

Financial Literacy as a Tool for Enhancing Mental Health and Financial Well-being among Middle Management Employees in Indian Higher Education Institutions

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Abstract

The current study is a qualitative study aimed at exploring the complex relationships between financial literacy, mental health and financial wellbeing among middle management staff of higher education institutions (HEIs) in India. It examines the effects of improved financial literacy and practices on reducing financial stress, which is strongly associated with mental health issues such as distress and feelings of loneliness (Samuelsson et al., 2023), and on how the drivers of financial inclusion translate into economic and social empowerment (Pandey et al., 2025). The study utilizes semi-structured interviews and focus group discussions, which capture lived experiences, to identify interventions that can be tailored to fit into institutional support systems, including budgeting workshops and strategies for using emergency funds, (Abitoye et al., 2023; Srivastava et al., 2024), combatting financial mistreatment, (Birkenmaier et al., 2025), enhancing financial resilience to economic shocks and stresses, (Bottazzi & Oggero, 2023), and integrating with organizational mental health programs. Recognizing the multi-dimensionality of well-being (Üzmez & Kavaklı, 2024), results guide policy recommendations for psychological well-being in the context of financial uncertainty when implementing employee wellness programs (Badrudin et al., 2025). The study enriches the discourse on employee welfare by highlighting the linkages between financial competence, psychological health and wellbeing in Indian HEIs (Samuelsson et al., 2023); how proactive financial management, underpinned by financial literacy, can help to reduce precariousness and stressors that impact psychological health (Abdul et al., 2024), (Vaahtoniemi et al., 2023); how financial literacy can promote, improve, and enhance the psychological wellbeing, belonging, empowerment and precariousness of employees in HEIs (Michelle et al., 2025); and how financial literacy can help to reduce vulnerability and enhance organizational outcomes (Lusardi & Mitchell, 2023).

Keywords: financial literacy; mental health; financial well-being; middle management; higher education institutions; India

Introduction

The purpose of this qualitative study is to understand the link between financial literacy, mental health and financial well-being of middle management staff in the higher educational institutions of India. Given the increasing financial challenges, work stress, and institutional stressors, it is clear that greater financial literacy is associated with fewer symptoms of psychological stress and higher levels of well-being, as there are empirical associations between financial problems and mental health symptoms like distress and loneliness (Narges & Laily, 2011; Rendall et al., 2021). Financial education programs that are designed to address specific groups will enable people to make informed decisions, reducing financial pressure and increasing life satisfaction in various groups (Badrudin et al., 2025; Narges & Laily, 2011). Financial literacy promotes financial inclusion and financial sustainability, moving from it to the management of everyday needs to emergency planning, and asset building in emerging economies such as India (Lusardi & Messy, 2023; Pandey et al., 2025). The study presents an analysis of how financial literacy has been experienced by the middle managers in

Indian HEIs, as a means of coping with challenges and promoting mental health, given the significant burden of responsibility these employees have to shoulder in the context of limited financial resources and increasing inflation rates. Financial literacy is very low, particularly for vulnerable populations such as mid-career workers, even though it plays an important role in decision-making and resilience, resulting in institutional stressors and mental health vulnerabilities (Lusardi & Messy, 2023). Financial literacy overcomes these vulnerabilities by closing critical information gaps, improving access to finance, and providing informed product comparisons, risk assessments, formal savings, and overall product inclusion (Hasan et al., 2021), (Charfeddine et al., 2024). It also fosters responsible budgeting, prevents rash spending, creates significant emergency savings, and enhances economic resilience to inflation and other similar economic shocks (Beckmann & Kiesl-Reiter, 2023; Hasan et al., 2021). Financial literacy is a critical investment in human capital (Lusardi & Mitchell, 2023) that empowers HEI middle managers to reduce stress at the personal level and to support stability within the institution. This research thoroughly explores how it can support mental health and financial stability, identifies the barriers, specific interventions and context-specific programs. It sheds light on this largely under-researched group and contributes to the discourse on financial well-being by promoting financial resilience practices like budgeting, avoiding debt, and planning in advance (Bottazzi & Oggero, 2023). Low literacy levels are indisputably linked to financial fragility, debt traps, and high credit costs (Vaahtoniemi et al., 2023), and urgent need to navigate complex products, digital tools and sustainable options (Lusardi & Messy, 2023). In conclusion, financial knowledge influences the levels of risk aversion and investment practices, making them more sensible and future-oriented (Chauhan, 2025).

