The Dual Impact of Artificial Intelligence Adoption on Employee Stress and Mental Health: Balancing Benefits and Psychological Costs

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ABSTRACT

The study examines how Artificial Intelligence (AI) is quickly permeating several sectors and how it has a significant influence on job positions, organizational dynamics, and decision-making procedures. While AI improves operational precision, efficiency, and strategic insights, it also poses significant psychological and mental health risks to workers. work uncertainty, the need to adjust to new technology, ongoing digital surveillance, concerns about losing one's work, and the need to retrain are some of the major stresses that have been highlighted.

The relationships between AI-induced work instability, psychological safety, knowledge-hiding behaviour, and self-efficacy in the context of learning AI technologies have given a lot of attention. The results show how important it is for employees to adapt to technological changes; their opinions and responses have a big influence on individual performance, the culture of the company as a whole, and the general adoption of AI technologies. This emphasizes how crucial it is to deal with psychological issues and provide a supportive and secure atmosphere while implementing AI in the workplace.

Additionally, the study advocates for an artificial intelligence (AI) deployment paradigm that is human-centric, emphasizing the critical role that enterprises play in reskilling and upskilling their workforce. It emphasizes how crucial it is to create supportive settings that mitigate the drawbacks associated with the difficulties posed by AI technology. The report promotes strategic design efforts that prioritize employee well-being while simultaneously furthering technical advancement by balancing the possible psychological hazards associated with AI with its possibilities.

KEYWORDS

Organizational dynamics, digital surveillance, psychological, human-centric, technology, employee, technical.

1. INTRODUCTION

Nowadays the use of Artificial Intelligence (AI) is increasing rapidly, whether it is in the field of education or in any company or organization. Artificial Intelligence (AI) has rapidly transformed the modern workplace environment, shaping job roles and decision-making process. Although

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Vol - 1
Issue - 4

the adoption of AI brings many benefits, accuracy and strategic insights are also increased, but its concentration in the workplace raises serious concerns when it comes to the psychological and mental health of employees. Employees often have to face new problems, which creates a situation of stress, in which some adverse conditions causing stress are as follows -

1. Job insecurity
2. Pressure to adapt to new technologies
3. Constant digital monitoring
4. Job Displacement and Reskilling

1. Job insecurity

Employees experience employment instability as a result of AI adoption, which raises concerns about job loss and diminished value. Their performance, confidence, and readiness to share information are all negatively impacted by this uneasiness, which in turn has an impact on workplace culture and productivity. To effectively manage AI integration and maintain an engaged workforce, organizations need to comprehend these emotions.

2. Pressure to adapt to new technologies

When workers must quickly pick up and adjust to new AI technology, they endure a great deal of stress. Inadequate training, fear of making mistakes, and worries about having out-of-date abilities are the main causes of this stress. Such pressures can result in increased anxiety, worse performance, and a general unwillingness to accept technology advancements in the workplace if there are insufficient support structures.

3. Constant digital monitoring

In order to increase productivity, AI-enabled monitoring systems are made to keep tabs on worker performance, activities, and efficiency. However, these monitoring techniques can make workers uncomfortable, undermine trust, and increase stress. Employees' psychological health may suffer if they feel like they are being watched all the time.

4. Job Displacement and Reskilling:

Some employment functions may become automated as a result of integrating AI technology, which raises worries about job displacement. Organizations should fund upskilling and reskilling programs to solve this problem. These programs will provide workers the chance to learn new skills that complement AI technology, enabling them to move into new positions that make the most of their special human characteristics and enable productive cooperation with AI systems.

3. RESEARCH OBJECTIVES

To examine the positive effects of AI adoption on employee job satisfaction and work performance. To identify the negative psychological consequences of AI implementation, particularly in terms of stress, anxiety, and mental health. To analyze how organizational support, training, and communication can mitigate the adverse effects of AI adoption. Recent developments in AI have been astounding, with new developments appearing every week. Many

people, including professionals, have been overtaken by this quick evolution, leaving the general public unprepared for the changes. Hundreds of technology experts have called for a six-month freeze to AI model development in order to give academics and policymakers time to evaluate the situation and keep up with the rapid rate of innovation.

AI is no trivial matter. For better or worse it could transform the nature of work, media, content production, programming, healthcare, creativity, cybersecurity, science, literature, art, and much more besides. Maybe a little, maybe a lot. So, people of all stripes who would otherwise be happy to mind their own business and go about their lives are now forced to be concerned. Even tech nerds such as myself who get high off this kind of stuff find the cognitive demands of keeping up with AI's explosive growth quite the tall order. This pressure to adapt to AI can be arduous and unwelcome. Many feel vulnerable, insecure or even threatened by the unplanned and hasty societal proliferation of these models.

The continuous barrage of news stories showcasing the most recent developments in artificial intelligence (AI) may be intimidating, even for people who view AI as an interesting and generally positive phenomena. This is especially true if people haven't finished reading all of the items from the previous day. The deluge of knowledge seems to go on forever and doesn't seem to be slowing down. In the examined text, the author reflects on the significant transformations brought about by artificial intelligence (AI), particularly focusing on the psychological, emotional, and intellectual impacts it imposes on individuals, especially those facing potential job instability. The narrative emphasizes a human preference for stability as opposed to uncertainty; in this context, controlled uncertainty which can be likened to a regulated gambling scenario is perceived as more acceptable. However, the inherent unpredictability of AI's progression and its consequences leaves many individuals feeling disconcerted and anxious due to the lack of comprehensive control over these developments. The resulting ambiguity stemming from AI advances aggravates these emotions, as people confront an uncertain future influenced by technologies that none can entirely govern.

