Parental Mediation in the Age of Artificial Intelligence and Smart Devices: A Study of Digital Parenting Practices in India

Remiya J.S.

Assistant Professor & Head, Department of Journalism and Mass communication, Malankara Catholic College, Mariagiri, Tamilnadu, India.

Abstract- **The rapid integration of Artificial Intelligence (AI) into smart digital devices has significantly transformed children's media environments, presenting new challenges for parental mediation. This study examines digital parenting practices in India by analyzing parental mediation strategies adopted to regulate children's interaction with AI-enabled smart devices. Using a survey method, data were collected from parents of children aged 8-18 years. The study assesses parental AI awareness and four forms of parental mediation active, restrictive, technical, and co-use and explores their relationship with children's digital well-being. The findings indicate that higher parental AI awareness is significantly associated with active and technical mediation, which positively influence children's responsible digital behavior and online safety.**

Key words: Digital parenting, active, restrictive, technical, and co-use

1.　　　INTRODUCTION

In the digital age, parenting practices are increasingly shaped by the integration of Artificial Intelligence (AI) and smart devices. This study explores how Indian parents mediate their children's interaction with AI-enabled smart devices and examines the relationship between parental mediation strategies and children's digital well-being. Smart devices such as smart phones, smart televisions, voice assistants, and AI-powered educational applications are increasingly embedded in children's everyday lives. In India, affordable internet access, widespread smart phone usage, and the growth of online education platforms have intensified children's exposure to AI-driven content.

While AI-enabled technologies offer educational and entertainment benefits, they also raise concerns regarding excessive screen time, privacy invasion, algorithmic bias, misinformation, and digital dependency. In this context, parental mediation plays a crucial role in shaping children's digital experiences. Traditional parental mediation strategies, developed for television and early internet use, may be insufficient in addressing the complexities of AI-driven personalization and automation.

1.1.1 Significance of the study

The present study is proposed to investigate a few subjects relating to digital parenting practices and by analyzing parental mediation strategies adopted to regulate children's interaction with AI-enabled smart devices. This study would make an attempt to identify the digital parenting practices and its effects

1.1.2 Research Problem:

Despite the widespread adoption of AI-driven technologies by children, there is limited empirical research in the Indian context examining parental awareness of AI and its influence on digital parenting practices. Many parents lack adequate knowledge about how AI systems function, which may limit their ability to effectively mediate children's digital experiences and safeguard their well-being.

2. LITERATURE OF REVIEW

Sudha Venkata swamy (2025) made a study on I Care for my child: parental mediation of children's digital consumption in India. This is the literature review of the paper which deals with parental mediation of children's digital consumption. This qualitative study was conducted in the Nilgiris and Coimbatore districts in Tamil Nadu, Southern India. It employed in-depth interviews to first examine parents' attitudes toward the Internet and their digital consumption, and second, how this, in turn, influences their mediation styles toward primary school children aged 8 to 10 years. The typologies of parental attitudes, the nature of digital consumption and the mediation of children's online engagement presented in the findings could serve as a starting point for new research concerning children and their active digital media utilization. Furthermore, the study outlines the interrelationship between parents' attitudes towards digital practices and their mediation style, which can be explored in today's context as children navigate through various screens for content.

Jos De Haan (2015) made a study on guiding young children's internet use at home: Problems that parents experience in their parental mediation and the need for parenting support. Using an online questionnaire among 785 parents (children 0-7 years) in the Netherlands we investigated a) whether parents experience problems when guiding children's digital media usage, b) whether they feel competent in dealing with these problems, c) whether they need parenting support, and d) how these problems, competences and need for support are related to the characteristics of the parents, the family and the child. The analyses reveal that the parents' experiences of problems is associated with negative views on media effects, the presence of older siblings living at home and occur especially when their child is active on social media. Parents' feelings of competence are enhanced by positive views on media effects, older children being present in the home, and the involvement of the young child in educational games and media skill level. Parents feel less confident if their child is active on social media.

2.   RESEARCH METHODOLOGY

1.3.1 Objectives of the Study

1.   To assess parental awareness of AI-enabled smart devices used by children.

2.   To identify dominant parental mediation strategies adopted by Indian parents.

3.   To examine the relationship between parental digital literacy and mediation practices.

4.   To analyze socio-demographic variations in parental mediation strategies.

1.3.2 Research Questions

1.   What level of awareness do Indian parents have regarding AI-driven digital technologies?

2.   Which parental mediation strategies are most commonly used?

3.   How does parental digital literacy influence mediation practices?

4.   Do parental mediation strategies vary by socio-demographic factors?

1.3.2 Research design

The study employed a quantitative survey design. The sample consisted of 300 parents of children aged 8–18 years, selected using purposive sampling from urban and semi-urban areas in India. A structured questionnaire was used, comprising sections on socio-demographic information, parental AI awareness, digital literacy, and parental mediation practices (active, restrictive, technical, and co-use). Data were analyzed using descriptive statistics and correlation analysis to examine relationships between variables.

