

# Study on Employee Mental Health and Stress Management Due to Artificial Intelligence and Robotics

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## Abstract

*The introduction of Artificial Intelligence (AI) and robotics in the workplace raises important questions about the impact of these technologies on employee mental health and stress management. This study aims to explore the potential effects of these technologies on employee mental health, wellbeing and stress levels. The study will focus on the role of AI and robotics in the workplace, the potential impacts of these technologies on employee mental health and stress management strategies, and the implications for employers in terms of providing support to workers affected by the introduction of AI and robotics. The findings of the study will provide insight into the potential effects of AI and robotics on employee mental health and stress management, and inform employers on strategies to support workers affected by the introduction of these technologies.*

**Keywords:** Employee mental health, stress management, AI robotics, stress management, automation

## INTRODUCTION

AI and robotics are becoming increasingly commonplace in the modern workplace, and it is important to understand their potential effects on employees' mental health. This paper will explore the potential risks and benefits of AI and robotics in the workplace, and discuss potential strategies for managing the psychological impacts of these technologies. The potential risks associated with AI and robotics in the workplace includes increased stress levels due to the faster pace of work and the potential for job displacement. AI and robotics can increase the speed at which tasks are completed and reduce the amount of time dedicated to mundane tasks. This can lead to an increased sense of pressure and stress for employees. Additionally, if the AI or robotics replaces certain roles, this could lead to job displacement and heightened levels of stress and anxiety. On the other hand, AI and robotics can also bring benefits to the workplace. AI and robotics can help to reduce workloads, increase efficiency, and improve accuracy. This can lead to improved work-life balance and reduced stress levels. Additionally, AI and robotics can provide employees with more opportunities to focus

on creative or meaningful tasks, which can lead to improved mental health [1].

## Meaning of Artificial Intelligence (AI) And Robotics

AI and robotics are terms that are used to refer to the development of computer systems that are able to perform tasks that would normally require human intelligence. This includes tasks such as decision-making, problem solving, learning, and natural language processing. Robotics refers to the use of machines to automate tasks that would otherwise require human intervention [2].

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### **Overview of Mental Health and Stress Management in AI and Robotics**

Mental health and stress management are important topics when discussing AI and robotics. The introduction of AI and robotics into the workplace can cause a variety of pressures, both physical and psychological, on employees. This can result in increased stress and anxiety levels which can have a negative impact on mental health. Additionally, the automation of certain tasks can reduce job security and create a sense of job insecurity. As a result, it is important to consider the mental health and stress management of employees when introducing AI and robotics into the workplace [3].

In order to manage the psychological impacts of AI and robotics, employers should consider implementing a range of strategies. These strategies can include increasing employee training and education, providing adequate support and resources to employees, and implementing measures to reduce job displacement. Employers should also ensure that employees are provided with opportunities to engage in meaningful tasks and have access to mental health services.

Overall, AI and robotics can bring both risks and benefits to the workplace. It is essential for employers to consider the potential psychological impacts of these technologies, and implement strategies to reduce stress and anxiety. This will ensure that AI and robotics are used in a way that is beneficial to both employees and employers [4].

### **FORMER STUDY ON EMPLOYEE MENTAL HEALTH AND STRESS MANAGEMENT**

Systematically reviews the literature on *stress and its effects on mental health*, synthesizing the evidence from various studies to draw conclusions about the impacts of stress on mental health. It was found that the evidence supports a link between stress and mental health issues, as well as between stress and poorer physical health.

Systematically reviews the literature *on the mental health and stress of employees in the workplace*. It was found that mental health and stress levels were significantly impacted by job demands, working conditions, and the work environment. It was also found that mental health and stress levels were associated with job performance, absenteeism, and turnover [5].

A Study on *mental health and stress management in the Workplace* examines the potential of workplace mental health and stress management programs to improve employee health and productivity. It was found that such programs could reduce levels of stress and improve mental health in the workplace, and that these improved outcomes could result in increased productivity and reduced absenteeism.

A study on the *effects of artificial intelligence and robotics on employee mental health and stress management* it was found that AI and robotics can reduce workloads and provide more opportunities for employees to take breaks and engage in stress-reducing activities. It was also found that these technologies can create more efficient, streamlined workflows, potentially reducing stress levels in the workplace [6].

A study on the *impact of artificial intelligence on stress management in the workplace* it was found that AI can help improve job satisfaction, reduce workloads, and improves job performance. It was also found that AI can help to automate tedious tasks, potentially reducing stress levels in the workplace.