Stress often stems from the awareness of unknowns in a vast and complex subject, making individuals feel overwhelmed and discouraged by their limited understanding. Engaging with topics like artificial intelligence reveals a continuous cycle of learning and the realization of one's ignorance, akin to reaching a high point only to discover a higher challenge ahead. This ongoing journey into knowledge can leave one questioning their readiness for deeper exploration.
Time for self-reflection is essential in addressing AI fatigue. It is important to manage both our intellectual and emotional reactions to the increasing presence of AI in our lives. The following strategies aim to help individuals cope effectively with the fatigue associated with AI, shared by someone experienced with this challenge.

October
December 25

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Vol - 1
Issue - 4

1. Human Decisions as the True Drivers of AI's Impact:

Bear in mind the consequences of AI's rapid advance will still only pan out at a human pace. It only moves when we move. Despite how quickly AI is evolving, it can only take root once we have made up our minds what to do with it. Those that don't approach using AI carefully, will make instructive mistakes the rest can learn from . So while the rate of development happens faster than the rate at which we can keep up with it on the whole, those advances won't be fully implemented until we understand them. Everyone faces the same predicament. It's not the technological advances, but human decisions about AI, that will have the biggest impact on your life regarding it.

2. Building Collective Understanding Through Open Dialogue and Knowledge Sharing:

Embrace open debate and a culture of knowledge sharing. It behooves us to share what we learn about AI and distribute that knowledge in an accessible, teachable format, and to have open , frank discussions about AI's implications. Even if we can't hope to learn everything individually, we can complement each other's mutual understanding and compensate for our respective deficits in knowledge through well meaning exchange. Strengthening each other's understanding helps build a collective epistemological safety net. Since AI's ascendancy is a societal problem that involves everyone, we need to think in terms of collective solidarity and be democratic and open about sharing information and ideas. We're in this together.

3. Relying on Expert Interpretation to Make Complex AI Information Accessible:

If you find all the latest raw data impenetrable wait for dedicated experts to interpret it and then present their findings to the public in a more digestible form. Sorting through all this information, much of it technical, can be exhausting. All the more so for non-experts. But if someone with more expertise does the heavy lifting and condenses the results for laypersons that will take some of the pressure off and skip you ahead several steps for free.

4. Effective Approaches to Navigating AI Complexity and Uncertainty:

Practical strategies for managing AI overload and uncertainty involves focusing on aspects of AI that are directly relevant to individual needs, as the field is expansive and complex. Limiting learning to pertinent subtopics helps prevent overwhelm and allows for deeper understanding, which requires time and patience. It is also beneficial to take regular breaks and engage in activities such as going outside, which alleviates cognitive fatigue caused by the density of AI topics that often yield numerous questions rather than clear answers. Moreover, embracing uncertainty is crucial; accepting that not all developments in AI can be predicted fosters adaptability and comfort in the face of rapid technological changes.

5. Why No One Can Fully Keep Up With the Unpredictability of Machine Learning Models:

In the realm of technology, particularly concerning machine learning models, the notion of being "on top" of developments is misleading. These models inherently exhibit unpredictability due to their complex nature, which even the programmers who design them do not fully comprehend. This uncertainty leads to behaviors that can be unforeseen, indicating that everyone involved,

including experts and developers, is navigating these advancements without complete understanding. Consequently, individuals should not feel pressured to keep pace with this evolving technology, as even the most knowledgeable actors are adapting along the way.

6. Seeing Through AI Hype and Fear-Mongering with Healthy Skepticism:

Don't believe all the marketing hype or sci-fi doomsday scenario fear-mongering. It will only stress you out. Practice a healthy dose of skepticism instead. If someone tries to sell you something they're doing it because it benefits them first and foremost. They probably aren't being entirely genuine. And if someone attempts to scare you chances, they aren't doing so for honest reasons. AI has gotten very powerful, but it can't take over a world it can't be aware exists. Seeing through all this sensationalism will defuse some of the tension and ease any unwarranted sense of urgency.

7. Reframing AI Perception Through Critical Reflection on Human Motivations and Social Context:

The author of the book promotes an experimental method to comprehending artificial intelligence (AI), claiming that individual interaction with technology may boost intellectual confidence and empowerment. The author makes the case that human motives are more to blame for the unease around AI than the technology itself, and she calls for consideration of the socioeconomic structures and cultural norms that support unfavourable opinions of the technology. It is hypothesized that technology might be abused since it reflects human shortcomings. Additionally, people can decide to put their personal life ahead of worrying about technical developments and stop caring about AI issues. The message as a whole promotes a critical analysis of human behavior and how it affects how AI is perceived.

This is the overarching concept that unites all of these suggestions. Naturally, the current phase of AI growth is extremely unstable and unclear. It will ultimately be followed by a more stable period of consolidation, during which the technology will become more subservient to our desires and our fundamental knowledge of AI will become more established and well-organized. Every technological innovation is first disconcerting. Every time one has occurred, we have continued to do what we do best: adapt. AI is unlike anything that has ever been, and at times it might feel boundless and uncontainable. Sometimes the notion is exhausting. However, until we select where to place AI, it cannot move.

