.00 = High



Graph 3: **Perceived Preparedness for AI Implementation**

The overall preparedness score (M = 2.46, SD = 0.92) indicates low levels of perceived preparedness. The lowest scores were recorded for training received in AI (M = 2.18) and knowledge to select appropriate AI tools (M = 2.38).

Table 5: Barriers to AI Adoption in Special Education

Barrier	M	SD	Category

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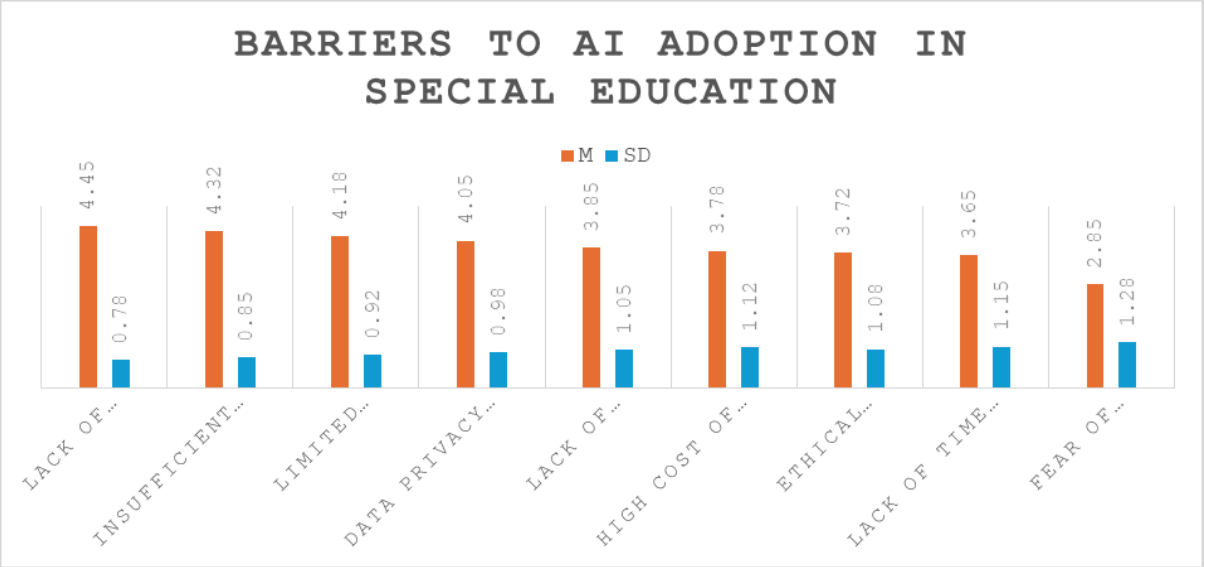
Lack of formal training	4.45	0.78	Major Barrier
Insufficient infrastructure	4.32	0.85	Major Barrier
Limited access to AI tools	4.18	0.92	Major Barrier
Data privacy concerns	4.05	0.98	Major Barrier
Lack of administrative support	3.85	1.05	Significant Barrier
High cost of AI tools	3.78	1.12	Significant Barrier
Ethical concerns	3.72	1.08	Significant Barrier
Lack of time for learning	3.65	1.15	Significant Barrier
Fear of technology	2.85	1.28	Moderate Barrier

Note: Scores interpreted as: 1.00-2.49 = Minor Barrier, 2.50-3.49 = Moderate Barrier, 3.50-4.49 = Significant Barrier, 4.50-5.00 = Major Barrier



Graph 4: **Barriers to AI Adoption in Special Education**

The most significant barriers identified were lack of formal training (M = 4.45) and insufficient infrastructure (M = 4.32), followed by limited access to AI tools (M = 4.18) and data privacy concerns (M = 4.05).

4.5 Relationships among Variables

Table 6: Correlation Matrix

Variables	1	2	3
1. Awareness	-		
2. Attitude	.42**	-	
3. Preparedness	.31**	.38**	-

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**p < .01, n = 120

A significant positive correlation was found between awareness and attitudes (r = 0.42, p < .01) and between attitudes and preparedness (r = 0.38, p < .01). The correlation between awareness and preparedness was also positive but weaker (r = 0.31, p < .01). These findings support the KAP model's proposition that knowledge influences attitudes, which in turn influence practices.

4.6 Differences Based on Demographic Variables

Table 7: Group Comparisons

Variable	Category	Awareness Mean	Attitude Mean	Preparedness Mean
Gender	Female	2.76	3.70	2.44
	Male	2.92	3.85	2.62
	t-value	-0.58	-0.72	-0.65
	Significance	ns	ns	ns
Type of Institution	Government	2.62	3.58	2.28
	Private	2.89	3.82	2.58
	t-value	-1.52	-1.82	-1.68
	Significance	ns	ns	ns
Prior AI Training	Yes	3.45	4.12	3.18
	No	2.66	3.65	2.34
	t-value	3.28**	2.52*	3.52**
	Significance	p < .01	p < .05	p < .01
Teaching Experience	1-5 years	2.82	3.68	2.52
	6-10 years	2.75	3.75	2.42
	11+ years	2.78	3.72	2.48
	F-value	0.12	0.18	0.15
	Significance	ns	ns	ns

*p < .05, **p < .01, ns = not significant

Significant differences were found based on prior AI training. Respondents with prior AI training demonstrated significantly higher awareness (t = 3.28, p < .01), attitudes (t = 2.52, p < .05), and preparedness (t = 3.52, p < .01) compared to those without training. No significant differences were found based on gender, type of institution, or teaching experience.