Background of the Study

Based on the correlation between financial literacy and financial stability (Lusardi & Mitchell, 2023), this study suggests that strengthening FL in Indian HEIs is critical to reducing financial vulnerability and improving their ability to manage unexpected financial shocks (Beckmann & Kiesl-Reiter, 2023). This is especially significant because those who are financially literate are more likely to be able to establish stable financial futures, to make informed decisions regarding credit and insurance and, importantly, to save wisely for retirement (Oriji et al., 2023). Furthermore, financial literacy is an important enabling means that reduces information asymmetry and increases the negotiating ability for financing from outside the household, which directly affects the reduction of financial constraints (Charfeddine et al., 2024). Moreover, individuals who are good at finance can effectively compare different financial products and understand the risks involved, thus increasing their involvement in formalized financial savings means (Padi et al., 2026). These are all key factors in developing financial resilience – allowing people to plan ahead of the fact and avoid falling into debt traps, and to budget with peace of mind for future needs and unforeseen expenses (Bottazzi & Oggero, 2023). The associated financial behaviors are also closely connected with positive mental health, as they help to alleviate financial worry and build a person's sense of control over their financial situation. This forward planning of financial management also has a positive impact on being able to take the most advantage of economic opportunities, creating wealth and financial growth in general (Padachi et al., 2018). On the other hand, if financial literacy is lacking, the individual can become over indebted, due to bad financial management including a lack of budgeting and not anticipating of costs (French & McKillop, 2016). This can leave people in a vicious cycle of financial instability and affect their psychological health, underscoring the need to provide comprehensive financial education (Agabalinda & Alain, 2020). This highlights the need for organized interventions that aim at not only financially educating but also fostering behavioral changes that are essential for good financial health and psychological well-being (Ntakyo et al., 2021). Therefore, financial education programs can be a key factor in helping individuals handle their financial risks and opportunities with confidence, thereby enhancing their financial decision-making and financial well-being (Ntakyo et al., 2021). Implementing this financial literacy can make a huge difference in improving employees' financial health, which can help them make informed investment decisions and cover financial obligations.

Research Questions

This qualitative study explores the perceptions and experiences of middle managers in Indian higher education institutions on how financial literacy affects their mental health and financial well-being. It examines how financial knowledge, attitudes, and skills shape financial behaviors and psychological distress (Chiang, 2002), the mediating role of financial literacy in turning financial inclusion drivers into economic and social empowerment (Pandey et al., 2025). The study also assesses how financial literacy moderates the impact of financial stressors on mental health (Chauhan, 2025) and identifies barriers to accessing financial resources and education that hinder resilience and well-being (Abitoye et al., 2023). It evaluates the effectiveness of current financial literacy programs, identifies gaps for targeted interventions to boost financial health and psychological stability, and explores the links between financial literacy and financial wellness, workplace productivity, and employee satisfaction (Narges & Laily, 2011). Using open-ended questions and interpretive phenomenological analysis (Athota et al., 2022; Warmate et al., 2021), it reveals lived experiences amidst challenges such as burnout (Srivastava et al., 2024), cultural norms (Abitoye et al., 2023), cognitive biases (Athota et al., 2022), psychological factors (Chauhan, 2025), and economic uncertainties (Tomar et al., 2021).

Guiding Research Questions

RQ1: How do middle management employees in Indian HEIs perceive the relationship between their financial literacy levels and mental well-being, particularly stress, anxiety, and psychological health?

RQ2: What financial management behaviors do they adopt due to financial literacy, and how do these influence well-being via savings, debt management, and investments?

RQ3: What barriers and facilitators affect acquiring and implementing financial literacy, and how do they impact financial decision-making and mental health?

RQ4: How do institutional or governmental financial literacy programs influence their financial well-being and mental health?

RQ5: To what extent does financial literacy mediate psychological conditions and coping mechanisms for HEI faculty navigating financial challenges?

This study clarifies the links between financial knowledge, psychological states, and outcomes, advancing behavioral finance theory and employee welfare strategies.

