Original Article

AI as a Thinking Partner: Exploring Cognitive Reliance Among Indian Users

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Abstract

This qualitative study explores how Indian users experience and interpret cognitive reliance on artificial intelligence (AI) tools in their everyday lives. Using a semi-structured interview method with 20 participants (10 male, 10 female aged 18–35 years), the research examined how individuals conceptualize AI as a "thinking partner" in tasks involving reasoning, learning, and decision-making. Thematic analysis revealed four major themes: cognitive offloading, trust calibration, emotional engagement, and identity negotiation. Participants described AI as a source of mental ease and efficiency but also expressed concerns about dependence and diminished self-reliance. Cross-theme analysis indicated that task type and frequency of AI use moderated reliance, while self-regulatory coping strategies such as cross-checking and limited use helped maintain cognitive balance. These findings suggest that AI reliance is a complex, context-dependent phenomenon shaped by both technological affordances and user awareness. The study contributes to growing discussions on human–AI interaction by offering culturally grounded insights into how users in India negotiate trust, control, and cognitive partnership with intelligent systems.

Keywords: *cognitive reliance, AI as thinking partner, cognitive offloading, trust calibration, Indian users*

Introduction

The rapid proliferation of artificial intelligence (AI) in everyday life has transformed how individuals think, decide, and interact. From virtual assistants and recommendation systems to advanced generative models such as ChatGPT, AI technologies are increasingly embedded in cognitive and communicative practices (Lee & See, 2004). For many users, these systems act not merely as tools but as thinking partners that support reasoning, learning, and decision-making (Glikson & Woolley, 2020). This growing phenomenon raises important psychological questions regarding cognitive reliance, trust calibration, and the boundaries of human agency in the age of intelligent machines (Ahire, 2025; Atchley et al., 2024; Dzindolet et al., 2003).

In India, where digital adoption has accelerated dramatically over the past decade, AI tools have become integral to academic, professional, and creative domains (Bansal & Jain, 2023; Das et al., 2024; Hemraj, 2025). The accessibility of conversational AI and decision-support systems has led to a generation of users who routinely engage with technology for intellectual assistance (Sasikumar & Sunil, 2023). Yet, despite widespread use, limited qualitative research has examined how Indian users interpret and experience their mental reliance on AI. Understanding this experience is crucial for developing culturally informed frameworks for responsible and reflective AI engagement.

Research on cognitive reliance and AI-mediated cognition has expanded significantly in recent years. The concept of cognitive offloading i.e., the transfer of mental processes such as memory, reasoning, or decision-making to external systems, has become central to understanding digital thinking (Gerlich, 2025). Studies show that AI tools enhance efficiency, creativity, and cognitive fluency by reducing mental effort and time spent on repetitive tasks (Deng, 2024). However, this convenience often blurs the line between augmentation and dependency. According to Kosmyna et al. (2025), habitual use of AI for complex problem-solving can reduce neural activation associated with sustained attention and critical reasoning, leading to what they term "cognitive debt."

Another critical dimension concerns trust and epistemic judgment. Users do not engage with AI passively; rather, they calibrate their trust according to perceived reliability and context.

Zhai (2024) found that individuals demonstrate higher trust in AI for low-stakes factual queries but remain cautious in domains involving expertise or moral judgment. Similarly, Wang (2025) emphasized that AI literacy i.e., the ability to discern when and how to rely on AI, is vital for maintaining epistemic control and preventing over-reliance. These findings suggest that the relationship between users and AI is not uniform but conditional, shaped by users' awareness, goals, and experience.

Recent research also highlights the affective and social aspects of AI reliance. De Freitas et al. (2025) observed that conversational AI can fulfill emotional and social needs by offering companionship, feedback, and emotional validation. While such interactions may reduce short-term loneliness, they may also displace authentic human connection over time. The emotional integration of AI therefore extends cognitive reliance into the realm of social cognition, altering patterns of communication and self-expression.

Together, these studies reveal that cognitive reliance on AI is multidimensional—encompassing efficiency gains, skill trade-offs, trust dynamics, and emotional adaptation. However, most existing studies are quantitative or experimental, leaving a gap in understanding how users themselves interpret and negotiate this reliance in everyday contexts, particularly within non-Western cultural settings.

Objectives

1. To explore how Indian users experience and interpret cognitive reliance on AI tools in their everyday lives.
2. To identify patterns of trust, dependence, and cognitive offloading in users' interactions with AI.
3. To understand the emotional and relational dimensions of AI engagement among Indian users.

Methodology

Research Design

The present study employed a qualitative research design using semi-structured interviews to explore how Indian users experience and interpret cognitive reliance on artificial intelligence (AI) tools in daily life.

Participants

The sample consisted of 20 participants aged 18–35 years (M = 25.65, SD = 5.62; 10 males, 10 females), selected through purposive sampling to include individuals highly engaged with AI-based tools for learning, decision-making, and everyday tasks.

Inclusion Criteria

1. Aged 18–35 years and residing in India.
2. Regular users of AI-based tools (e.g., ChatGPT, Gemini, Perplexity, Grok).
3. Fluent in English
4. Provided informed consent for participation.