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5. Discussion

5.1 Awareness among Special Educators

Results showed a moderate low level of awareness among special educators regarding AI tools in special education (M=2.78). This result is aligned with international research, which indicated that whereas 61 percent of nations regard AI as significant for education strategy, only fewer than 30 percent provide teacher- training strategies or policy as such. Among those in the area of special education, this is exacerbated, with not only technical expertise but also ethical fluency and instructional flexibility needed for the potential of AI to unfold.
The low scores are most apparent with the lowest reported knowledge about the following AI tools in practice: AI for IEP Development and AI Ethics.

Given that IEPs "serve as the foundational building block of special education services and supports"10andAI tools are known to have streamlined the IE P writing process from 6–8 months to around two weeks, awareness concerning IEP Development is an overlooked prospect in the administrative challenge facing special education practitioners. Fifteen percent of the participants have received previous training in AI, which coincides with the scattered application of AI in the classroom-including with those who teach special education –which remains largely attributable to a lack of targeted preparation and training opportunities.

5.2 Attitudes toward AI Integration

Despite lack of awareness of AI, the participating special education teachers had favourable attitudes towards using AI (M = 3.72), as in other studies carried out in the UAE, teachers attitude strongly predicted their use of AI in the classrooms and knowledge had an indirect impact on use through their attitudes. The most favourable attitudes were towards AI's abilities to aid in individual instruction (M = 4.15) and offer differentiatediation support (M = 4.02). Similarly to other studies that have provided evidence that AI technologies can improve learning outcomes and students with learning difficulties can also become more engaged, special education teachers clearly envision the power of AI to respond to the significant problem that they encounter in everyday work in responding to diversity through individualized instruction.
Nonetheless, special education teachers' low confidence in the use of AI tools (M = 2.74) and considerable concern for data privacy (M = 4.08) is to be addressed.

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The data privacy concern mirrors evidence which stresses the value of balancing individual support benefits of AI with responsible monitoring for such data, and questions arise about individual privacy, algorithm's potential bias, and rigorous guidelines. These trends support The Technology Acceptance Model (TAM) wherein, teachers accept technology if its perceived usefulness is high, that is, its usefulness in performing their duties increases their job performance (performance expectancy) and is easy to learn and operate (effort expectancy) 27.

5.3 Perceived Preparedness and Barriers

The low level of felt preparedness (M=2.46) was the biggest takeaway from this research. This is similar to other literature, such as the statement that teacher preparedness within the context of special education “is yet to blossom/yet to blossom uneven” (Yen et al., 2021). The discrepancy between the strong positive attitudes and the low preparedness is telling – the potential forAI’is understood, yet, the capacity for the same is lacking.

The most critical constraints identified-lack of training (M=4.45) and infrastructure (M=4.32) also point to issues which exist at a structural level in the Indian educational scenario. While India only has 120,000 trained special educators for the 35 million children who need them, the disparity is further concentrated within urban centres, which primarily harbour the trained workforce.

This fact also reiterates why past AI training is the most significant predictor of higher levels of awareness, attitudes and preparedness, and highlights the necessity of pre-service and in-service teacher education programs for building capacity in using assistive technologies.

5.4 Theoretical Implications

These findings corroborate KAP model, proposing knowledge impacting attitude that further impacts practice. Knowledge impacting attitude ($r=0.42$, $p<.01$) and attitudes influencing practice ($r=0.38$, $p<.01$) support the sequential relation; this indicates that interventions focusing on the development of awareness might enhance the preparedness via the development of positive attitude. Technology Acceptance Model suggests ease of use and usefulness determine the acceptance of technology.

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Findings align with the TAM as positive attitudes among special educators were evidenced if they perceived AI useful for individualized instructions but perceived ease of use is an obstacle given that confidence in using the AI tools is not high.

The Universal Design for Learning's use of the framework of technology-assisted instruction is supported with positive attitudes towards AI's utility for differentiated instructions; implying, that special educators are well acquainted of the notion that AI technology's functions can integrate in inclusive pedagogies.