4. LITERATURE REVIEW

The integration of Artificial Intelligence (AI) into workplaces is transforming organizational operations and employee experiences across sectors. While AI significantly enhances productivity and reduces routine workload, its implementation also raises critical concerns related to job security, stress, and interpersonal dynamics within the workplace. A study by Adupa Prathiksha and Shashank Kurimilla (2025) examined these effects using survey data from 500 employees in healthcare, technology, manufacturing, and finance, along with interviews

October
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Vol - 1
Issue - 4

from 50 managers and employees. The results indicate notable productivity gains (78%), yet they also reveal substantial challenges, including job insecurity (68%) and weakened workplace relationships (50%). Thematic analysis further highlights ethical implementation, adequate training, and concerns about digital surveillance as key moderating factors influencing employee well-being. The study provides evidence-based recommendations to help organizations integrate AI responsibly, ensuring a balanced approach that maximizes technological benefits while safeguarding employees' psychological and professional well-being.

1.   Gabriele Giorgi, et al., (2022) This Special Issue provides new insights into the challenges and opportunities associated with new workplace paradigms and business transformations. Information and communication technologies (ICT) and workplace innovations have permanently modified the structural and social aspects of organizations. In addition, due to COVID-19, the trends of the future of work have undergone strong and irreversible acceleration, with consequences in terms of new hierarchical forms, the management of tangible and intangible resources, and the use of technologies as an essential element of the workplace. All these features, in turn, pose challenges and risks for the protection of employees' wellbeing. Indeed, the available data underline the need to rethink management models in order to adapt human resources management (HRM) and occupational health and safety (OSH) practices to the characteristics of the hybrid workplace. The manuscripts included in this Special Issue shed light on the worker–workplace innovations relationship, providing useful insights into occupational health promotion.

The use of technologies in the workplace can lead to more blurred boundaries between work and personal activities. The article by Song et al. investigated cyberloafing behaviors using a sample of 335 Indian employees. The results show that the observation of cyberloafing is positively associated with perceived norms and cyberloafing behaviors. In addition, perceived norms partially mediate the relationship between observability and employees' cyberloafing, while the perceived certainty and severity of sanctions moderate the effect of observability on employees' cyberloafing, as well as the mediating effect of perceived norms.

The use of ICT can have a significant impact on individuals' wellbeing, both in work and educational contexts. The research by González-López et al. explored the effects of forced digitalization and technostress dimensions on a sample of 337 students, using structural equation modeling based on partial least squares (SEM-PLS). The results show that technostress has negative consequences at the individual, group, and professional levels. Furthermore, the research analyzed archetypes of user behaviors.

Technology can also modify communication patterns, thanks to the use of smartphones and online platforms. Moving onto the topic of instant messaging (IM), Jiang et al. used the COR

October
December 25

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Vol - 1
Issue - 4

theory to investigate the relationship between IM and psychological withdrawal, and the role of work engagement as a mediator and self-control as a moderator, using the experience sampling method (ESM). The results show that IM played a pivotal role in building social relationships, and that IM demands should not only be considered as a form of distraction.

One of the crucial factors in analyzing the impact of ICT in the workplace is the degree of acceptance, as highlighted by the adoption and use literature. The study by Molino et al. investigated the antecedents (resilience, goal orientation, and opportunities for information and training) and outcomes (work engagement) of technology acceptance in a sample of white- and blue-collar workers, in a total of 598 subjects. The results show that all the indirect effects are significant and highlight the importance of adequate organizational trainings.

2. Cheng, B., Lin, H., & Kong, Y. (2023) In the context of the growing adoption of artificial intelligence (AI) within organizations, this study investigates how employees respond to such changes in their work environment. Utilizing the transactional theory of stress and coping, the research examines how organizational AI adoption influences employees' promotion- and prevention-focused job crafting. The study is built on data collected from a three-wave time-lagged survey involving 332 employees from eight companies in India. Findings reveal that the impact of AI adoption on employees is contingent upon their locus of control. Specifically, employees with an internal locus of control tend to perceive AI adoption as a challenge, prompting them to engage in promotion-focused job crafting behaviors. In contrast, employees with an external locus of control view AI adoption as a hindrance, leading to prevention-focused job crafting behaviors. These insights highlight the complex dynamics between technology adoption in organizations and employee behavior, offering significant theoretical contributions as well as practical implications for management practices.

3. Sarah Bankins, et al., (2023) The article explores the growing integration of artificial intelligence (AI) technologies, particularly generative AI tools, within organizations and emphasizes the need to understand their impact on employees' experiences and job design. The discourse on AI in the workplace remains polarized: supporters advocate for its potential to enhance efficiency and productivity, while critics express concerns over its negative effects on human workers. To clarify this issue, the article reviews empirical research on the repercussions of AI use at work, structured around five themes within a multilevel framework. These themes include:

1. Human–AI collaboration: Examining how human workers and AI systems can cooperate effectively.

2. Perceptions of algorithmic and human capabilities: Analysing how workers view the competencies of AI compared to their own abilities.

October
December 25

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Vol - 1
Issue - 4

3. Worker attitudes toward AI: Investigating the sentiments that employees harbour regarding the adoption of AI technologies.

4. AI as a control mechanism in algorithmic management: Understanding the role of AI in the oversight of platform-based employment, affecting how work is managed and regulated.

5. Labor market implications of AI use: Considering how the rise of AI might influence job availability and workforce dynamics.

The review not only sheds light on each theme but also suggests five avenues for future research. Additionally, it offers practical recommendations for organizational leaders to successfully implement AI technologies while ensuring the well-being of employees is protected.

