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Artificial Intelligence Adoption and Faculty Mental Well-Being in Indian Higher Education: A Review

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Abstract

Artificial Intelligence (AI), including Generative AI tools such as ChatGPT, Gemini, Microsoft Copilot, and Claude, is increasingly being adopted in higher education for teaching preparation, research, assessment creation, and learner-centred teaching. While AI adoption offers opportunities to improve productivity, teaching effectiveness, and research capabilities, it also raises concerns related to technostress, AI anxiety, cognitive load, ethical challenges, professional identity, and technological adaptation. This review synthesizes literature on AI adoption and faculty mental well-being, with particular emphasis on the Indian higher education context. It examines the drivers and barriers influencing AI adoption and explores how technological, institutional, motivational, and individual factors shape faculty experiences. The review draws on the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and Self-Determination Theory (SDT) to understand technology acceptance and faculty well-being. Existing literature indicates that perceived usefulness, ease of use, institutional support, AI literacy, professional autonomy, and empowerment encourage adoption, whereas technostress, digital fatigue, ethical concerns, and professional identity threats may negatively affect well-being. Despite growing research, evidence on the mental health implications of AI adoption among Indian faculty remains limited. The review highlights the need for longitudinal and mixed-methods research to develop AI adoption strategies promoting faculty well-being.

Keywords: Artificial Intelligence; Generative AI; Faculty Well-Being; Higher Education; AI Anxiety; India

1. Introduction

Artificial Intelligence has become an increasingly important topic in the debate around the future of higher education. Rapid innovations in machine learning, natural language processing and Generative AI have transformed teaching, learning, research, evaluation and administration practices in the sector. The emergence of ChatGPT and its rise to prominence in late 2022 has in particular focussed attention on the potential of Generative AI and prompted universities to critically assess current approaches to teaching practice, assessment design, and organisational strategies. Faculty are experimenting with its use in lecture preparation, test and question construction, literature reviews, student guidance, information synthesis and research writing. Such approaches have enabled significant time saving and prompted novel pedagogical innovations and research practices.

At the same time, the increasing use of AI has raised critical questions in higher education about plagiarism, privacy, intellectual property, algorithmic bias, transparency and ethical use. Faculty members find themselves at the centre of this debate as their attitudes, skills, confidence and engagement with AI fundamentally shape the extent to which the technology will be adopted and integrated in higher education. Adoption is therefore not only determined by the functional and technical capacity of a given AI application but also by faculty's appreciation of its educational value, perceived ease of use and level of support provided by the institution.

The Indian higher education sector is also undergoing this transition, with digitization initiatives, the policy of National Education Policy (NEP) 2020, and the proliferation of technology-mediated instruction provoking universities and colleges into considering the adoption of AI-driven approaches and processes. However, not all faculty members are equal, and there are variations in AI literacy levels, confidence with technology, infrastructural provisions, training provisions, institutional support, and professional expectations, all of which may influence their receptiveness to adopting AI.

Studies have shown that the adoption of AI is influenced by technology-related, psychological, motivational, and institutional factors. For instance, studies employing UTAUT and SDT have identified factors such as performance expectancy, effort expectancy, social influence, facilitating conditions, autonomy, competence, relatedness, AI

literacy, teaching values, and personal innovativeness as influential processes and conditions. Therefore, contextual variables such as perceptions of the usefulness of the technology and the likelihood that it will produce desirable consequences determine the extent to which one will adopt it.

Like many other factors influencing technology acceptance, the impact of AI on faculty members' mental well-being is complex and can be both positive and negative. Though the technology has the potential to increase professional responsibility and foster a sense of accomplishment, the additional burden of continuous learning and the possibility that it may undermine their professional competence, autonomy, and control can also have adverse effects. Expectations for innovation can also be overwhelming and may adversely affect vitality, job satisfaction, professional self-concept, and mental well-being. Thus, the impact of AI on mental well-being is not linear but depends on various individual and situational factors.