5.   DATA ANALYSIS

Table 4.1

Age of the Respondent

Age	Frequency	Percentage
Below 30 years	48	16.0
31-40 years	132	44.0
41- 50 years	90	30.0
Above 50 years	30	10.0
Total	300	100.0

The above table shows the age level of the respondents those who suggested their own opinion. Broadly the group was divided into three major slabs below 30 years, 31 years to 40 years, 41 to 51 years, and above 5 years. In this table (16%) of the respondents belong to the age group of below 30 years. 44% of the respondents belong to the age group of 31 to 40 years, 30% of the respondents belong to the age group 41 to 50 years, 10% of the respondents belong to the age group above 50 years.

Table 4.2

Gender of the Respondent

Gender	Frequency	Percentage
Male	138	46.0
female	162	54.0
total	300	100.0

For the present research took a sample of 300 sample of parents who parents of children aged 8–18 years. The above table shows the gender of the respondents. In this majority of the respondents (54%) are mothers (ie) Females. 46% of the respondents are fathers ie) Males.

Table 4.3

Area of Residence

Area of Residence	Frequency (n)	Percentage (%)
Urban	170	56.7
Semi-Urban	130	43.3
Total	300	100.0

The table shows the respondents' area of residence, indicating that 56.7% live in urban areas, while 43.3% reside in semi-urban areas.

Table 4.4

Child Age Group

Child Age Group	Frequency (n)	Percentage (%)
8–12 years	136	45.3
13–18 years	164	54.7
Total	300	100.0

The table presents the age distribution of the children, showing that 45.3% fall within the 8–12 years age group, while 54.7% belong to the 13–18 years age group.

Table 4.5

Educational Qualification of the Respondent

Educational Qualification	Frequency (n)	Percentage (%)
Up to School	78	26.0
Undergraduate	132	44.0
Postgraduate & Above	90	30.0
Total	300	100.0

The above table represents the educational level of the respondents. As seen from the table 26% of the respondents are educated up to school, 44% of the respondents are educated up to under graduate level of education, 30% of the respondents have a post graduate and above level of education.

Table 4.6

Construct	Number of Items	Cronbach's Alpha
Parental AI Awareness	8	0.81
Digital Literacy	10	0.85
Active Mediation	6	0.78
Restrictive Mediation	6	0.74
Technical Mediation	5	0.71

Variable	Mean	Standard Deviation
Parental AI Awareness	3.42	0.67
Digital Literacy	3.55	0.71
Active Mediation	3.46	0.64
Restrictive Mediation	3.87	0.69
Technical Mediation	3.15	0.68
Co-use Mediation	3.32	0.66
Total	20.77	4.05

Reliability Analysis of Study Variables

Co-use Mediation	5	0.76
Total	40	4.65

he reliability analysis indicates that all study variables demonstrate acceptable internal consistency. Cronbach's alpha values range from 0.71 to 0.85, exceeding the minimum acceptable threshold of 0.70. Parental AI Awareness ($\alpha = 0.81$) and Digital Literacy ($\alpha = 0.85$) show strong reliability, while the mediation dimensions Active ($\alpha = 0.78$), Restrictive ($\alpha = 0.74$), Technical ($\alpha = 0.71$), and Co-use ($\alpha = 0.76$) also exhibit satisfactory reliability. Overall, the results confirm that the measurement scales used in the study are reliable for further statistical analysis.

Table 4.7

Descriptive Statistics of Key Study Variables

The descriptive statistics indicate moderate to high levels across the study variables measured on a 5-point Likert scale. Digital Literacy shows the highest mean score (M = 3.55, SD = 0.71), followed by Restrictive Mediation (M = 3.87, SD = 0.69), suggesting that parents frequently adopt restrictive strategies in managing children's digital media use. Active Mediation (M = 3.46, SD = 0.64) and Parental AI Awareness (M = 3.42, SD = 0.67) reflect moderately high engagement and awareness levels. Co-use Mediation (M = 3.32, SD = 0.66) and Technical Mediation (M = 3.15, SD = 0.68) show comparatively lower mean scores, indicating less frequent use of shared and technical mediation strategies. The relatively low standard deviations across variables suggest consistent responses among participants.

Table 4.8

Pearson Correlation Matrix of Study Variables

Variables		1	2	3	4	5	6
Parental AI Awareness	Pearson Correlation	1	.61**	.47**	.22*	.54**	.38**
	Sig. (2-tailed)		.000	.000	.018	.000	.000
	N	300	300	300	300	300	300
Digital Literacy	Pearson Correlation	.61**	1	.52**	.19*	.43**	.57**
	Sig. (2-tailed)	.000		.000	.031	.000	.000
	N	300	300	300	300	300	300
Active Mediation	Pearson Correlation	.47**	.52**	1	.31**	.48**	.45**

	Sig. (2-tailed)	.000	.000		.001	.000	.000
	N	300	300	300	300	300	300
Restrictive Mediation	Pearson Correlation	.22*	.19*	.31**	1	.27*	.21*
	Sig. (2-tailed)	.018	.031	.001	.000	.012	.021
	N	300	300	300	300	300	300
Technical Mediation	Pearson Correlation	.54**	.43**	.48**	.27*	1	.42*
	Sig. (2-tailed)	.000	.000	.000	.012	.000	.000
	N	300	300	300	300	300	300
Co-use Mediation	Pearson Correlation	.38**	.57**	.45**	.21*	.42**	1
	Sig. (2-tailed)	.000	.000	.000	.021	.000	
	N	300	300	300	300	300	300

Note. Values represent Pearson's correlation coefficients.