4. Qingqi Meng, et al., (2025) The rapid progress in artificial intelligence (AI) has established it as a new partner in the workplace. However, this partnership may lead to reduced communication with human colleagues, resulting in feelings of loneliness and diminished emotional resources, which can foster counterproductive work behavior (CWB). Based on the conservation of resources (COR) theory, this study posits that collaboration with AI could heighten CWB through increased loneliness and emotional fatigue. The research also examines the mitigating role of leader emotional support on these effects. To explore these hypotheses, a 2×2 vignette experiment involving 167 participants was conducted. Findings indicate that collaboration with AI significantly increases feelings of loneliness among employees. This loneliness contributes to greater emotional fatigue, ultimately resulting in escalated CWB. Conversely, leader emotional supporta form of care and encouragement from supervisorsplays a crucial role in alleviating loneliness.

This study enriches the existing literature on the dynamics of employee–AI collaboration and CWB, while also broadening the application of COR theory in understanding workplace interactions. It presents practical implications for managers, emphasizing the need to consider the effects of AI collaboration on interpersonal relationships and to proactively address the emotional aspects of their employees' experiences.

4.1 Positive Impacts of AI Adoption.
Reduction of routine workload: AI automates repetitive and mundane tasks, allowing employees to focus on more meaningful and creative work.
Enhanced efficiency and productivity: AI tools assist in data analysis, forecasting, and decision-making, which improve organizational performance.
Opportunities for professional growth: AI encourages employees to acquire new skills, fostering career advancement and engagement.

October December 25

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Vol - 1
Issue - 4

4.2 Negative Impacts of AI Adoption

Job insecurity: Employees may fear redundancy as AI replaces human functions.

Technostress: Continuous exposure to digital tools can lead to fatigue, information overload, and decreased well-being.

Increased monitoring: AI-driven surveillance systems may create stress and feelings of reduced autonomy.

Mental health concerns: Anxiety, depression, and burnout may arise from constant pressure to adapt to technological changes.

4.3 Theoretical Frameworks

- **Job Demands-Resources (JD-R) Model**: Explains how job demands (AI-driven changes, workload) and resources (training, support) influence employee stress and satisfaction.
- **Technology Acceptance Model (TAM)**: Highlights the role of perceived usefulness and ease of use in shaping employees' attitudes toward AI
- **Sociotechnical Systems Theory**: Suggests that successful AI adoption requires balancing technological systems with human and organizational needs.

5. RESEARCH METHODOLOGY

An online survey targeting service-sector employees in India was conducted using a professional research platform. The focus on this sector stemmed from its rapid growth and the integration of AI-driven tools. Participants came from various job roles, including supermarket staff, delivery personnel, marketing employees, restaurant workers, and customer service staff. Out of 600 distributed questionnaires, 549 valid responses were obtained, resulting in a high response rate of 91.5%.

October December 25

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Vol - 1
Issue - 4

Among the respondents, there were 228 males (41.5%) and 321 females (58.5%), indicating a higher female representation. The participants were nearly evenly split by residential backgrounds, with 274 (49.9%) from urban areas and 275 (50.1%) from rural areas. Marital status revealed that 254 participants were married (46.3%), 276 were single (50.3%), and 19 were divorced (3.4%). In terms of family structure, 310 participants reported having no children (56.5%), while 239 participants had children (43.5%).

Educational qualifications among the respondents showed that 53.7% (295 individuals) had a college diploma or lower, whereas 46.3% (254 individuals) held a bachelor's degree or higher. The monthly income distribution indicated that 52.8% of participants earned below ₹20,000, 26.1% earned between ₹20,000 and ₹40,000, and 21.1% earned between ₹40,001 and ₹80,000. The average age of the participants was 29.4 years, with a standard deviation of ± 8.5 years. Additionally, all respondents provided informed consent prior to participation in the study.

5.1 Population and Sample
Target industries: IT, healthcare, banking, and manufacturing (where AI integration is significant).
Sample size: Approximately 600 employees across diverse job roles.
Sampling technique: Stratified random sampling to ensure representation across sectors.

5.2 Data Collection Tools
Questionnaires: Standardized scales to measure stress, job satisfaction, and mental health (e.g., Perceived Stress Scale, Job Satisfaction Survey).

5.3 Variables
Independent variable: Level of AI adoption.
Dependent variables: Employee stress, job satisfaction, and mental health outcomes.
Moderating variables: Training, organizational support, employee adaptability.

5.4 Data Analysis (Planned)
Quantitative: Descriptive statistics, correlation, regression, and Structural Equation Modeling (SEM).
Qualitative: Thematic analysis of interview data.

Stress reduction and efficiency enhancement: research on social support:
Social support can be defined from subjective and objective viewpoints. Subjectively, it is information that helps individuals feel cared for and valued, while objectively, it refers to the actual supportive relationships and interactions individuals perceive. It encompasses both material and emotional support and is categorized into formal support from laws and institutions,

and informal support from personal relationships like family and friends. Research identifies three dimensions of social support: perceived, actual, and online support. Actual support involves tangible assistance, whereas online support pertains to emotional or informational exchanges through digital platforms. Perceived support is an individual's subjective assessment of the support received, which is crucial during stress as it can mitigate negative psychological impacts and enhance emotional well-being and resilience. Studies across various professions in India, including healthcare workers and laborers, indicate that higher social support correlates with reduced negative emotions like stress, anxiety, and burnout, as it bolsters self-efficacy and reinforces the perception of being valued at work. In collectivist cultures like India, social support plays a more significant role due to the importance placed on community and family ties, making it an essential protective factor.