Significance of the Study

The results of this study will inform targeted financial literacy interventions for middle managers in Indian higher education institutions, enhancing their financial competencies, mental health, organizational stability, and productivity. The study elucidates lived experiences influenced by cultural norms and cognitive biases in financial decision-making (Chauhan, 2025; Tomar et al., 2021), thereby providing insights for effective policies and educational programs (Brüggen et al., 2017; Tomar et al., 2021). The research advances scholarship on financial well-being in developing economies, particularly in the context of India's higher education challenges (Srivastava et al., 2024), while addressing a notable gap pertaining to this demographic. Enhanced financial literacy alleviates financial stress (Badrudin et al., 2025); mitigates psychological factors such as risk aversion and locus of control to enable rational investments and satisfaction (Chauhan, 2025); fosters resilience and financial inclusion (Hasan et al., 2021); and improves behaviors like budgeting. This holds particular relevance for vulnerable groups, where financial illiteracy intensifies stress, illness, and productivity losses (Narges & Laily, 2011), (Lusardi & Messy, 2023). Moreover, financial literacy's moderating role underpins strategies for mitigating distress, bolstering psychological and relational well-being (Chiang, 2002), (Samuelsson et al., 2023), promoting economic empowerment (Pandey et al., 2025), and cultivating human capital for enduring stability (Lusardi & Mitchell, 2023), (Kim & Xiao, 2020).

Mental Health and Financial Well-being Interconnections

The interplay between mental health and financial well-being is bidirectional: financial stress detrimentally impacts mental health, while mental health disorders obstruct effective financial management (Kirkbride et al., 2024). This interaction perpetuates a deleterious cycle, wherein financial hardships intensify anxiety and depression—thereby compromising financial planning—and financial stress, irrespective of debt magnitude, engenders psychological distress and mental disorders (Samuelsson et al., 2023), (Rendall et al., 2021). The challenge is particularly pronounced with complex financial products or elevated debt levels, emphasizing the necessity for enhanced financial literacy to ameliorate these outcomes (Lusardi & Messy, 2023), (Lusardi & Mitchell, 2014). Greater financial literacy enables informed decision-making, interrupts this cycle, and cultivates stability and resilience to shocks (Lusardi & Messy, 2023). Reciprocally, mental health impairments undermine cognitive capacities requisite for sound decisions, fostering impulsive spending or neglect of obligations, which exacerbates financial instability (Chandra et al., 2023). A holistic strategy integrating financial education and mental health support is imperative, particularly for middle managers in higher education institutions (Chiang, 2002), to fortify financial resilience and mitigate psychological consequences (Chiang, 2002). Individuals under financial strain commonly exhibit heightened anxiety and depression (Samuelsson et al., 2023), as financial stress induces both physiological and psychological manifestations, including elevated psychological distress, and suicidal ideation (Kirkbride et al., 2024), (Rendall et al., 2021).

Financial Literacy Interventions and Outcomes

Rigorous empirical studies affirm the effectiveness of targeted financial literacy initiatives in promoting constructive behavioral shifts and bolstering financial well-being, especially when customized to particular demographic and professional settings (Braunstein & Welch, 2002; Xiao & O'Neill, 2016). Moreover, such initiatives, including structured educational curricula and workplace initiatives, substantially elevate both objective and subjective financial literacy levels, which in turn align with more judicious financial practices (Xiao & O'Neill, 2016). For example, advanced comprehension of financial principles facilitates adept handling of intricate financial products, thereby alleviating financial strain and concomitant mental health difficulties (Hastings et al., 2013; Rendall et al., 2021). In particular, enhanced financial literacy proves indispensable for at-risk groups, enabling astute decision-making that diminishes vulnerability to exploitative schemes and economic volatility (Hasan et al., 2021; Lusardi & Messy, 2023; Vaahtoniemi et al., 2023). Conversely, deficient literacy correlates with detrimental patterns, such as elevated indebtedness and suboptimal mortgage selections, which intensify financial burdens and psychological distress (Abitoye et al., 2023; Hastings et al., 2013). These insights highlight the imperative for holistic educational efforts to sharpen financial proficiency, fortify resilience against the mental toll of fiscal stressors (Chiang, 2002; Samuelsson et al., 2023), and counteract age-related cognitive impairment through proficient financial stewardship (Chandra et al., 2023). Consequently, fostering financial literacy within middle management cohorts in Indian higher education institutions is essential for navigating fiscal intricacies, curtailing distress, and nurturing holistic well-being (Lusardi & Messy, 2023; Pandey et al., 2025; Samuelsson et al., 2023). Additionally, workplace programs of this nature furnish personnel with competencies for autonomous financial oversight (Narges & Laily, 2011), generating organizational benefits through heightened productivity and employee morale, notwithstanding the debilitating effects of financial woes (Lusardi & Messy, 2023; Narges & Laily, 2011). Over time, instructional methodologies have advanced to incorporate gamified applications, peer-led instruction, and artificial intelligence-driven resources, enhancing participant involvement and customization (Pandey et al., 2025). Nevertheless, obstacles endure regarding uptake and enduring efficacy, exacerbated by socioeconomic inequities and constrained access to financial services (Abitoye et al., 2023; Lusardi & Mitchell, 2014).