Exclusion Criteria

1. Professionals in AI development or data science.
2. Individuals with no AI usage experience.
3. Those unable to complete the interview.

Participant details are presented in Table 1.

Data Collection

Data were gathered through in-depth, semi-structured online interviews lasting 45–60 minutes, conducted in English. The interview guide included open-ended questions on participants' use of AI for cognitive support and decision-making. All interviews were transcribed verbatim.

Ethical Considerations

Participants provided written and verbal consent. They were assured of confidentiality, voluntary participation, and the right to withdraw at any time. Personal data were anonymised using pseudonyms.

Data Analysis

Data were analysed following Braun and Clarke's (2006, 2012) six-phase reflexive thematic analysis, involving familiarisation, coding, theme generation, review, definition of themes, and report writing to convey key meanings and implications.

Results

Data analysis produced five principal themes describing how Indian users experience AI as a "thinking partner" (Table 2). Indian users perceive AI as both a cognitive enhancer and a potential cognitive crutch. While AI improves efficiency and confidence in decision-making, it also leads to dependency and raises questions about autonomy, authenticity, and emotional substitution.

Discussion

The findings of the present study illuminate how Indian users experience AI as both an intellectual collaborator and a convenient cognitive shortcut. Participants' accounts of delegating everyday cognitive tasks to AI tools such as generating summaries, drafting emails, or organizing thoughts reflect a growing global trend toward cognitive offloading, where individuals externalize memory and reasoning functions to digital systems (Gerlich, 2025). This aligns with evidence that generative AI tools enhance task efficiency, creativity, and speed (Deng, 2024), while also reshaping the boundaries of human cognitive effort. In this study, participants frequently likened AI to an "external brain" that reduces mental load and enables multitasking, a perception that resonates with the findings of Kosmyna et al. (2025), who observed that continuous reliance on AI assistants can alter attention allocation and lower neural activation in areas linked to problem-solving.

A second dominant theme concerned trust calibration. Participants exhibited selective reliance on AI, readily accepting information for low-stakes queries but cross-checking data for academic or professional use. This pattern parallels prior studies showing that users develop "graded trust" in AI systems based on domain familiarity, perceived credibility, and prior success (Gerlich 2024; Zhai, 2024). Rather than blind faith, participants demonstrated an emergent epistemic awareness, recognizing both the utility and fallibility of AI outputs. This finding supports recent work by Wang (2025), who argued that AI literacy i.e., understanding when and how to rely on algorithms, is central to maintaining cognitive autonomy.

The skill erosion reported by several participants adds nuance to the discourse on digital cognition. Users perceived that frequent reliance on AI for synthesis and reasoning led to diminished retention and a sense of mental "laziness." Similar results were reported by Kosmyna et al.

(2025), who demonstrated that offloading complex cognitive tasks to AI reduces internal rehearsal and weakens long-term recall. These converging findings reveal that cognitive convenience may come at the cost of sustained analytical engagement.

Equally significant was the ambivalence surrounding autonomy and agency. While some participants described feeling empowered and intellectually supported by AI, others sensed a loss of ownership over their ideas and outputs. This duality reflects what Gerlich (2025) termed "shared agency," where human intention becomes intertwined with algorithmic contribution. The participants' awareness of blurred authorship suggests a cognitive negotiation between self and system, a dynamic that is increasingly shaping digital identity formation.

Across themes, several cross-cutting patterns emerged. Users differentiated between task types, showing comfort and reliance for low-stakes factual tasks but skepticism for high-stakes analytical reasoning, mirroring findings that reliance and cognitive cost vary by task complexity (Gerlich, 2025). Frequency of use also moderated outcomes: heavy, habitual users displayed stronger patterns of offloading and skill erosion, while occasional, strategic users retained greater cognitive balance (Kosmyna et al., 2025). Finally, many participants developed coping strategies such as cross-verifying outputs, maintaining manual practices, and setting limits on AI use, reflecting adaptive efforts highlighted in reviews on AI literacy and over-reliance (Zhai, 2024; Wang, 2025).

Finally, the emergence of emotional and social reliance on AI highlights the expanding affective dimension of human–AI interaction. Participants who used conversational AIs for emotional expression or rehearsal described feelings of companionship and comfort, echoing findings by De Freitas et al. (2025) that AI interactions can temporarily alleviate loneliness but may gradually substitute human contact. This emotional reliance complements cognitive dependence, revealing that AI's integration into daily life is both mental and relational.

Overall, the study's findings portray AI not merely as a technological aid but as an evolving cognitive and emotional ecosystem, redefining how individuals think, decide, and relate in an increasingly algorithmic world.

Implications, Limitations, and Future Directions

The findings carry important implications for education, technology design, and everyday digital practices. Encouraging AI literacy can help users maintain cognitive engagement and prevent over-dependence. Integrating reflective or explanatory prompts within AI interfaces could promote active reasoning rather than passive consumption.

Despite its insights, the study has certain limitations. The sample size of 20 participants, though sufficient for qualitative depth, limits generalizability across India's diverse linguistic and cultural population. Self-reported experiences may also be influenced by recall or social desirability biases.