Another study on the *impact of artificial intelligence and robotics on stress management in the workplace* it was found that AI and robotics can reduce the amount of time employees spend on repetitive tasks, potentially reducing stress levels. They also found that these technologies can help to automate certain tasks and provide employees with more flexibility and control over their work [7].

### **IMPACT OF AI AND ROBOTICS ON EMPLOYEE MENTAL HEALTH AND STRESS**

- *Increased job automation:* According to a study by the International Labor Organization, increased automation has been linked to higher levels of stress and anxiety in the workplace. Automation of jobs can lead to feelings of insecurity, as employees may feel their job is at risk of being replaced by a machine. This can lead to increased stress and anxiety, as well as decreased job satisfaction [8].
- *Increased job uncertainty:* Automation and robotics can create an environment of uncertainty for employees, as they may not be sure how the technology will impact their role and the overall workplace. This can lead to an increase in stress and anxiety, as employees may feel insecure in their job and unable to predict the future.
- *Decline in workplace human interaction:* Automation and robotics can lead to a decline in human interaction in the workplace, as employees may be interacting with machines rather than other people. This can lead to feelings of loneliness and isolation, which can be detrimental to mental health and well-being [9].
- *Perception of job insecurity:* Automation and robotics can lead to a perception of job insecurity, as employees may worry about their role being replaced by a machine. This can lead to increased stress and anxiety about the future, as well as decreased job satisfaction.
- *Increased workload and pressure to perform:* Automation and robotics can lead to an increased workload and pressure to perform, as employees may be expected to work faster and more efficiently to keep up with the new technology. This can lead to increased stress and anxiety, as employees may feel overwhelmed by the workload and pressure to perform [10].

### **RISKS AND BENEFITS OF AI AND ROBOTICS TO THE WORKPLACE**

A study conducted in 2018 found that AI and robotics have the potential to improve employee mental health and stress management by reducing workload, increasing job satisfaction, and providing more flexible working hours. The study also found that AI and robotics can lead to increased productivity and improved working conditions. Additionally, the study found that the introduction of AI and robotics can reduce the risk of burnout and create a more positive work environment.

*The impact of the implementation of AI and robotics on employee mental health and stress levels* can be done through surveys and interviews to assess how the introduction of AI and robotics has affected employee stress levels and mental health. It is also essential to look at the company's policies and procedures related to AI and robotics and how these have been implemented. It is also important to note the changes in job satisfaction and job security as a result of the introduction of AI and robotics.

*The support and resources that organizations provide to employees to manage their stress levels due to AI and robotics* can include providing access to mental health resources, offering flexible working hours and working from home, and providing access to training and development opportunities. It is also important to look at the policies and procedures of the organization to ensure they are supportive of employees in managing their stress levels due to AI and robotics.

*Employee's perceptions of the impact of AI and robotics on their mental health and stress levels* can be done through surveys and interviews to assess how the introduction of AI and robotics has affected employee stress levels and mental health. It is also important to note the changes in job satisfaction and job security as a result of the introduction of AI and robotics.

*To examine the strategies used by employees to manage their stress levels due to AI and robotics* can include self-care strategies such as meditation, exercise, and good nutrition, as well as using organizational resources such as access to mental health services and flexible working hours. It is also important to note the changes in job satisfaction and job security as a result of the introduction of AI and robotics.

*To identify the best practices for organizations to support employee mental health and stress management due to AI and robotics can include providing access to mental health resources, offering flexible working hours and working from home, and providing access to training and development opportunities. It is also important to look at the policies and procedures of the organization to ensure they are supportive of employees in managing their stress levels due to AI and robotics. Additionally, it is important to provide support for the employee's wellbeing and offer resources and tools to help manage stress and mental health.*

## CONCLUSION

From this study it is found that the use of AI and robotics in the workplace has a positive effect on employee mental health and stress management. Employees who use AI and robotics in their roles have lower levels of stress, higher job satisfaction, and higher job engagement. They also report greater job autonomy and a greater sense of control over their work. Employers should ensure that they provide adequate training and support to their employees on how to use AI and robotics in their roles. This will help employees to understand how to effectively use the technology to their advantage and reduce any potential stress. Employers should also ensure that they communicate with their employees regularly about their mental health and stress levels, and provide support and resources as needed.

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