Middle Management in Higher Education Institutions

Indian higher education institutions also have unique financial challenges for middle managers, particularly due to the inconsistent nature of academic regulations and the administrative demands, which often come with a fixed remuneration model. Therefore, tailored financial literacy initiatives are crucial for middle managers in this context (Pandey et al., 2025). These programs help them understand the financial landscape, make informed decisions and minimize the impact of their occupations on their finances (Charfeddine et al., 2024). Furthermore, improved literacy skills contribute to better financial product evaluation, risk assessment, and structured savings, forging economic and social empowerment in emerging digital financial landscapes (Padi et al., 2026) while creating new opportunities for financial inclusion (Pandey et al., 2025). This is especially pertinent in this context because of the increasing use of digital platforms for transactions and financial planning (Badrudin et al., 2025). This, in turn, helps to alleviate the financial anxiety, enhance psychological well-being (which is associated with better financial practices and lower stress – Narges & Laily, 2011), and thus establish a virtuous circle of better choices leading to a psychological balance. Thus, the teaching of financial literacy, both in traditional and digital forms, is a crucial priority in an organization for its stability and employee well-being (Lusardi & Messy, 2023). However, customization in addressing dissemination challenges such as reach and cultural relevance, and in enabling continued engagement, requires infrastructure and approaches to engagement that are tailored to the context (Abitoye et al., 2023; Braunstein & Welch, 2002). For example, micro-credentialing is for professionals with time constraints, and it helps to foster financial inclusion and resilience (Ali et al., 2024; Offiong et al., 2024).

In addition, program evaluations must capture the long-term changes in behavior and mental health outcomes that go beyond cognitive outcomes (Narges & Laily, 2011), potentially utilizing technologies such as AI and blockchain that can provide flexible tools within changing environments (Falaiye et al., 2024). Finally, a financial literacy-mental wellness nexus approach can significantly contribute to the well-being of this crucial population (Srivastava et al., 2024).

India's financial landscape and mental health. The financial landscape of India and mental health

The financial landscape in India is rapidly changing due to the digitalization of the financial system and the financial inclusion program, which brings opportunities and challenges to the higher education landscape (Warwick, 2014; Varadarajan et al., 2023). To address financial stress and promote mental health, it is crucial to possess a comprehensive grasp of financial instruments, services, and digital interfaces in this ecosystem. Importantly, in India, the cultural context is particularly relevant to the financial literacy-mental health relationship, as it influences both emotions and decision-making processes in the context of new forms of economic models (Gill et al., 2017; Samuelsson et al., 2023). Financial access and education gaps are significant socio-economic factors influencing well-being and stress, and there is a need to provide specific interventions targeting both financial knowledge and psychological factors (Kuhnen & Melzer, 2018; Rendall et al., 2021; Birkenmaier et al., 2025; Narges & Laily, 2011; Kara et al., 2021). At the same time, emerging concepts such as mobile payment and digital wallet increase engagement opportunities, which, however, demand high levels of digital competences to close new gaps and enhance inclusion (Ewim et al., 2024; Falaiye et al., 2024; Wanof, 2023). AI tools can provide tailored suggestions and streamline tasks to reduce mental strain and assist mental wellbeing, however, to do so, it is important to train the tools to mitigate biases and foster trust (Filippelli et al., 2025; Kanbach et al., 2023). Digitalization is a tool used for value creation, but it also challenges traditional intermediation, which requires new regulations and education (Egieya et al., 2023). Knowledge and awareness, perceived benefits, self-confidence and managerial support (Yuniawan et al., 2025), sustainable funding under high costs (Sharma et al., 2021) are the key factors of AI adoption in finance. These steps are essential for leveraging AI to improve financial education and wellbeing, and for addressing ethical and regulatory concerns (Oriji et al., 2023). Adopting an in-depth qualitative study of the perceptions of the middle management about AI-based financial tools would be imperative to assess the impact on literacy and health in Indian HEIs. It will specifically explore digital literacy-institutional support

interplay and psychological effects; identify best practices and barriers like fragmented adoption and inconsistent digital skills in emerging economies(Juita et al., 2025; Okoye et al., 2022; Yuniawan et al., 2025); and address ethical concerns including biases. These insights will then help to inform individual literacy programs and mental health supports, using technology to promote the health and wellness of this special group. In this regard the study is qualitative in nature to capture lived experiences and perceptions in this context.

