AI at Work: Effects on Work-Life Balance.

Abstract

Artificial Intelligence (AI) is now part of daily work in many companies. It helps finish tasks faster, cuts costs, and makes work run more smoothly. But it has a side effect: many employees find it harder to balance their work and personal life. They worry about losing their jobs, feel tired from continuous use of technology, feel stressed to keep learning new skills, and find it hard to switch off from work even at home.

This paper studies how AI tools, such as automated task systems, digital monitoring, online work platforms, and flexible work options, affect employees' daily routines, stress, mental health, and job satisfaction. We surveyed 100 employees working in IT and banking. Each person answered questions on a simple 1-to-5 rating scale to understand how AI affects their sense of job security and how well they manage their work and personal life.

The results show that employees feel a moderate to high level of job fear, with an average score of 3.07 (SD = 1.12). Work-life balance, however, scored low, at 2.35 (SD = 1.25). A statistical test (Pearson correlation) showed a strong negative link between the two ($r = -0.874$, $p < 0.001$).

A simple linear regression was also used to analyses the effect of job insecurity on work-life balance. The regression equation was $y = 5.34 - 0.975x$, which reveals that for every 1-point increase in job insecurity, work-life balance decreases by about 0.975 points. Job insecurity explained 76.4% of the variance in work-life balance ($R^2 = 0.764$, $p < 0.001$). It is clearly understandable that the employees are more worriedof AIreplacement, and it will surelyworsentheir work-life balance. Based on this, we reject the idea that there is no link between AI-driven automation and work-life balance.

The findings suggest that while AI removes boring and repetitive work, it also brings a lot of challenges such as fear of losing their jobs and a sense of being monitored continuously. Companies can ease this by offering hands-on AI training, having open conversations about upcoming changes, setting clear rules against work contact after hours, checking in on employee well-being regularly, and rewarding balance, not just output. When technology and genuine care for people go together, workplaces can be both efficient and happy.

Keywords

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Artificial Intelligence, Work Automation, Work-Life Balance, Employee Well-Being, Job Flexibility, Task Automation, Workplace Monitoring, Skill Development, AI Adoption

1. Introduction

Artificial Intelligence is changing the way companies work today. It affects what tasks people do, how the work gets done, and how employees spend their day. AI takes away the boring, repetitive tasks and helps people finish work faster. But it also brings some real worries. People wonder if their jobs are still safe. Many feel like they are being watched all the time. Others feel they must keep learning new skills just to keep up.

This paper looks at how AI is affecting the balance between work and personal life. The results are mixed. AI can make jobs more flexible and help people be more productive. But it can also bring stress, uncertainty, and pressure to keep learning new things. This effect is not the same for every worker. It depends on the industry and the type of job a person does.

The paper also looks at how employees are adjusting to these changes, how their jobs are changing because of AI, and what companies can do to make this transition easier. Using past research, survey data, and real workplace examples, the paper shows both the sides of AI at work.

Finally, the paper gives some simple, practical ideas to help companies use AI in a way that helps both the business and the people who work there.

2. Significance of the Study

AI is now part of daily work in almost every kind of company. IT firms, banks, hospitals, schools, and offices are all using it. But most discussion about AI is only about saving money and working faster. Very few studies were conducted on how employees feel about it.

This study is important because it puts employee well-being first. It uses real numbers, not just opinions. It shows how job worries caused by AI are connected to work-life imbalance. This can help in simple ways.

- Company leaders can make AI rules that care about people, not just profit.
- HR teams can build training and support that actually helps reduce stress.

UNDER PEER REVIEW IN IJAR

- Employees can feel heard, because their worries are backed by real data.
- Future researchers can use this work to do bigger, deeper studies.

3. Objectives of the Study

a) To study the relationship between AI-driven work automation and employees' work-life balance.

b) To understand how AI tools, such as automatic task systems, digital monitoring, and online work platforms, affect employees' stress levels, flexibility, and mental well-being.

4. Review of Literature

Zaki and Fahad (2026) studied 550 IT employees in the Delhi-NCR region of India to see how using AI at work affects burnout, workload, work-life balance, and job satisfaction. They found that using AI actually lowered employees' burnout and workload, and improved their work-life balance. A better work-life balance, in turn, was the strongest reason employees felt satisfied with their jobs. This shows that when AI is introduced in a supportive way, it can genuinely help employees manage their work and personal life better.

Mahmood, Mohd Noh, and Izni (2026) reviewed how AI tools, such as virtual assistants and smart scheduling systems, affect the balance between work and personal life. They found that AI can help employees manage their time better, but it can also add new pressure, blur the line between work and home, and add to burnout if not managed carefully. They suggested that organisations need a clear plan for introducing AI in a way that helps, rather than harms, employees' well-being.

Begum and Mishra (2025) studied how AI tools can lower stress at work and improve the balance between work and personal life. They found that AI reduces repeated, boring tasks and helps people manage time better. But they also warned about privacy worries and fear of job loss, and said companies need to introduce AI carefully and responsibly.

The BrijDisa Centre for Data Science and Artificial Intelligence at IIM Ahmedabad, with the Wadhwani Foundation (2024), surveyed more than 550 white-collar employees across India and interviewed business leaders about how AI is affecting jobs. They found that 60% of employees feared losing their jobs to AI, while 53% hoped new jobs would be created instead. This fear was highest among early- and mid-career employees and lowest among senior leaders. At the same time, most employees who use AI reported that it

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improved their work performance, showing that AI brings both worry and benefit at the same time.

Jin (2024) studied how employees' opinions about AI affect their emotional well-being. This research found a strong link between how people feel about AI, their stress at work, and their mood through the day. It showed that a person's mindset plays a big role in how AI affects them.