The document proposes a hypothesis that social support moderates the relationship between AI-related workplace anxiety and negative emotions among Indian service industry workers.

6. SIGNIFICANCE OF THE STUDY

For organizations: Provides insights into managing AI adoption without compromising employee well-being.

For policymakers: Offers evidence to support regulations on ethical AI integration and labor protections.

For academia: Contributes to emerging literature on the intersection of AI, mental health, and workplace psychology.

Why is this possible Shaping the Future of the Augmented Workforce by Generative AI with Balancing of employee Stress and Metal health

The concept of an augmented workforce, where humans collaborate with advanced technologies such as AI and robotics, is rapidly transforming the future of work. As organizations embrace the potential of AI, generative AI, in particular, holds tremendous promise in shaping the future of the augmented workforce.
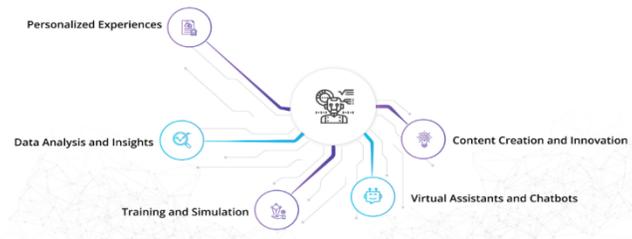
Generative AI refers to a subset of AI technologies that can generate new and original content, such as text, images, and even entire virtual worlds. Generative AI systems can learn from vast data and create realistic and innovative outputs by leveraging deep learning algorithms. In the context of the augmented workforce, generative AI can revolutionize several aspects:

Workplace Safety and Risk Management

AI technologies contribute to workplace safety by automating hazardous tasks and detecting potential risks. For example, AI-powered sensors and computer vision systems can monitor

environments for safety violations, identify potential hazards, and alert employees to take necessary precautions. This enhances overall workplace safety and mitigates risks for employees.

Measures
Satisfaction with life scale (SWLS)
The document outlines various psychological scales used in a study focused on measuring life satisfaction and stress in the context of artificial intelligence within the Indian service industry. The Life Satisfaction Scale, developed by Diener, comprising 5 items, measures overall life satisfaction using a 5-point Likert scale. In this study, it achieved a high reliability with a Cronbach's α coefficient of 0.884.

The research also implemented a modified version of the Artificial Intelligence Anxiety Scale, which measures "job replacement stress" and "work-related learning stress" across 6 items. Respondents rated these items on the same 5-point Likert scale. This scale reflected a reliable Cronbach's α coefficient of 0.824, indicating moderate workplace stress linked to the fear of job displacement by AI and the pressure of continuous learning.

Additionally, the Depression Anxiety Stress Scale (DASS) was included, featuring 21 items rated on a 4-point scale. It evaluates negative emotional states, with the study reporting an exceptionally high reliability (Cronbach's α = 0.963).

The Perceived Social Support Scale was also utilized, which contains 12 items organized into three support subscales. This scale achieved a Cronbach's α coefficient of 0.952, indicating high internal consistency regarding perceived social support from various sources.

Statistical analyses were performed using SPSS 23.0, utilizing independent sample t-tests and ANOVA to determine demographic differences in life satisfaction. Regression analysis assessed the predictive relationship between AI workplace stress and life satisfaction. Mediation and moderation analyses were conducted using the PROCESS macro, confirming the mediation effect of negative emotions and the moderation of perceived social support. Harman's single-factor test indicated no significant common method bias, as the first factor accounted for only 26.95% of the variance, below the 40% threshold.

Furthermore, the study found that the average AI workplace stress score among service industry employees was 2.75 ± 0.72, with no significant differences across demographic groups, indicating a uniform experience of AI-related workplace stress among employees of varying genders, ages, education levels, income levels, and marital statuses in the Indian service sector. **See Table 1.**

Demographic variable	Group	AI workplace anxiety	t/F value	p-value
Gender	Male	2.74 ± 0.73	-0.375	0.708
	Female	2.75 ± 0.71		
Household Registration	Urban	2.72 ± 0.67	-1.085	0.278
	Rural	2.78 ± 0.75		
Education level	College Diploma and Below	2.81 ± 0.74	0.05	0.962
	Bachelor's Degree and Above	2.81 ± 0.73		
Having children	No	2.74 ± 0.72	-0.097	0.922
	Yes	2.75 ± 0.71		
Marital status	Married	2.72 ± 0.72	0.720	0.487
	Single	2.76 ± 0.71		
	Divorced	2.91 ± 0.64		
Monthly income	<5,000 CNY	2.76 ± 0.71	1.143	0.319
	5,000–10,000 CNY	2.79 ± 0.76		
	>10,000 CNY	2.66 ± 0.59		

Table 1. The differences of life satisfaction of artificial intelligence job anxiety with different demographicvariables.

Basic situation of life satisfaction

The analysis indicates that service industry employees have a moderate overall life satisfaction score of 3.10 ± 0.85, with significant variations across demographic factors. Notably, educational attainment plays a crucial role, as employees with a bachelor's degree or higher report higher life satisfaction compared to those with a college diploma or lower. This suggests that higher education may enhance career prospects, boost confidence, and provide socio-economic stability.