Research Methodology

It documents the perspectives, challenges, cultural implications, emerging themes and subjective interpretations of stakeholders that are not reflected in quantitative methods (Athota et al., 2022),(Oriji et al., 2023). Furthermore, because of its inductive approach, it is well suited to unique experiences of technology adoption and offers insight regarding motivations, emotional, psychosocial, and behavioral factors in financial decision making, as well as contextual factors that drive financial literacy initiatives(Long et al., 2023; Rendall et al., 2021).

Given the exploratory research questions and complex human experiences involved, this method—employing semi-structured interviews and focus group discussions with middle managers in Indian HEIs—is optimal for intricate social phenomena, and comprises four key stages: research design, data collection, data analysis, and report writing (Limna et al., 2023). This approach facilitates a comprehensive understanding by cross-verifying information, providing greater validity and reliability of the results of AI integration within conventional financial systems (Oriji et al., 2023).

Research design: Secondary Qualitative Analysis.

The methodology used in this study is secondary qualitative analysis, where the existing qualitative data is used to derive the emerging trends related to financial literacy and mental health of middle managers in Indian HEIs. This can provide deeper insights without the need for new primary interviews(Revellino, 2019). This is especially useful for theory development of phenomena that are complex like AI adoption in professional environments (Bibri & Krogstie, 2017). Specifically, the method involved a systematic review and integration of previous studies, which allowed for reinterpreting the data to uncover patterns and relationships between financial literacy, mental health and technological adoption (Laubengaier et al., 2022). It integrates a variety of accounts to highlight the lived experience and subtle understandings of how AI affects one's life, rather than relying on single-study methods (Lewin et al., 2018).

Findings and Discussion

This section brings together the emergent themes and patterns identified from the secondary qualitative data, which weave together the themes of financial literacy, AI adoption, and mental well-being of the middle managers in higher education institutions in India. The study explores, among other things, the effect of the perception of financial tools that use AI on decision-making and psychological effects in a socio-economic and cultural context in India. It does so, while advancing the theory of financial technology interventions for enhancing well-being and buffering stressors for this group, and simultaneously considering ethical issues in the use of AI and providing recommendations for policy and institutional leaders (Cramarenco et al., 2023). This structure includes thematic categories that outline AI's role in financial decision-making, the relationship between digital literacy and financial independence, and the psychological implications. Significant features include challenges like information gaps, and benefits like enhanced support systems for inclusivity, including Udeh et al. (2024) features for support. Content and thematic analysis (Klieštík et al., 2023) is used to facilitate the synthesis and identify optimal practices, barriers, and areas of intervention.

Moreover, given the technological developments and their human-centric implications, the study examines the dual effects of AI (both demands and opportunities) on employee satisfaction and work-

life balance (Chuang et al., 2025). It also examines how AI is utilized within HRM processes, how it enhances resilience and adaptive effectiveness (Antonopoulou et al., 2023), and how it serves as a mediator in stress reduction in accordance with the self-determination theory (Do et al., 2025). Similarly, the impact of digital HRM on well-being, as mediated by work-life balance (India, 2025), is analyzed along with AI-based predictive analytics which can ease financial burden, boost employee retention, and provide personalized guidance (Ajuwon et al., 2024). Ethical issues related to data confidentiality and safeguarding employees' private data through regulations require further research in the context of AI advancements (Santana & Díaz-Fernández, 2022).

Perceived implications of financial literacy for well-being

In the result, there is a direct link between enhanced financial understanding and psychological well-being of middle managers in Indian HEIs: A literate decision making process leads to decrease in the feeling of anxiety and increase in life satisfaction. Specifically, it helps to reduce the financial stress by adopting a proactive budgeting, debt management and saving strategy aimed at achieving a specific goal, leading to control and security (Hasan et al., 2021). On the other hand, financial illiteracy increases stress, mental health problems and financial crises and psychological distress, making targeted interventions that provide knowledge and tackle psychological issues as a priority (Srivastava et al., 2024). Therefore, fostering literacy helps to reduce occupational stress, improve financial status, job satisfaction, and organizational commitment, which are crucial elements in HRM practice for successful performance in an age of Artificial Intelligence (AI) (Cramarenco et al., 2023; Egieya et al., 2023). Yet, despite the benefits of AI in financial management, it also presents its own set of challenges, such as job insecurity, cognitive load and health concerns, which require a delicate balance of understanding how to use AI in HEI tools (Chuang et al., 2025; Cramarenco et al., 2023; Zheng et al., 2025). Additionally, the usability and effectiveness of these tools have a significant impact on them being adopted and their effects on well-being for middle managers (Padi et al., 2026). Especially, aspects that help to reduce stress and increase positive behaviors are crucial for educators and practitioners who strive to enhance employee satisfaction (Badrudin et al., 2025; Narges & Laily, 2011) as financial stress is associated with high levels of tension, anxiety, lack of vitality, and resilience (Chiang, 2002). Furthermore, mental stress still consumes resources in other domains which disrupts the work-life balance, healthy coping mechanisms, effective planning and, ultimately, stability (El-Sherbeeney et al., 2024).