- p < .05, ** p < .01.

The Pearson correlation analysis revealed significant relationships among the study variables. Parental AI awareness showed a strong positive correlation with digital literacy ($r = .61$, $p < .01$), indicating that parents with higher awareness of AI tend to possess greater digital literacy. Parental AI awareness was also significantly and positively associated with active mediation ($r = .47$, $p < .01$), technical mediation ($r = .54$, $p < .01$), and co-use mediation ($r = .38$, $p < .01$), while a weaker but significant relationship was observed with restrictive mediation ($r = .22$, $p < .05$). Digital literacy demonstrated significant positive correlations with all forms of parental mediation, including active ($r = .52$, $p < .01$), restrictive ($r = .19$, $p < .05$), technical ($r = .43$, $p < .01$), and co-use mediation ($r = .57$, $p < .01$). Additionally, active mediation was significantly related to restrictive ($r = .31$, $p < .01$), technical ($r = .48$, $p < .01$), and co-use mediation ($r = .45$, $p < .01$). Overall, the findings suggest that higher levels of parental AI awareness and digital literacy are associated with greater engagement in diverse parental mediation strategies.

5. FINDINGS

The present study has been carried out to find out the digital parenting practices in India by analyzing parental mediation strategies adopted to regulate children's interaction with AI-enabled smart devices. Using a survey method, data were collected from parents of children aged 8-18 years. The study assesses parental AI awareness and four forms of parental mediation active, restrictive, technical, and co-use and explores their relationship with children's digital well-being. The findings of the study highlight important patterns in

digital parenting practices in the context of AI-enabled smart devices. The results indicate that restrictive mediation is the most commonly adopted strategy by parents, while technical mediation is the least practiced. Parents demonstrate moderate to high levels of parental AI awareness and digital literacy, with digital literacy emerging as relatively stronger.

The study also finds that higher parental AI awareness is positively associated with active and technical mediation, suggesting that informed parents are more likely to engage in discussion-based and technology-oriented guidance. Additionally, digital literacy shows a strong positive relationship with co-use mediation, indicating that digitally competent parents tend to share and participate in their children's media activities. . Digital literacy is strongly associated with co-use mediation, suggesting that digitally skilled parents are more likely to engage jointly with their children in media use. Overall, the findings suggest that greater awareness and digital skills among parents lead to more engaged, balanced, and proactive parental mediation practices.

6. CONCLUSION

In conclusion, this study underscores the evolving role of parents in mediating children's use of AI-enabled smart devices in India. The findings reveal that while parents predominantly rely on restrictive mediation strategies, more participatory approaches such as active, technical, and co-use mediation are less frequently practiced. Importantly, higher levels of parental AI awareness and digital literacy are associated with more engaged and effective mediation practices. This suggests that empowering parents with greater knowledge of AI and digital technologies can enhance their ability to guide children's media use in a balanced and constructive manner. The study highlights the need for targeted digital literacy and AI awareness programs for parents to promote informed, supportive, and developmentally appropriate digital parenting in an increasingly AI-driven media environment.

REFERENCES

1. Taehyung Kim, Funji Kim, Youngiunn Lee,(July 2025) .The Effect of Parental Active Mediation on Artificial Intelligence(AI) Literacy Among Elementary School Children: The Sequential Mediation Effect on AI Learning Interest and AI Learning Experience. The journal of Korean Association of Computer Education, 28(7):43-51

2. John M.Agomoh,Ayuk O.Clara & Eze Ifeoma L.(October, 2024) Parenting in the Age of Artifical Intelligence and Smart Devices Usage in Nigeria, International journal of strategic research in Education, Technology and Humanities.Vol. 12,No.2

3. Sudha Vnkataswamy, (2025). I care for my child: parental mediation of children's digital consumption in India, Cogent Social Sciences,Vol 11, Issue 1.

4. Ahu Pakdemirli, (2026) Artificial Intelligence and Digital Technologies in Family and Parenting Contexts, Journal of Basic and Clinical Health Sciences 2026; 10: 149-156.

5.   Leonardo Banic and Tihomir Orehovacki (Apr 2024),A Comparison of Parenting Strategies in a Digital Environment: A Systematic Literature Review. Multimodal Technologies and Interaction.Vol 8, Issue 4.

6.   https://www.oecd.org/en/publications/how-s-life-for-children-in-the-digital-age_0854b900-en/full-report/the-impact-of-digital-activities-on-children-s-lives_4df70664.html

7.   https://www.academia.edu/50993194/Guiding_young_children_s_internet_use_at_home_Problems_that_parents_experience_in_their_parental_mediation_and_the_need_for_parenting_support

8.   https://norden.diva-portal.org/smash/get/diva2:1265024/FULLTEXT02.pdf