Despite the fact that several studies have explored the relationship between faculty members' mental well-being and their willingness to embrace AI across different institutional settings worldwide, the literature exploring this relationship in the context of Indian higher education is inconclusive. Most studies have focused on identifying factors influencing faculty members' intention to adopt AI, with few examining the psychological ramifications of such an initiative. As such, there is a need to consolidate the existing body of literature examining the influence of this emerging issue on higher education students, faculty members, and institutional stakeholders while also identifying research gaps.

2. Research Objectives

The research objectives are as under:

1. To Review the existing literature on Artificial Intelligence adoption in higher education in India.
2. To Identify the positive and negative psychological outcomes of AI adoption among faculty members.
3. To Suggest future directions for empirical research on Artificial Intelligence adoption and faculty mental well-being in higher education in India.

3. Research Methodology

3.1 Research Design

The study uses a systematic narrative literature review approach to bring together current knowledge on Artificial Intelligence adoption and faculty mental well-being in higher education, with a particular focus on the Indian context. A literature review is appropriate for this topic because research on Generative AI in education is developing rapidly and is spread across several fields, including educational technology, information systems, organizational behaviour, and psychology.

The review brings together empirical findings, theoretical perspectives, and practical observations to develop a broader understanding of how AI adoption may affect faculty experiences and well-being. Rather than providing a purely descriptive summary, the review follows a structured process of identifying, screening, evaluating, and synthesizing relevant literature published between 2020 and 2026. Greater attention is given to recent work published after the emergence of widely used Generative AI applications such as ChatGPT.

4. Literature Review

4.1 Faculty Perspectives on Artificial Intelligence Adoption in Higher Education

Jeya and Saravanakumar (2026) examined faculty perceptions of AI adoption in Indian higher education using the Unified Theory of Acceptance and Use of Technology (UTAUT). Their quantitative study included 380 faculty

members and considered factors such as perceived benefits, institutional support, peer influence, perceived risks, and other technology-related influences on AI adoption.

The study indicates that faculty adoption is strongly connected to how useful AI is perceived to be and to the environment in which it is introduced. Institutional support, peer influence, perceived benefits, and perceived risks all appear to shape faculty members' intentions and actual use of AI. This suggests that successful implementation cannot depend on individual willingness alone. Universities also need suitable infrastructure, supportive leadership, training, and clear guidance.

The study is also important because it recognizes that faculty members may have concerns about academic integrity, privacy, reliability, and excessive dependence on AI. Such concerns are relevant not only to adoption decisions but also to the psychological experience of using the technology. However, the study mainly examines adoption and behavioural intention rather than mental well-being. It does not establish whether AI-related experiences lead to stress, anxiety, emotional exhaustion, job satisfaction, or other psychological outcomes. This leaves an important area for further research.

Source: Jeya and Saravanakumar (2026).

4.2 Responsible Adoption of Generative AI in Higher Education

Dotan, Parker, and Radzilowicz (2024) examine Generative AI adoption from an institutional governance perspective. Rather than treating AI adoption simply as an issue of technology acceptance, their work considers how universities can respond to Generative AI while protecting academic values and institutional responsibilities. Their approach is informed by faculty perspectives gathered through a collaborative process at the University of Pittsburgh.

The study identifies several potential benefits of Generative AI in teaching, curriculum development, research, and administrative work. At the same time, faculty members raise concerns about academic integrity, inaccurate information, bias, privacy, intellectual property, transparency, and the possible effect of AI on critical thinking.

A key point in the study is that AI governance in higher education needs to reflect the distinctive nature of academic work. Academic freedom, faculty participation, pedagogical goals, and institutional values all need to be considered when universities develop AI policies. Instead of relying only on centrally imposed rules, the authors propose a flexible set of considerations that institutions can adapt to their own circumstances.

This study is particularly relevant to faculty well-being because uncertainty about institutional expectations can influence how faculty experience AI. Clearer policies and guidance may reduce uncertainty, but the study itself does not directly measure anxiety, stress, burnout, or well-being. Further research is therefore needed to determine whether responsible governance can contribute to healthier patterns of AI adoption.

Source: Dotan, Parker, and Radzilowicz (2024).