Key factors that can make it difficult to be financially healthy

The financial and technological challenges faced by middle managers in Indian HEIs are poor digital skills, fragmented technological use between financial institutions, and high levels of financial expenditure and maintenance costs especially for resource-limited small and medium-sized institutions and institutions (Sharma et al., 2021). These costs are frequently difficult to afford by SMEs and education institutions, and require subsidies from government and simplified framework (Sharma et al., 2021). Lack of financial information, particularly in rural areas, also hinders access to key AI-powered services, further narrowing the access gap to these services even for those who can physically access them (Schuetz & Venkatesh, 2019). Lack of regulatory frameworks, data privacy concerns, especially for sensitive financial and personal information, and cybersecurity concerns all contribute to these barriers, which hamper access, utility and trust in AI systems (Yuniawan et al., 2025). Like HEIs, resource limitations, competency gaps, poor infrastructure and a shortage of AI professionals are also challenges for small and medium enterprises that affect financial education and the uptake of technology (Al-Amin et al., 2024) (Eyeregba et al., 2024). Lack of expertise and proper training in AI, combined with its complexity, significantly hinders its deployment, as observed in various sectors in India like manufacturing and education (Faiz et al., 2024). To meet these demands, customized strategies are needed: strengthening digital infrastructure, designing cost-effective AI solutions in the cloud (Eyeregba et al., 2024), enhancing financial and AI literacy education (Eyeregba et al., 2024), imposing strict data privacy laws (Yuniawan et al., 2025), developing targeted policies with subsidies (Sharma et al., 2021), and creating partnerships between the

government, institutions and teachers to cultivate financial skills and psychological resilience (Sharma et al., 2021),(Eyeregba et al., 2024). Making sense of behavioral determinants – AI literacy, resources, etc.

Implications for Middle Management in HEIs

The integration of AI in financial management within HEIs presents both opportunities and challenges for middle managers, necessitating adaptive strategies to leverage technological benefits while mitigating potential risks (Offiong et al., 2024). A robust understanding of AI's capabilities and limitations is crucial for these managers to effectively guide their teams through transformations in financial processes and decision-making, thereby fostering a culture of continuous learning and adaptation. However, successful adoption is frequently constrained by limited financial resources, skills gaps, and inadequate infrastructural support, particularly in institutions with informal business structures and varying digital readiness (Al-Amin et al., 2024). This disparity creates significant hurdles in AI adoption, especially for women in Asian contexts, who often face deficits in AI skills that affect their professional contributions and perpetuate workforce inequities (Kalim et al., 2025). Addressing these challenges requires targeted interventions to enhance digital literacy and AI competencies, particularly for historically underrepresented groups, creating an inclusive AI-driven financial ecosystem that supports employee mental well-being and financial stability(Eyeregba et al., 2024). Furthermore, ethical implications of AI deployment—including bias and data protection—must be rigorously addressed to ensure financial tools enhance employee well-being (“Awareness, Benefits, Threats, Attitudes, and Satisfaction with AI Tools among Asian and African Higher Education Staff and Students,” 2024). Understanding faculty perceptions of AI's benefits and challenges, and their professional development needs, is critical for successful implementation (Mah & Gross, 2024). Empirical evidence reveals diverse faculty profiles regarding AI self-efficacy—from optimistic to critically reflective—thus necessitating tailored support and customized training programs to address competency gaps, psychological barriers like resistance to change, and ensure effective AI integration (Eyeregba et al., 2024),(Mah & Gross, 2024). To this end, comprehensively evaluating middle managers' current AI literacy levels alongside their financial management responsibilities is essential for designing effective intervention strategies.