Marital status significantly impacts life satisfaction as well; married individuals express higher satisfaction levels than their unmarried or divorced counterparts, highlighting the benefits

October
December 25

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Vol - 1
Issue - 4

of emotional support and family stability. Furthermore, employees with children experience greater life satisfaction than those without, likely due to increased purpose, stronger familial ties, and enhanced social support. Income level is another significant factor; individuals earning 10,000 CNY or more per month report notably higher satisfaction compared to those with lower earnings, emphasizing the role of financial security and access to resources in fostering positive life evaluations.

However, the study finds that gender and household registration status do not significantly affect life satisfaction within this group of employees. Overall, the results underscore the interrelationship between socio-economic factors, family structure, and educational level in shaping the well-being of service industry employees.

See Table 2.

Demographic variable	Group	Life satisfaction	t/F value	p-value
Gender	Male	3.05 ± 0.89	−0.984	0.325
	Female	3.13 ± 0.82		
Household registration	Urban	3.12 ± 0.85	0.674	0.501
	Rural	3.07 ± 0.86		
Education level	College Diploma and Below	2.99 ± 0.89	−2.901***	0.004
	Bachelor's Degree and Above	3.20 ± 0.81		
Having children	No	2.99 ± 0.80	−3.443**	0.000
	Yes	3.23 ± 0.89		
Marital status	Married①	3.24 ± 0.87	6.664***, ① > ②, ① > ③	0.001
	Single②	2.97 ± 0.81		
	Divorced③	2.98 ± 0.99		
Monthly income	<5000CNY①	2.93 ± 0.86	13.155***, ② > ①, ③ > ①	0.000
	5,000-10000CNY②	3.30 ± 0.77		
	>10000CNY③	3.28 ± 0.84		

* Indicates $p < 0.05$, ** indicates $p < 0.01$, and *** indicates $p < 0.001$. Same below.

Table 2. The differences of life satisfaction of service industry employees with different demographic variables.

The correlation analysis results reveal significant relationships between various factors affecting life satisfaction among service industry employees. Specifically, there is a notable negative correlation between life satisfaction and both AI workplace stress and negative emotions, evidenced by correlation coefficients of $r = −0.170$ for life satisfaction and AI workplace stress, and $r = −0.413$ for life satisfaction and negative emotions ($p < 0.01$). This indicates that as AI-related workplace stress and negative emotional states increase, life satisfaction decreases. On the other hand, life satisfaction shows a strong positive correlation with perceived social support ($r = 0.514$, $p < 0.01$). Employees who feel they receive substantial support from their social networks—such as family, friends, and colleagues—tend to report higher levels of life satisfaction.

October December 25

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Vol – 1
Issue – 4

Furthermore, the analysis underscores that AI workplace stress is positively correlated with negative emotions ($r = 0.369$, $p < 0.01$), suggesting that increased stress due to AI implementation is associated with greater emotional distress in employees. Additionally, there is a negative correlation between AI workplace stress and social support ($r = -0.174$, $p < 0.01$), which implies that employees who perceive lower levels of social support are more likely to experience higher stress related to AI integration in their work environment.

See Table 3.

Variable	M ± SD	①	②	③	④
AI Workplace anxiety ①	2.75 ± 0.72	1			
Negative emotions ②	1.57 ± 0.61	0.369**	1		
Social support ③	3.52 ± 0.84	−0.174**	−0.469**	1	
Social support ④	3.10 ± 0.85	−0.170**	−0.413**	0.514**	1

Table 3. Correlation analysis of major variables.

Correlation and regression analyses were conducted to investigate the impact of various independent variables, including educational level, marital status, having children, monthly income, and AI workplace anxiety on life satisfaction among service industry employees. The focus was particularly on AI workplace anxiety, which was found to have a significant detrimental effect on life satisfaction. In a multiple linear regression model, it was established that monthly income, presence of children, and AI workplace anxiety accounted for 7.2% of the variance in life satisfaction. The results indicated a notable negative correlation, with AI workplace anxiety providing a statistically significant negative prediction of life satisfaction ($t = -3.905$, $p < 0.001$), highlighting the importance of addressing workplace anxiety related to AI in improving employees' overall life satisfaction.

See Table 4.

Independent variable	R	R^2	ΔR^2	β	t	P
Monthly income	0.190	0.036	0.034	0.190	4.523	0.000
AI workplace anxiety	0.249	0.062	0.059	−0.162	−3.905	0.000
Having children	0.269	0.072	0.067	0.103	2.406	0.016

Table 4. Regression analysis of artificial intelligence job anxiety on life satisfaction.

Regression analysis focused on the relationship between artificial intelligence (AI) workplace anxiety and life satisfaction revealed distinct outcomes. The study found that while the direct impact of AI workplace anxiety on life satisfaction was not statistically significant ($p > 0.001$), a significant relationship was identified between AI workplace anxiety and the experience of negative emotions, with a p-value less than 0.001 and an effect size of 0.301. Furthermore, the mediating role of negative emotions in the relationship between AI workplace

anxiety and life satisfaction was confirmed, with an estimated mediating effect of −0.161. The associated 95% confidence interval ranged from −0.219 to −0.107, which does not include zero, indicating a complete mediation effect. Ultimately, the analysis demonstrated a total effect of −0.188, with the mediating influence of negative emotions accounting for an impressive 85.64% of this total effect, thereby highlighting the critical role that negative emotions play in the context of AI job anxiety and overall life satisfaction.