4.3 ChatGPT Adoption and Faculty Well-Being

Cambra-Fierro et al. (2024) directly examine the relationship between ChatGPT adoption and faculty well-being in higher education. This makes the study especially relevant because it moves beyond the usual focus on technology acceptance and considers what AI use may mean for educators' day-to-day work experiences. The researchers examined factors associated with ChatGPT adoption and then considered its relationship with faculty well-being using covariance-based structural equation modelling.

The findings suggest that ChatGPT can provide professional benefits by supporting academic tasks and making some work processes more efficient. Reducing repetitive activities may give faculty more time for teaching, creative work, and other responsibilities that require professional judgment and expertise.

However, the study also makes clear that the relationship between AI use and well-being is not automatically positive. The benefits faculty receive from ChatGPT depend on how they perceive the technology, how they use it, and the institutional environment in which it is introduced. Concerns about accuracy, academic integrity, appropriate use, and dependence on AI continue to matter.

The study is valuable because it places faculty well-being directly within the discussion of AI adoption. At the same time, more research is needed to determine whether the effects observed in cross-sectional research continue over time and how AI adoption relates to specific outcomes such as burnout, work engagement, emotional exhaustion, work-life balance, and occupational stress.

Source: Cambra-Fierro et al. (2024).

4.4 Determinants of Lecturer Readiness to Adopt Generative AI

Luo and Day (2026) broaden the traditional technology-acceptance perspective by combining UTAUT with Self-Determination Theory (SDT) and individual characteristics relevant to Generative AI adoption. Their study surveyed 651 university lecturers in mainland China and examined performance expectancy, effort expectancy, social influence, facilitating conditions, psychological needs, AI literacy, teaching values, and personal innovativeness.

The findings show that both technology-related perceptions and motivational factors contribute to lecturers' intention to use Generative AI. Factors linked to Self-Determination Theory were strongly related to intention, while UTAUT variables and individual characteristics such as AI literacy and personal innovativeness also contributed to adoption. In other words, faculty readiness cannot be explained simply by whether a person thinks AI is useful or easy to operate.

The study is particularly useful for understanding the psychological side of adoption. Autonomy, competence, and relatedness may influence whether faculty members experience AI as a useful professional resource or as a technological requirement imposed on them. This distinction may have important implications for well-being.

However, the study concentrates mainly on readiness, intention, and use behaviour rather than mental well-being. It therefore cannot establish whether greater readiness for AI necessarily leads to better psychological outcomes. Future research should connect adoption-related variables with stress, anxiety, emotional exhaustion, job satisfaction, and work engagement.

Source: Luo and Day (2026).

5. Positive and Negative Psychological Outcomes of Artificial Intelligence Integration

The literature reviewed in this study shows that the relationship between AI adoption and faculty well-being is not straightforward. AI can make some academic tasks easier and reduce the time required for routine work, but it can also introduce new demands. Faculty members may need to learn unfamiliar technologies, make decisions about ethical use, verify AI-generated information, adapt established working practices, and respond to changing expectations.

For this reason, AI is better understood as a socio-technical intervention rather than simply as a new technological tool. Its effects depend not only on what the technology can do, but also on how it is introduced, what institutions expect from faculty, and how much support faculty members receive.

5.1 Positive Psychological Outcomes

5.1.1 Enhanced Teaching Effectiveness

Generative AI can help faculty prepare instructional materials, develop classroom activities, create examples, and support assessment-related work. These applications can provide additional resources and make it easier for educators to experiment with different teaching approaches. When faculty members find AI useful and manageable, successful use may also strengthen their confidence in carrying out academic tasks.

5.1.2 Research Productivity

AI-based tools can support several stages of research, including exploring literature, developing ideas, improving language, and organizing information. The time saved through these applications may allow faculty to devote more attention to research design, interpretation, collaboration, and other scholarly activities. However, AI-generated information must still be checked carefully because it can contain errors or misleading information.

