



IMPACT OF AI TOOLS ON EMPLOYEE STRESS AND WORK EFFICIENCY

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ABSTRACT

Artificial Intelligence (AI) tools are increasingly being adopted in organizations to improve productivity and automate routine tasks. This study examines the impact of AI tools on employee stress and work efficiency among IT employees. The main objective of the study is to analyze whether the use of AI technologies reduces workload and enhances employee performance or creates additional stress due to technological changes and job insecurity.

The research is based on primary data collected through a structured questionnaire distributed to employees working in IT companies. A quantitative research approach was used, and responses were analyzed to understand the relationship between AI tool usage, employee stress levels, and work efficiency. The study considers factors such as workload management, task completion speed, learning adaptability, and employee perceptions toward AI tools.

The findings indicate that AI tools significantly improve work efficiency by reducing manual effort, increasing accuracy, and enabling faster task completion. However, the study also reveals that some employees experience moderate stress due to the need to continuously learn new technologies and concerns about job stability. Overall, the results suggest that while AI tools contribute positively to organizational productivity, proper training and support are essential to minimize employee stress and ensure effective adoption of AI technologies in the workplace.

KEYWORDS: Artificial Intelligence, Employee Stress, Work Efficiency, AI Tools, Workplace Productivity.

INTRIDUCTION

Artificial Intelligence (AI) has become an important technological advancement that is transforming modern workplaces. Many organizations are increasingly adopting AI tools to automate routine tasks, improve productivity, and enhance decision-making processes. In the IT sector especially, AI technologies such as machine learning systems, chatbots, automation software, and data analysis tools are widely used to support employees in performing their tasks more efficiently. As a result, AI has significantly influenced the way employees work and interact with technology in their daily activities.

The implementation of AI tools in organizations offers several benefits, including faster task completion, improved accuracy, and reduced manual workload. These tools help employees handle large volumes of data, perform repetitive tasks automatically, and focus more on strategic and creative activities. Consequently, the use of AI technologies can improve overall work efficiency and organizational productivity.

However, the introduction of AI tools also creates certain challenges for employees. Rapid technological changes require employees to continuously learn new skills and adapt to advanced systems. This adaptation process may lead to increased pressure, anxiety, and stress among employees. In some cases, employees may also feel concerned about job security due to the growing use of automation and artificial intelligence in the workplace.

Employee stress is an important factor that can influence both individual well-being and organizational performance. High levels of stress can reduce productivity, affect job satisfaction, and impact employee motivation. At the same time, if AI tools are implemented effectively with proper training and support, they can reduce workload and help employees perform their tasks more efficiently.

Therefore, it is important to understand the overall impact of AI tools on employee stress and work efficiency. This study aims to examine how the use of AI technologies influences employees' stress levels and their ability to perform tasks efficiently. The findings of this study will help organizations understand the benefits and challenges associated with AI adoption and assist in developing strategies to ensure a balanced and productive work environment.

RESEARCH OBJECTIVES

- To examine the use of AI tools among employees in the workplace.
- To analyze the impact of AI tools on employee stress levels.
- To evaluate the influence of AI tools on employee work efficiency.
- To identify the relationship between AI tool usage and employee performance.



- To suggest measures for reducing employee stress while using AI tools in the workplace.

LIMITATIONS OF THE STUDY

- The study is based on responses collected through questionnaires, and the answers may be influenced by the personal opinions of the respondents.
- Due to time constraints, the study covers only a short period and may not reflect long-term effects of AI tools on employees.
- The study mainly focuses on employee stress and work efficiency, while other factors such as job satisfaction, organizational culture, and management support are not considered.
- The sample size of the respondents is limited, which may affect the overall accuracy of the findings.

SCOPE OF THE STUDY

The study focuses on analyzing the impact of Artificial Intelligence (AI) tools on employee stress and work efficiency in organizational settings. It examines how the adoption of AI tools influences employees' stress levels, job performance, and overall efficiency at work.

This study covers employees working in organizations where AI tools are actively used in daily work activities, particularly in the IT sector. It includes an assessment of employees' awareness, usage, and perceptions of AI tools, along with the challenges faced while adapting to AI-based systems.

The scope of the study is limited to a selected group of employees and a specific geographical area. The findings are based on the data collected during the study period and aim to provide insights that can help organizations improve work efficiency while minimizing employee stress.

STATEMENT OF PROBLEM

The rapid adoption of Artificial Intelligence (AI) tools in organizations has significantly changed the way employees perform their work. While AI tools are introduced to improve work efficiency, productivity, and accuracy, they also require employees to continuously adapt to new technologies and work processes. This situation may create stress due to increased performance pressure, fear of job displacement, and lack of adequate technical skills.

In many organizations, AI tools are implemented without sufficient training or support for employees. As a result, instead of reducing workload, AI tools may increase mental strain and negatively affect employee well-being. At the same time, the actual impact of AI tools on work efficiency remains unclear, as stress and adaptation issues may influence employee performance.