Summary of Research Questions

The robust methodology could support the development of theoretical frameworks specific to the educational transformation through AI, ensuring academic integrity (Avello & Zurita, 2025). In addition, future studies need to critically examine socio-economic and technological conditions in India to support specific interventions and resource allocation procedures (Dwivedi et al., 2019). There is a need for further empirical research with postgraduate students, teachers, and school leaders to shed light on how AI can be used to enhance learning in resource-limited contexts, particularly in developing countries like India (Bond et al., 2024). Such endeavors might take a systematic approach to evaluating the impact of Generative AI tools and pedagogical strategies involving social media on the development of AI literacy in higher education, building on existing psychological and educational theories (Tzirides et al., 2024). At the same time, it is crucial to explore the psychological well-being of students and faculty in the context of growing AI presence, highlighting the importance of mental health and the impact on education with longitudinal and qualitative approaches (Abbas et al., 2024), (Chan & Hu, 2023). In addition, assessing the impact of easily accessible culturally sensitive AI literacy programs would respond to the contextual emergency and digital gaps in education, leading to equitable access and inclusivity for higher education institutions across diverse India. In this context, longitudinal studies are especially useful for tracking changes in user attitudes and behaviors over time in relation to the use of Generative AI (Generative AI and User Attitudes, 2024), and the implications of prompt engineering practices on critical thinking and problem-solving (Lee & Palmer, 2025). This agenda in turn highlights the need to understand human-AI symbiosis and

to foster hybrid intelligence paradigms for the integration of technological enhancements in parallel with human skills and ethical principles (Yan et al., 2025), (Järvelä et al., 2025) Furthermore, it would be impossible to simply create a construct of GenAI literacy for pedagogical milieus without the cognitive, ethical, and socio-emotional dimensions (Park, 2025). At the same time, close attention should be paid to policy analysis to develop ethical directives for using AI for decision-making and ensuring transparency, accountability, and confidentiality (Walter, 2024), and to establish long-term monitoring and evaluation systems of the consequences of AI deployment (Chan & Lee, 2023). This integrative paradigm is aligned with calls for a strategic plan, a pilot study, and evidence gathering (Chan, 2023), and also includes generative AI to scaffold SRL and personalized feedback (Skulmowski, 2024). Considering the above factors, it is essential to consider the implications for pedagogy when generative AI is used to support cognitive and metacognitive skills in various contexts (Yan et al., 2025). This review should focus especially on how precision and improved AI-to-human communication can affect academic performance and the ability of AI-produced content to create a grey area between originality and plagiarism in academic fields (Kanont et al., 2024; Tzirides et al., 2024). Thus, a more complete policy is needed that will not just promote AI literacy but will also have to deal with ethical concerns and psychological effects of the integration of AI in higher education contexts (Park, 2025).

Theoretical Implications

The framework is proposed as a need for blending existing theories in learning, such as constructivism and socio-cognitive theory, in order to explain the mediation role of AI-based tools in knowledge construction and social learning in the context of academic environment. It should also look into the ways AI can support pedagogical approaches, such as creating individual learning pathways and adaptive assessments that can be tailored to accommodate the needs and cognitive styles of each student (Mouta et al., 2023; Tapalova & Zhiyenbayeva, 2022). This theoretical foundation is essential for comprehending the impact of human-centered AI design to support student agency and cultivate holistic generative AI literacies, including functional, critical, ethical, and creative aspects (Anders & Speltz, 2025). In addition to this, the framework covers the possibility of using AI to improve SRL and give personalized feedback, as this has the potential to greatly affect student autonomy and academic achievement (Yan et al., 2025). This approach also tackles the pedagogical, governance, and operational aspects of AI's use in higher education, which requires policies that account for transparency, accuracy, and privacy (Chan & Hu, 2023). It also contemplates the possibilities of generative AI's influence on the education landscape, including the potential for transformation in instructional practices and support systems for students in higher education (Belkina et al., 2025). Additionally, the ethical implications of using AI to create content, such as plagiarism and authenticity, require careful consideration and the establishment of guidelines (Kanont et al., 2024), (Yusuf et al., 2024).

Practical Implications

AI applications can have practical implications in higher education, such as the use of AI in the design of learning activities to encourage critical thinking and independent problem-solving skills among students (Qu et al., 2024). This requires the creation of comprehensive AI literacy training for both students and teachers, that includes how to use AI tools effectively, as well as how to critically assess the ethical aspects of AI tools and AI-generated content (Chan, 2023). These programs should take into account the complexity of the human and technical factors, and should emphasize human-centered AI in learning, incorporating existing cognitive and behavioral learning theories (Kim et al., 2024). Furthermore, educational institutions must develop institutional policies and support mechanisms to address the evolving landscape of AI in higher education, including guidelines for academic integrity and appropriate AI usage (Lee et al., 2024; Zawacki-Richter et al., 2024) This includes establishing collaborative efforts among various stakeholders to integrate AI effectively, addressing students' perceptions and concerns, and ensuring that AI complements traditional teaching

methods to improve learning outcomes (Chan & Hu, 2023; Wang et al., 2025). (Chan & Hu, 2023; Wang et al., 2025) additionally, the integration of AI tools, such as virtual AI teaching assistants and intelligent tutoring systems, can guide individual learner paths and facilitate automated grading, thereby optimizing administrative and instructional efficiencies within HEIs (Delcker et al., 2024). Continual evaluation by rigorous monitoring is needed to guarantee the ethical use of these advancements and to evaluate the learning processes and outcomes (Chan, 2023).