5.1.3 Reduced Routine Workload

One of the clearest potential benefits of Generative AI is its ability to assist with repetitive academic and administrative activities. If AI genuinely reduces routine work, faculty members may have more time for teaching, mentoring, research, and interaction with students and colleagues. The effect on well-being, however, depends on what institutions do with the time that is saved. If the saved time simply leads to higher expectations and additional tasks, the expected benefit may not materialize.

5.1.4 Professional Satisfaction and Energy

Evidence from research on ChatGPT adoption suggests that AI use may be associated with positive experiences at work. Cambra-Fierro et al. (2024), for example, examined ChatGPT adoption in relation to faculty well-being. These findings suggest that AI can contribute to more positive work experiences when it helps faculty manage academic tasks effectively and when the surrounding work environment is supportive.

5.1.5 Professional Learning

AI adoption also creates opportunities for faculty members to develop new digital and teaching-related skills. Building AI literacy can increase confidence and adaptability, especially when institutions provide practical training and allow faculty time to experiment with the technology. Professional learning can therefore become a positive part of AI adoption rather than an additional source of pressure.

5.2 Negative Psychological Outcomes

The literature also points to several possible risks. These include AI-related anxiety, technostress, increased learning demands, ethical uncertainty, cognitive burden, and concerns about changing professional roles. These experiences are unlikely to be the same for everyone. AI literacy, institutional support, autonomy, workload, and perceptions of job security can all influence how faculty respond.

5.2.1 AI Anxiety

Faculty members may feel uncertain about the reliability and wider implications of AI. Concerns about professional competence, job security, ethical use, and the speed of technological change can create anxiety, particularly when faculty feel they have not received enough preparation or support.

5.2.2 Technostress

AI tools are changing rapidly, which can require faculty members to learn new skills repeatedly and adjust familiar work practices. When training and institutional support are limited, these continuing demands may contribute to technology-related stress and fatigue.

5.2.3 Emotional Exhaustion

AI does not automatically reduce a faculty member's total workload. If institutions introduce AI while also increasing expectations for digital innovation, content creation, research output, or rapid responsiveness, faculty may experience additional pressure rather than relief. Over time, this may contribute to emotional exhaustion.

5.2.4 Ethical Stress

Questions about academic integrity, accuracy, privacy, copyright, bias, and responsible AI use can create uncertainty. Faculty members may have to make difficult decisions about when AI use is appropriate and how AI-generated material should be checked. Clear institutional policies and practical guidance can help reduce this ethical ambiguity.

5.2.5 Cognitive Overload

Generative AI can produce information quickly, but faculty members remain responsible for checking whether that information is accurate, relevant, original, and appropriate. As a result, some of the time saved by generating content may be used again for verification and quality control. When this checking becomes extensive, the technology may add to rather than reduce cognitive demands.

5.2.6 Professional Identity

The growing capabilities of AI may also lead faculty members to rethink aspects of their professional role. Questions about the value of human expertise, academic autonomy, teaching responsibility, and the appropriate division of work between educators and AI systems may affect how faculty view their roles and their future in academia.

5.3 Comparative Analysis of the Reviewed Literature

The studies reviewed show broad agreement about several factors that influence faculty adoption of AI, although they differ in how much attention they give to psychological outcomes.

Research based on technology-acceptance models such as TAM and UTAUT generally identifies perceived usefulness, effort expectancy, facilitating conditions, and social influence as important predictors of AI adoption. More recent work has expanded these models by including motivational factors from Self-Determination Theory, particularly autonomy, competence, and relatedness. These studies suggest that intrinsic motivation can strengthen the intention to use AI and support more sustained engagement.

Compared with adoption research, studies focusing specifically on faculty well-being are still relatively few. Existing evidence points to possible improvements in work efficiency, professional energy, and satisfaction when AI reduces repetitive activities. At the same time, AI anxiety, technostress, ethical uncertainty, cognitive overload, and concerns about changing professional roles are emerging as important challenges.

Taken together, the literature suggests that AI adoption should be viewed as a socio-technical process. Sustainable implementation requires more than access to technology. It also depends on faculty preparedness, organizational support, ethical governance, professional autonomy, and attention to psychological well-being.