REVIEW OF LITERATURE

1. Begum, S. & Mishra, R. (2025)

Title: The Role of Artificial Intelligence in Reducing

Workplace Stress and Enhancing Work-Life Balance This study examined how AI tools influence workplace stress and efficiency among employees in Indian IT and service sectors. The authors found that AI automation reduces repetitive and time-consuming tasks, thereby improving productivity and reducing workload stress. However, they also noted that fear of job displacement and lack of technical skills can increase psychological stress. The study concludes that proper training and transparent communication are essential to maximize efficiency while minimizing stress.

2. Sinha, G. & Sharma, S. (2025)

Title: Artificial Intelligence and Employee Perception of Workplace Stress

This research focused on how employees perceive AI integration in Indian organizations. The findings indicate that employees who view AI as supportive technology experience improved work efficiency and lower stress levels. In contrast, employees who perceive AI as a threat to job security report higher stress and anxiety. The study emphasizes the importance of positive organizational culture and digital training programs.

3. Reddy, P. & Kumar, N. (2024)

Title: AI Adoption and Its Impact on Employee Productivity in Indian IT Companies

The authors analyzed AI implementation in major Indian IT firms and found that AI tools significantly enhance work efficiency by speeding up data processing and decision-making tasks. While productivity improved, some employees experienced initial stress due to adaptation challenges. The study suggests gradual implementation and employee support systems to balance stress and efficiency.

4. Gupta, R. & Singh, A. (2024)

Title: Technostress and Artificial Intelligence in Indian Workplaces

This study explored technostress caused by AI usage in corporate offices. The authors found that constant monitoring, algorithmic management, and performance tracking increase stress levels among employees.

However, AI also improved task accuracy and reduced manual errors. The research concludes that AI must be used ethically to



prevent excessive stress.

5. Iyer, M. & Bansal, T. (2024)

Title: AI Tools and Work Efficiency: Evidence from Indian Banking Sector

The study investigated AI-based customer service systems and automation tools in Indian banks. Results show that AI significantly reduced workload pressure and increased service speed. Employees reported improved efficiency but required continuous skill upgrading to remain competitive. Training programs were recommended to reduce stress.

RESEARCH METHODOLOGY

This study adopts a descriptive research design to analyze the impact of AI tools on employee stress and work efficiency. The research is mainly based on primary data collected from employees working in IT companies. A structured questionnaire was used as the main instrument for data collection, which included multiple-choice and Likert scale questions related to the usage of AI tools, employee stress levels, and work efficiency. The respondents for the study were selected using the convenience sampling method based on their availability and willingness to participate in the survey. The sample size for the study consists of 100 employees working in IT organizations in Coimbatore. The collected data was organized and analyzed using statistical tools such as percentage analysis, tables, charts, and SPSS software to interpret the results and understand the relationship between AI tool usage, employee stress, and work efficiency.

ANALYSIS AND INTERPRETATIONS

TABLE 1: AGE OF THE RESPONDENTS

Age Group	No Of Respondents	Percentage
Below 25	25	22.7%
25-35	76	69.1%
36-45	6	5.5%
46 and above	3	2.7
Total	110	100

Interpretation

The table shows the age distribution of the respondents. The majority of the respondents (69.1%) belong to the 25–35 years age group, indicating that most participants are young professionals. About 22.7% of the respondents are below 25 years, while 5.5% fall under the 36–45 years category. Only 2.7% of the respondents are 46 years and above. Hence, it can be inferred that the study mainly represents the opinions of employees in the 25–35 years age group.

TABLE 2: WORK EXPERIENCE OF THE RESPONDENTS

Work Experience	No Of Respondents	Percentage
Less than 1 year	25	22.7%
1-3 Years	69	62.7%
3-5 Years	8	7.3%
Above 5 Years	8	7.3%
Total	110	100%

Interpretation

The table shows the work experience of the respondents. The majority of the respondents (62.7%) have 1–3 years of work experience, indicating that most participants are early-career employees. About 22.7% of the respondents have less than 1 year of experience. A small proportion of respondents have 3–5 years (7.3%) and above 5 years (7.3%) of work experience. Hence, it can be inferred that the study mainly represents employees with 1–3 years of work experience.

TABLE 3: USE OF AI TOOLS

Use Of AI Tools	No Of Respondents	Percentage
Yes, regularly	20	18.2%
Yes, sometime	81	73.6%
Rarely	6	5.5%
No	3	2.7%
Total	110	100%

Interpretation

The table shows the usage of AI tools among the respondents. The majority of the respondents (73.6%) use AI tools sometimes in their work. About 18.2% of the respondents use AI tools regularly. A small percentage (5.5%) use AI tools rarely, while only 2.7% of the respondents do not use AI tools at all. Hence, it can be inferred that most employees use AI tools occasionally in their workplace.