See Table 5.

Pathway	Direct effect	Mediating effect	T	95%CI	p-value
AI workplace anxiety → Life satisfaction	−0.027	—	−0.551	−0.124 ~ 0.070	0.582
AI workplace anxiety → Negative emotions	0.301	—	8.942	0.235 ~ 0.367	0.000
Negative emotions → Life satisfaction	−0.536	—	−9.121	−0.651 ~ −0.420	0.000
AI workplace anxiety → Negative emotions → Life satisfaction	—	−0.161	—	−0.219 ~ −0.107	—

Table 5. Testing the mediating effect of negative emotion.

Testing the mediating effect of negative emotion revealed significant findings regarding the relationship between AI workplace anxiety and social support. The analysis showed that the interaction term between these two variables significantly predicted negative emotions, with a standardized coefficient (β) of -0.098, a t-value of -3.455, and a p-value of less than 0.01. This indicates a statistically significant moderating role of social support in the impact of AI workplace anxiety on negative emotions, emphasizing the importance of social support mechanisms in mitigating the adverse emotional effects associated with AI in the workplace.

See Table 6.

Result variable	Predictor variable	R	R²	F(df)	β	t	LICI	ULCI
Negative emotions		0.581	0.338	39.468 (7)				
	Educational level				−0.071	−1.471	−0.166	0.024
	Marital status				0.094	1.964	0.000	0.189
	Number of children				0.068	1.239	−0.040	0.176
	Monthly income				−0.048	−1.530	−0.109	0.014
	AI workplace anxiety				0.602	5.574***	0.390	0.814
	Social support				−0.039	−0.491	−0.193	0.116
	AI workplace anxiety × Social support				−0.098	−3.455**	−0.154	−0.042
Life satisfaction		0.446	0.199	22.424 (6)				
	Educational level				0.011	0.143	−0.136	0.157
	Marital status				−0.023	−0.318	−0.169	0.122
	Having children				0.155	1.845	−0.010	0.321
	Monthly income				0.113	2.350*	0.018	0.207
	AI workplace anxiety				−0.027	−0.551	−0.124	0.070
	Negative emotions				−0.536	−9.121***	−0.651	−0.420

Table 6. Testing the moderated mediation effect.

7. LIMITATIONS

Despite the valuable insights regarding AI-related workplace stress and employee well-being, the study presents significant limitations. Primarily, it is confined to the service sector, which raises concerns about the generalizability of its findings to other industries such as manufacturing,

healthcare, or IT, where work dynamics, AI utilization, and employee experiences could vary widely.

Moreover, the swift progress of AI technology presents a challenge regarding the long-term relevance of the conclusions drawn. As AI and automation evolve, shifts in employees' stress levels, coping strategies, and organizational approaches may emerge, potentially impacting the relationships identified between AI-induced stress, negative emotions, and overall life satisfaction. Additionally, the study's reliance on self-reported data introduces biases, as respondents might inaccurately evaluate their stress levels or perceptions of social support due to factors like social desirability, memory errors, or individual interpretations. This reliance may compromise the findings' accuracy and reliability. Future research is encouraged to rectify these limitations by encompassing a broader range of industries, employing longitudinal methodologies to track changes in AI effects, and integrating objective measurements of stress and workplace outcomes alongside self-reported data.

DISCUSSION

The survey's findings support the idea that artificial intelligence (AI) is already having an influence on job-related stress levels in this sector by showing that workplace stress due to AI is at a moderate level among Indian service industry employees, with no discernible demographic disparities. These workers also have a somewhat high level of life satisfaction; individuals with higher levels of education, married status, parental status, and income also exhibit higher levels of contentment. This highlights the need for focused interventions to improve life happiness, especially for employees with less education, single or divorced people, and those with lower earnings.

Notably, stress at work has a detrimental effect on life satisfaction; however, this effect is lessened when negative emotions are taken into account as a mediating component. This implies that the unpleasant feelings that emerge from AI-induced stress, including anxiety and sadness, are mostly responsible for its harmful impacts. Three major effects of AI technology in the workplace are identified by the analysis: the creation effect, which raises demand for new skills and jobs but also increases stress due to the pressures of adaptation; the deskilling effect, which restricts skill development and weakens employee bargaining power; and the job substitution effect, where AI replaces low-skill roles.

Additionally, the study highlights how important social support is in mitigating the negative emotional impacts of AI job stress. According to the Conservation of Resources (COR) Theory, social support is a crucial resource that fosters stress resistance. Workers that have significant social support from friends, family, and coworkers are better able to handle the pressures brought on by AI at work. On the other hand, those who have less social support are more susceptible to negative emotional reactions. This is especially true in the collectivist setting of Indian civilization, which emphasizes group support. Overall, this study suggests social support as a major protective barrier against the psychological effects of technological change and experimentally supports the mediation role of negative emotions in the influence of AI job stress on life satisfaction. The results advance our knowledge of the relational and emotional

aspects of workplace stress in the context of developing technology, especially in the Indian service sector.

CONCLUSION, STRATEGIES AND RESEARCH LIMITATIONS

Social support might lessen the rise in negative emotions brought on by AI workplace anxiety, which mainly impacts the life satisfaction of workers in the service sector. In light of this, the service sector might use the following strategies to lessen the detrimental effects of AI technology on workers and enhance their quality of life: To improve employees' job adaptability, first boost employee vocational training by raising educational investments in labor costs and offering job training that is in line with AI technology.