Future research should adopt mixed-method and longitudinal designs to examine how sustained AI use affects cognition, creativity, and social relationships over time. Comparative studies across age groups, professional domains, and cultural settings would deepen understanding of how AI reliance evolves as technologies become more pervasive and personalized.

Conclusion

The present study explored how Indian users perceive and engage with AI as a thinking partner, highlighting a dynamic relationship between cognitive efficiency, trust calibration, and emotional reliance. Participants viewed AI as both a facilitator of productivity and a source of cognitive dependence, reflecting global patterns of digital offloading. The findings illustrate that AI's cognitive and emotional integration is shaped not only by the technology itself but also by users' reflective engagement with it. Overall, the study highlights that cognitive reliance on AI represents a profound transformation in human thought and relational patterns, necessitating future research into its psychological and social dimensions.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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Table 1

Details of the Participants

Variable	Category	Frequency (n)
Gender	Male	10
	Female	10
Age (years)	18–24	9
	25–30	5
	31–35	6
AI Use Frequency	Daily	19
	Weekly	1
Primary Purpose	Academic/Research	9
	Professional	7
	Creative	4
Primary AI tool used	ChatGPT	16
	Gemini	3
	Perplexity	1

Table 2

Themes and Sub-themes Derived from the Study with participant quotes

Theme	Subtheme	Illustrative Participant Quotes
Cognitive Offloading and Efficiency Gains	Task Delegation	"I use AI to create the outline of my essay and after that is done, it gives me an idea on how to write the rest of it." *(P01)* "Whenever I'm stuck...I give the boring work to AI...it's like having a very fast assistant." *(P07)*
	Time-saving and Efficiency	"ChatGPT helps me get things done in half the

		time...actually less than that." *(P03)* "If I have limited time and I have many papers to read, I can't do that ofcourse...so i ask ChatGPT and its gives really great summaries." *(P05)*
	External Memory	"I don't bother remembering small facts anymore...I just ask gemini when I need them." *(P09)*
Trust, Credibility, and Selective Reliance	Default Trust for Routine Queries	"For everyday stuff like directions or definitions, I just trust it...it's usually right." *(P10)* "I rely on ChatGPT because it feels right most of the time, it is accurate and I have never felt it has given me wrong answere." *(P18)*
	Verification Practices	"If I'm using information for assignments and I know they will be strictly corrected, I always verify it with another source." *(P06)* "Sometimes I'll Google the same thing to make sure AI isn't making it up." *(P11)*
	Domain Sensitivity	"I use AI freely for recipes or ideas and all, but not for financial decisions. I have personal boundary with that." *(P12)* "I don't understand people who use AI for deciding important stuff like their potential marriage partners...it's too risky and strange to me...I trust myself and my opinion more in such cases." *(P16)*
	Coping Strategies Emerge	"I make it a point to write by hand sometimes so to keep my skills active because I am afraid I will totally lose them." *(P02)* "I don't accept AI's first answer...I question it really strictly so that by that time I am done with the answer, it takes more time and effort than if I would have written it on my own. This makes me feel better about using AI." *(P17)*
Skill Erosion and Cognitive Costs	Reduced Retention	"I've noticed I remember less now...earlier I used to be able to recall basic definitions easily, but now I have this urge to always check ChatGPT." *(P13)*
	Dependency for Reasoning	"It's hard to start thinking without prompting Perplexity...it's become part of my life now, it's hard to stop doing it." *(P04)*
	Task-specific Skill Atrophy	"Earlier, I'd write notes from scratch; now I just turn to what AI gives me." *(P19)* "It's sad because I used to think up my story ideas till just last year but once I started using ChatGPT, it's like an addiction...I don't have the patience to sit and think when I can get the ideas from ChatGPT in a second." *(P15)*
Autonomy, Agency, and Decision Ownership	Augmentation and Empowerment	"I feel smarter using it...I can now take part in class discussions." *(P14)* "I think I have become smarter with ChatGPT." *(P08)*
	Diffused Responsibility	"Sometimes I follow what AI suggests, and if it's wrong, I feel it's not fully my fault." *(P20)*
	Norms for Attribution	"If AI contributes to my work, I mention it...feels fair to do." *(P03)* "In class, I say I used ChatGPT tools so it's transparent." *(P14)* "I don't mention if I am using AI...feels pointless because everyone is using it anyway." *(P01)*
Emotional and Social Reliance	Companionship and Rehearsal	"I practice interviews and presentations with the bot...it helps me stay calm." *(P05)* "It's easier to express myself to ChatGPT because mainly it listens without judging." *(P07)*
	Loneliness and Substitution	"When I'm stressed or lonely, I end up chatting with it more than with people." *(P19)* "Sometimes AI feels like company...when I miss home, I

		chat with it and it's like it really understands my problems." *(P11)*
	Boundaries and Limits	"I try not to overuse it...remind myself it's a tool, not a friend." *(P10)* "I have a limit like, I will only ask 10 questions per day. That way I'm not chatting with ChatGPT throughout the day." *(P20)*