Ribeiro, Pires da Silva, and Rino Vieira (2024) studied how remote-work technology affects the line between work and personal life. Their results showed that being constantly reachable blurs this line, but having a supportive manager reduces the stress caused by technology. Good leadership, they found, protects employees from tech-related stress.

Rademaker, Klingenberg, and Süß (2023) looked at how AI-related tech stress affects people's emotions and quality of life. They found that feeling overloaded by digital tools leads to negative feelings and lowers overall life quality. They stressed the need to manage this kind of stress in workplaces that use AI.

5. Research Methodology

5.1 Research Design

This study uses a simple, quantitative approach. We wanted to measure how strongly AI automation and work-life balance are connected, so we used a statistical test to check this relationship rather than relying only on opinions.

5.2 Population of the Study

The people studied are employees who work in organisations that use AI tools, digital systems, or automated technology as part of their everyday work.

5.3 Sample and Sampling Technique

We selected 100 employees using simple random sampling. The respondents are from IT and Banking sectors

5.4 Variables of the Study

Independent variable: AI-driven work automation (use of AI tools, digital monitoring, task automation, and virtual platforms).

Dependent variable: Employee work-life balance (ability to manage work and personal life, stress level, flexibility, and mental well-being).

UNDER PEER REVIEW IN IJAR

5.5 Data Collection Method

We collected data directly from employees using a structured questionnaire. Each statement in the questionnaire was rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

5.6 Tools Used for Data Analysis

- Mean and Standard Deviation, to summarise the average responses and how spread out they were.
- Correlation Analysis, to check how strongly two things move together.
- Simple linear regression

5.7 Statistical Tool

We used the Pearson Correlation Coefficient to test our hypothesis. This number, written as "r", tells us how closely two things are related:

- Close to +1 → strong positive relationship
- Close to -1 → strong negative relationship
- Close to 0 → little or no relationship

5.8 Hypotheses of the Study

H0 (Null Hypothesis): There is no meaningful relationship between AI-driven work automation and employees' work-life balance.

H1 (Alternative Hypothesis): There is a meaningful relationship between AI-driven work automation and employees' work-life balance.

6. Limitations of the Study

First, the data was collected only once, at a single point in time. This means we can say the two things are related, but we cannot say for certain that one causes the other.

Second, all answers were self-reported by the 100 participants on a rating scale. People sometimes answer in a way they think is expected rather than fully honest, and they may not remember their experiences perfectly.

Third, all respondents were from India, and the number of people from each sector (IT, banking, education, healthcare, business) was not equal. This makes it hard to apply the findings to every industry or every country.

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Fourth, we treated the 5-point rating scale as if it gave exact numeric values, which is common in research but not something every researcher agrees with.

Fifth, because only the average scores for each sector were available and not each employee's individual answers, this study could not run a sector-by-sector comparison test (such as ANOVA). Future research should collect and keep the full, individual-level data so that this kind of comparison across sectors becomes possible.

7. Findings: Data Analysis and Interpretation

Table 1: Descriptive Statistics

Variable	Mean	SD	Interpretation
Job insecurity	3.07	1.12	Moderate to high
Work-life balance	2.35	1.25	Low

Table 2: Correlation Between Job Insecurity and Work-Life Balance

Variable	Job insecurity	Work-life balance
Job insecurity	1.000	-0.874
Work-life balance	-0.874	1.000
Significance	$p < 0.001$	

Table 3Regression Results

Item	Value
Regression Equation	$y = 5.34 - 0.975x$
Slope (b)	-0.975
Intercept (a)	5.34
R^2	0.764 (76.4%)
Significance	$p < 0.001$

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8.Hypothesis Testing Result

The Pearson correlation test gave a value of $r = -0.874$, with $p < 0.001$. Since this p-value is much smaller than the usual cut-off of 0.05, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1).

This means there is a real, meaningful relationship between AI-driven work automation and employees' work-life balance. The very strong negative value (-0.874) shows that when employees feel more insecure about their jobs because of AI, their work-life balance declines gradually.

9. Discussion of Findings

The results show a very strong negative relationship ($r = -0.874$, $p < 0.001$) between AI-related job insecurity and work-life balance. In simple words, the more worried employees are about AI taking over their jobs, the harder it becomes for them to balance work and personal life.

This matches the earlier studies that have already found the constant digital monitoring and continuous interaction with technology increasesboth stress and work pressure (Rademaker et al., 2023; Jin, 2024).

These findings show that organisations need to pay closer attention to how employees feel about AI. Clear communication, proper training, and reassurance about job security can go a long way in reducing fear and building a healthier workplace.

10. Suggestions

1. Offer hands-on AI training so employees feel confident using AI tools and worry less about their job security.
2. Hold regular, honest conversations that explain how AI is meant to support employees, not replace them.
3. Set clear rules that limit work messages and calls after office hours, so employees can truly switch off.
4. Keep track of work-life balance by monitoring overtime hours and running short well-being surveys.
5. Update performance reviews to value a healthy work-life balance and a willingness to adapt to AI, not just output or productivity.

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11. Conclusion

AI driven automation brings real benefits. It helps both companies and employees. Work gets done faster. Efficiency improves. In some cases, smart and flexible tools even improve well-being.

But AI also brings real problems. Employees worry about losing their jobs. Many feel tired from using technology all day. Some struggle to separate work time from personal time. These are not small issues. They should not be ignored while companies adopt AI.

The workplaces that succeed in the future will be that one which balances smart technology with real care for people. This means having supportive leaders. It means using AI fairly and openly. It means having policies that truly value employee well-being. When AI is used thoughtfully, it can improve how work gets done. At the same time, it does not have to take away from employees' personal lives. Progress and human well-being can grow together.

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UNDER PEER REVIEW IN IJAR

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