6. Conclusion

6.1 Summary of Findings

This study examined the awareness, attitudes, and preparedness of 120 special educators in Delhi toward AI in the education of students with intellectual disabilities. The key findings are:

1. **Awareness:** Special educators demonstrate moderate-low awareness of AI applications (M = 2.78), with the lowest awareness regarding AI-assisted IEP development and AI ethics.
2. **Attitudes:** Despite limited awareness, special educators hold positive attitudes toward AI integration (M = 3.72), particularly recognizing its potential to enhance individualized learning and differentiated instruction.
3. **Preparedness:** Perceived preparedness for AI implementation is low (M = 2.46), with significant gaps in training, technical skills, and institutional support.
4. **Barriers:** The most significant barriers include lack of formal training (M = 4.45), insufficient infrastructure (M = 4.32), limited access to AI tools (M = 4.18), and data privacy concerns (M = 4.05).
5. **Relationships:** Significant positive correlations exist between awareness and attitudes (r = 0.42) and between attitudes and preparedness (r = 0.38), supporting the KAP model.
6. **Training Impact:** Prior AI training significantly predicts higher awareness, attitudes, and preparedness, highlighting the importance of professional development.

6.2 Recommendations

Based on the findings, the following recommendations are proposed:

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For Policy Makers:

1. Develop national-level guidelines for AI integration in special education, addressing ethical concerns including data privacy and algorithmic bias.
2. Allocate resources for infrastructure development in special education institutions, ensuring access to AI tools and reliable internet connectivity.
3. Mandate AI training as a component of pre-service and in-service special education teacher preparation programs.

For Educational Institutions:

1. Establish partnerships with AI technology providers to facilitate access to AI tools and resources.
2. Create professional development programs focused on AI literacy for special educators, including hands-on training with AI-based applications.
3. Develop institutional AI policies that address ethical considerations and data privacy concerns.

For Teacher Education Programs:

1. Integrate AI literacy into special education curricula, covering AI concepts, applications, ethical issues, and practical implementation strategies.
2. Provide opportunities for pre-service teachers to engage with AI tools in supervised settings.
3. Emphasize the pedagogical aspects of AI integration rather than just technical skills.

For Special Educators:

1. Engage in continuous professional development to enhance AI literacy and technical skills.
2. Participate in professional learning communities focused on AI in special education.
3. Advocate for institutional support and resources for AI integration.

6.3 Limitations and Future Research

This study has several limitations. First, the sample was confined to Delhi, limiting generalizability to other regions of India. Second, the study relied on self-reported measures, which may be subject to social desirability bias. Third, the cross-sectional design does not allow for causal inferences.

Future research should:

1. Extend the study to other regions of India, including Tier II and III cities, to examine regional variations.
2. Employ mixed-methods approaches, including classroom observations and interviews, to provide deeper insights.
3. Conduct longitudinal studies to examine changes in awareness, attitudes, and preparedness over time following AI training interventions.
4. Investigate the actual use of AI tools in special education classrooms and their impact on student learning outcomes.
5. Examine the perspectives of students with intellectual disabilities and their families regarding AI-supported interventions.

6.4 Concluding Remarks

With special educators being a scarce commodity in India, the potential for AI to transform the education of children with intellectual disabilities is huge. AI-based solutions can also ease the administrative workload and customize education to meet the individual learning styles and needs of children with special needs. Data-driven insights can also be gained to improve the educational outcomes. However, the use of these AI technologies would only be effective if special educators are aware, have positive attitudes and are well prepared.

References

· NITI Aayog. (2026). AI-Powered Cognitive Profiling for Kids is Cutting Special Education Planning Time by 90%. Frontier Tech.

· Drelick, A. M., & Elder, B. (2026). Building Capacity with Assistive Technology in Teacher Education. Education Sciences, 16(3).

· Fteiha, M., Al-Rashaida, M., & Ghazal, M. (2025). General and special education teachers' readiness for artificial intelligence in classrooms: A structural equation modeling study of knowledge, attitudes, and practices in select UAE public and private schools. PLoS ONE, 20(9), e0331941.

· Yadav, M., Singh, S. K., Chandel, A., & Hung, T. H. (2025). AI in Teacher Training: Preparing Educators to Effectively Use AI for Students With Special Needs. In A. Mutawa (Ed.), Impacts of Generative AI on the Future of Research and Education. IGI Global.

· NeuroBloom VR. (2026). NeuroBloom: Animated Immersive Learning for Specially Challenged Students. Zenodo.

· Fteiha, M., Al-Rashaida, M., & Ghazal, M. (2025). General and special education teachers' readiness for artificial intelligence in classrooms. PLoS ONE, 20(9), e0331941. [ProQuest version]

· Khan, R., & Sujatha, S. (2025). AI in Special Education: Enhancing Learning Outcomes for Students with Disabilities. International Journal of Accounting and Economics Studies.

· (2026). Towards promoting innovation in inclusive education: behavioural intention of teachers towards adopting AI to teach students with learning disabilities in the UAE. Springer Professional.

· (2025). Attitudes and Experiences of Educators in the Use of Artificial Intelligence. Különleges Bánásmód, XI(2).

· (2026). Effectiveness of AI-Based Applications for Children with Mild Intellectual Disabilities: Perspectives of Special Education Teachers. International Journal of Social Sciences Bulletin.

· Bulut, A., & Haçat, S. O. (2026). AI-Supported Learning Platforms for Students With Developmental Disabilities: A SWOT Analysis Approach. Journal of Intellectual Disability Research.