Table 2. Positive and Negative Psychological Outcomes of AI Integration

Positive Psychological Outcomes	Negative Psychological Outcomes
Enhanced teaching effectiveness	AI anxiety
Increased research productivity	Technostress
Reduced administrative workload	Emotional exhaustion
Improved job satisfaction	Cognitive overload
Greater occupational happiness	Ethical stress
Higher professional energy	Professional identity concerns
Increased AI confidence	Digital fatigue
Continuous professional learning	Resistance to technological change

6. Conclusion

Artificial Intelligence is becoming part of everyday academic work and is transforming the way in which faculty members engage with teaching, research, assessment, and administration. The literature reviewed in this study sheds light on the factors that influence Generative AI adoption, highlighting the importance of technology perceptions, institutional conditions, individual capabilities, and psychological outcomes. Technology-acceptance models emphasize the relevance of usefulness, ease of use, social influence, and facilitating conditions, while motivational approaches highlight the role of autonomy, competence, and relatedness.

At the same time, the reviewed literature suggests that Generative AI can positively impact faculty experiences by reducing the need for routine work and contributing to enhanced teaching effectiveness and research productivity. Such benefits are closely linked to the risks of AI adoption, such as AI anxiety, technostress, ethical concerns, and additional responsibilities.

One of the most significant limitations of the reviewed literature is the lack of research that addresses the influence of Generative AI on the mental well-being of faculty members in India. While most studies examined faculty adoption, readiness, and behavioral intentions, few addressed concerns related to mental well-being. India is a particularly

interesting context for further research, as its higher education institutions differ significantly in terms of infrastructure, governance arrangements, disciplinary requirements, faculty readiness, and organizational culture.

Future studies should therefore adopt mixed-method, longitudinal approaches to understand the ways in which Generative AI can be integrated into academic work while enhancing well-being. Particular attention should be paid to the role of AI literacy, institutional support, organizational culture, ethical climate, professional autonomy, workload, and job security. In doing so, future research can go beyond questions of adoption and readiness to examine ways in which institutions can transform education in a manner that is conducive to faculty well-being and sustainable academic work environments.

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References

Jeya, S. F., & Saravanakumar, A. R. (2026). Exploring faculty perspectives on Artificial Intelligence adoption in higher education: An analysis using the UTAUT framework. Innovare Journal of Education, 14(2), 22–30.

Abbas, J., Aman, J., Nurunnabi, M., & Bano, S. (2024). The impact of artificial intelligence on higher education: Opportunities, challenges, and future directions. Education and Information Technologies, 29(3), 2561–2583.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268.

Dotan, A., Parker, S., & Radzilowicz, L. (2024). Responsible adoption of generative AI in higher education: Developing a "Points to Consider" approach based on faculty perspectives. Education and Information Technologies. https://doi.org/10.1007/s10639-024-12871-0

Cambra-Fierro, J. J., Fuentes-Blasco, M., López-Pérez, M.-E., et al. (2024). ChatGPT adoption and its influence on faculty well-being: An empirical research in higher education.

Marler, J. H., & Liang, X. (2023). Artificial intelligence and employee well-being: A systematic review. Human Resource Management Review, 33(4), 100923.

Ministry of Education. (2020). National Education Policy 2020. Government of India.

National Forum for Health and Wellbeing at Work. (2024). The impact of artificial intelligence on health and wellbeing. University of Galway.

Rahiem, M. D. H. (2024). Artificial intelligence in higher education: Faculty readiness, opportunities, and challenges. Journal of Applied Research in Higher Education, 16(2), 421–438.

Ryan, R. M., & Deci, E. L. (2020). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press.

Sallam, M. (2023). ChatGPT utility in healthcare education, research, and practice: Systematic review. Healthcare, 11(6), 887.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the Unified Theory of Acceptance and Use of Technology. MIS Quarterly, 36(1), 157–178.

Wang, P., & Siau, K. (2024). Generative artificial intelligence in higher education: A systematic review of opportunities, challenges, and future research directions. Computers and Education: Artificial Intelligence, 6, 100214.