A "complementary" co-employment attitude, marked by peaceful human-machine coexistence, replaces the "displacement" idea of machines replacing humans. The negative feelings connected to "pseudo-issues" of AI, which are frequently stoked by knowledge asymmetry and media sensationalism, can be lessened by good communication and education. This strategy can lessen workers' concerns about artificial intelligence. Second, provide mental health training to improve staff members' abilities to control their emotions and handle stress, allowing them to maintain a positive mental and professional state.

Plan team-building exercises and employee activities while also enhancing managerial concern and support for staff. By improving employees' views of social support within the company, these initiatives hope to boost their positive self-concept and feeling of self-efficacy. bolster social security system development. Companies can also give workers more chances to engage with family and the community, such as by planning family day events, in order to meet their needs regarding retirement, healthcare, and unemployment. This will improve workers' perceptions of social support from sources outside the company. This study admits significant limitations, such as the possibility of recollection or reporting bias in participant replies and the small sample size, which calls for care when extrapolating the findings.

8. CONCLUSION

AI adoption in workplaces functions as a double-edged sword, offering substantial operational advantages while simultaneously generating psychological challenges for employees. On one side, AI streamlines tasks, improves accuracy, accelerates decision-making, and reduces the burden of repetitive work. These improvements can elevate overall productivity and free employees to focus on more meaningful, creative, or strategic responsibilities. However, the same technological advancements also introduce concerns such as job insecurity, increased pressure to adapt to new tools, fear of skill obsolescence, and heightened performance monitoring. These factors may contribute to anxiety, stress, and reduced job satisfaction if not managed effectively.

Recognizing this dual impact is crucial for organizations that seek to implement AI responsibly. A balanced approach requires understanding not only the technical and economic benefits of AI but also its psychological and social implications. When organizations prioritize employee well-beingthrough transparent communication, reskilling initiatives, and supportive

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workplace policiesthey can mitigate negative outcomes and foster a more confident, future-ready workforce.

This study therefore aims to offer a comprehensive, human-centric perspective on AI integration. By examining both the opportunities and the emotional challenges associated with AI adoption, the research supports strategies that help organizations embrace technological progress while safeguarding the mental and emotional health of their employees.

REFERENCE

1. Byung-Jik Kim and Byung-Jik Kim, (2024) &How artificial intelligence-induced job insecurityshapes knowledge dynamics: the mitigating role of artificial intelligence self-efficacy&Volume 9,Issue 4, Journal of Innovation & Knowledge, https://doi.org/10.1016/j.jik.2024.100590.

2. Felicetti, Cimino, Mazzoleni and Ammirato, 2024 &Artificial intelligence and projectmanagement: An empirical investigation on the appropriation of generativeChatbots by project managers& Journal of Innovation &Knowledge, 9 (3), Article 100545.

3. Nathan Anecone, (2023) &AI Fatigue: Coping with Rapid Technological Change&https://medium.com/@nanecone.

4. https://www.cogentinfo.com/resources/adapting-to-the-ai-revolution.

5. Adupa Prathiksha and Shashank kurimilla (2025) "Artificial Intelligence And Employee Well-Being:Opportunities, Challenges, And Organizational Strategies", International Journal of Creative Research Thoughts(IJCRT) www.ijcrt.org, IJCRT2501335, Volume 13, Issue 1, ISSN: 2320-2882, pp-c898-c906.

6. Gabriele Giorgi, et al., (2022) "The Dark Side and the Light Side of Technology-Related Stress and StressRelated to Workplace Innovations: From Artificial Intelligence to Business Transformations", PMCID:PMC8834757 PMID: 35162271, Int J Environ Res Public Health. 23;19(3):1248.doi: 10.3390/ijerph19031248.

7. Cheng, B., Lin, H., & Kong, Y. (2023). Challenge or hindrance? How and when organizational artificialintelligence adoption influences employee job crafting. Journal of Business Research, 164, Article113987. https://doi.org/10.1016/j.jbusres.2023.113987

8. Qingqi Meng , Tung-Ju Wu, Wenyan Duan and Shijia Li (2025) "Effects of Employee–Artificial Intelligence(AI) Collaboration on Counterproductive Work Behaviors (CWBs): Leader Emotional Support as aModerator",doi: 10.3390/bs15050696, https://pmc.ncbi.nlm.nih.gov/articles/PMC12108590/#ref-list1.

9. Sarah Bankins , Anna Carmella Ocampo, Mauricio Marrone, Simon Lloyd D. Restubog and Sang Eun Woo,(2023) "A multilevel review of artificial intelligence in organizations: Implications for organizational behaviorresearch and practice",https://onlinelibrary.wiley.com/doi/10.1002/job.2735.

10. Schwarzer, R., and Knoll, N. (2007). Functional roles of social support within the stress and coping process: atheoretical and empirical overview. Int. J. Psychol. 42, 242–252. doi: 10.1080/00207590701396641.

11. Li, X. H., Zhang, T. T., and Li, T. S. (2024). The relationship between social support and digital addiction incollege students: a meta-analysis. Library Inform. Serv. 2024, 129–139. doi: 10.13266/j.issn.0252-116.2024.16.011.

12. Zimet, G. D., Dahlem, N. W., Zimet, S. G., and Farley, G. K. (1988). The multidimensional scale of perceivedsocial support. J. Pers. Assess. 52, 30–41. doi: 10.1207/s15327752jpa5201.