TABLE 4: TYPE OF AI TOOLS

Type of AI Tools	No Of Respondents	Percentage
Chatbots	45	40.9%
Data analysis tools	51	46.4%
Automation tools	8	7.3%
Others	6	5.5%
Total	110	100%

Interpretation

The table shows the types of AI tools used by the respondents. The majority of the respondents (46.4%) use data analysis tools, indicating that these tools are widely used for handling and analysing data. About 40.9% of the respondents use chatbots, showing their importance in communication and assistance. A small proportion (7.3%) use automation tools, while 5.5% of the respondents use other AI tools. Hence, it can be inferred that data analysis tools and chatbots are the most commonly used AI tools among the respondents.

TABLE 5: ENCOURAGE AI TOOLS AT WORK

Encourage AI Tools	No Of Respondents	Percentage
Yes	72	65.5%
No	28	25.5%
Maybe	10	9.1%
Total	110	100%

Interpretation

The table shows that 65.5% of respondents support encouraging AI tools at work, indicating strong acceptance of AI in the workplace. 25.5% do not support it, while 9.1% are uncertain. Overall, the majority of respondents have a positive attitude toward using AI tools at work

FINDINGS

- The majority of respondents fall in the 25–35 age group, representing 69.1% of the total sample.
- The majority of respondents are female, accounting for 65.5% of the total sample.
- The majority of respondents (86.4%) are employed in the IT/Software industry, indicating a strong dominance of this sector in the sample.
- The majority of respondents (62.7%) have 1–3 years of work experience, indicating that most participants are in the early stage of their careers.
- The majority of respondents (73.6%) use AI tools sometimes, showing moderate but widespread adoption among the participants.
- The majority of respondents use data analysis tools (46.4%), making it the most preferred type of AI tool.
- The majority of respondents (68.2%) are comfortable using AI.
- The majority of respondents (70%) agree with the statement on completing work.
- The majority of respondents (60%) reported that their work efficiency somewhat improved.
- The majority of respondents (70.9%) reported that they sometimes experience effective time management.
- The majority of respondents (60%) answered "sometimes."
- The majority of respondents chose the "agree" category, representing 61.8% of the total participants.
- the majority agree (61.8%), while for Work Pressure, the majority answered no (60.9%).
- The majority responses across the tables are agree for quality of work (61.8%), no for work pressure (60.9%), and no affect for job performance (62.7%).
- Majorities for each table are agree (61.8%), no work pressure (60.9%), no effect on performance (62.7%), and yes to encouraging AI tools (65.5%).

SUGGESTIONS

Organizations should conduct regular training programs to help employees understand and effectively use AI tools. Continuous learning reduces fear and uncertainty related to technology and improves employee confidence. Training should focus not only on technical skills but also on problem-solving and decision-making abilities required in AI-supported environments.

Skill development initiatives enable employees to adapt easily to technological changes, thereby reducing stress and improving work efficiency. Organizations that invest in employee learning create a positive attitude toward AI adoption

Management should clearly communicate the purpose, benefits, and limitations of AI tools to employees. Transparent communication helps reduce misconceptions related to job loss and performance monitoring. Employees should be informed about how AI tools support their roles rather than replace them.



Open communication builds trust and reduces anxiety among employees. Regular discussions and feedback sessions can help address employee concerns related to AI usage. Organizations should implement stress management initiatives such as counseling, wellness programs, and mental health support. These programs help employees cope with stress arising from technological changes and workload pressure.

Supporting employee mental health improves job satisfaction and productivity. Wellness programs create a healthy work environment in AI-driven organizations.

AI tools often increase connectivity beyond working hours. Organizations should set clear boundaries to prevent work from extending into personal time. Policies related to flexible work hours and digital disconnection should be encouraged.

Maintaining work-life balance reduces burnout and enhances long-term work efficiency. Employees who have adequate rest perform better and experience lower stress levels.

Finally, organizations should balance technological advancement with human needs. AI should be used as a supportive tool rather than a controlling mechanism. Employee well-being must be treated as a strategic priority.

A balanced approach ensures that AI adoption leads to improved efficiency without increasing employee stress. Sustainable growth depends on both technological innovation and human satisfaction.

CONCLUSION

The study concludes that the adoption of Artificial Intelligence tools has a significant impact on both employee stress and work efficiency in modern organizations. AI tools contribute positively by improving productivity, accuracy, and speed of work, while also reducing repetitive and manual tasks. These benefits help employees perform their duties more efficiently and support organizational growth.

However, the study also finds that the use of AI tools can increase employee stress due to factors such as job redesign, performance monitoring, learning pressure, role ambiguity, and fear of job displacement. Continuous technological changes and high-performance expectations may negatively affect employee well-being if not managed properly.

Overall, the study highlights the need for a balanced and human-centered approach to AI implementation. Organizations must focus not only on efficiency gains but also on employee mental health and job satisfaction through proper training, clear communication, ethical practices, and supportive work environments. By effectively managing the impact of AI tools, organizations can enhance work efficiency while minimizing employee stress and ensuring sustainable organizational success.

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