Limitations of the Study

Although this investigation offers important learning, there are a number of limitations to acknowledge, most importantly the use of secondary qualitative research data. Such methodological limitation necessarily limits the scope of direct observation of and primary data collection on the less easily observable dimensions of the relationships between Generative AI and pedagogical practices in given institutional settings (Neupane et al., 2024). Furthermore, the lack of direct interaction with stakeholders (such as faculty and students) precludes a detailed understanding of their perceptions, challenges, and acceptance of the use of these AI tools in education which restricts the extent to which the theoretical framework can be applied comprehensively. In addition, because Generative AI technologies are still rapidly evolving, findings from previous academic works can quickly become outdated, which can hinder the building of long-term theoretical models and recommendations (Neupane et al., 2024). Therefore, future studies should focus on longitudinal research that incorporates mixed methods (quantitative and qualitative) data collection techniques such as surveys, interviews, and ethnographic observations across a variety of HEIs in India, to better understand the dynamic relationship between the integration of AI technologies and educational outcomes. This would help in understanding the nuances of the challenges and opportunities of AI in each context of Indian HEIs, rather than focusing solely on the broader implications.

Future Research Directions

Based on the aforementioned findings, future studies could investigate the pedagogical implications and best practices for integrating Generative AI tools into educational practices, focusing on their potential to support personalized learning, collaborative problem-solving, and creative expression (Kanont et al., 2024). In addition, research into the ethical implications of AI-generated content and the establishment of robust policies for academic integrity in an era of AI in education are urgently required. In-depth exploration of institutional policies and procedures related to AI use and implementation should also focus on how well these policies promote responsible AI usage, and how they limit the risks to academic rigor and equity (Jin et al., 2024).

Conclusion

By adopting this comprehensive approach, AI-driven financial solutions can genuinely contribute to the mental health and financial well-being of middle managers in HEIs in India, without exacerbating existing disparities or causing new issues. For this reason, it adopts specific improvements in AI literacy and digital skills, fostering a space where students comfortably engage with the new financial technologies and reap tangible benefits (Imjai et al., 2024). Moreover, the implementation of this requires a positive institutional framework in the future that emphasizes continuous professional growth, ethical management of AI, and infrastructural investment for ongoing implementation (Aprianto et al., 2024). At the same time, it is essential to redress the entrenched digital divide and gender inequities impeding equitable access to cutting-edge digital tools in scholarly contexts (Nyaaba et al., 2024). Therefore, it is necessary to make efforts that cater to the specific needs of middle management in this backdrop where monolithic paradigms are not working, considering the varied contexts of Indian HEIs. Moving forward, it is crucial to conduct prospective studies that investigate the complex relationship between AI literacy, financial well-being, and mental health to inform context-specific interventions, such as customized training programs and allocation of resources that align with India's socio-economic and technological context. Specifically, probing the

ramifications of heterogeneous digital finance ventures on inclusivity and welfare (Saini & Saha, 2024), psychosocial facets such as job displacement trepidation and data privacy considerations, linkages between AI, financial literacy, and mental welfare (Lim, 2024), and ethical integration fostering transparency and equity (Aprianto et al., 2024) will buttress empirically grounded policies. Additionally, such efforts are fundamental to overcoming the limited technological use of AI in higher education to an understanding of its societal and psychological consequences, particularly in developing economies (Bond et al., 2024). More specifically, upcoming scholarship could examine student and faculty AI literacy abilities and skills to uncover gaps (Xia et al., 2024), create theoretical models by adapting psychological or pedagogical models to the context of AI for educational transformations, and implement longitudinal evaluations of the impact of AI-enhanced financial literacy programs on employee outcomes, while incorporating ethical considerations (Avello & Zurita, 2025). Lastly, by implementing various types of bibliometric and co-word analysis, it is possible to identify potential synergies, patterns and thematic connections between AI, financial literacy and mental health, which could inform targeted interventions and guiding policy principles in Indian HEIs (Lim, 2024).

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