

# THE IMPORTANT OF PHYSICAL WORKPLACE ENVIRONMENT TOWARDS ORGANIZATIONAL SUPPORT

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**Abstract.** Employees spend a significant portion of their time in the workplace, where the physical environment plays a vital role in shaping well-being, engagement, and productivity. A thoughtfully designed workspace that incorporates ergonomic furniture, effective lighting, and well-planned layouts enhances comfort and reduces stress and fatigue. These elements contribute to improved job satisfaction, performance, and organizational support. Moreover, a conducive workplace environment can reinforce organizational values, boost employee morale, and foster a sense of pride and loyalty. Organizations that prioritize functional and appealing workspaces are often seen as attractive employers, aiding in talent retention and satisfaction. In addition, this paper reviews how workplace safety, the physical environment, and spatial arrangement influence employees' perceptions of organizational support, contributing to a positive and comfortable work experience. These factors enhance motivation and efficiency. It highlights compliance with safety standards and organizational policies, ensuring a healthy, secure, and efficient workplace that supports employee well-being and satisfaction. This paper presents an analytical review of existing literature to explore the relationship between physical workplace environment and organizational support. The findings indicate that a well-designed physical environment not only reflects but also supports organizational goals, promoting a culture of engagement and adaptability in an increasingly competitive business landscape.

**Keywords:** *employees, workplace, physical environment, safety, spatial arrangement, motivation*

## Introduction

According to the International Labour Organization (ILO) in their 2023 Global Status Report on Safer and Healthier Working Environments, 2.93 million workers die each year as a result of work-related factors (Rotimi et al., 2024). Moreover, ILO highlights that the physical conditions and mental demands of the workplace determine a great workers condition. In addition, fundamental factors of healthy working environment are a core principle of workplace standards. Furthermore, the Asia and Pacific region represent nearly 63% of global work-related deaths. This statistic underscores the region's substantial working population. The high percentage of fatalities highlights the significant number of workers in these areas. The quality of the work environment, whether positive or negative, plays a crucial role in profoundly affecting employees within an organization. According to Badrianto and Ekhsan (2020) numerous studies have explored the connection between workplace environmental factors and employee performance, emphasizing how the physical setting, social interactions, and organizational culture significantly impact employee outcomes. Moreover, a conducive physical environment such as the physical layout of the workplace plays a crucial role in determining how effectively employees perform the tasks. A well-designed environment can facilitate collaboration, enhance communication, and minimize distractions, ultimately leading to increased productivity.

This is supported by Kim and De Dear (2013), this consists of ergonomic factors, lighting, temperature and noise in physical workplace environment in determining employees performance.

A non-ergonomic workstation can cause the risk of injury, while appropriate lighting can enhance focus and reduce eye strain (Makhbul et al., 2022). A noise significantly impacts the ability to concentrate, excessive noise can distract and hinder effective communication. Moreover, noisy surroundings can significantly increase stress at the workplace, making it difficult for employees to concentrate and perform their tasks effectively. The physical workplace environment mentioned includes various aspects that surround the workplace. Collectively, these elements create an environment that either supports or undermines employees' ability to perform their jobs effectively, ultimately influencing their overall job satisfaction and productivity. The specific risk and negative health outcomes of physical workplace environment is evidence related to specific disease (Pega et al., 2023). In 2016, the largest number of attributable deaths was exposure to long working hour, fifty-five hours per week which killed almost 745,000 people followed by ergonomic factors such as vision impairment linked to employees work. According to ILO and Agency for the Prevention of Blindness, it reported with estimated 3.5 million eye injuries occurring in the workplace every year. This evidence shows that the workplace is the third largest risk factor for vision impairment.

### ***Literature review***

#### ***Physical workplace environment influences employees at the workplace***

The physical workplace environment is defined as elements of the tangible workplace, including the spatial layout and the functionality of the surroundings (Hamidi et al., 2020). This encompasses the arrangement of physical space within an environment. physical environment such as office layout, lighting, temperature, noise ergonomics. It involves the equipment, workspace, office layout and natural features are positioned that interact with employees at the workplace. This shaping the employees engagement of perceive, navigate and use a space that influencing accessibility, interactions and overall functionality. In the context of office workspace, physical workplace is the environment where the employees are fit with the tasks. Employees are valuable assets to an organization, making significant contributions to its success (Samson et al., 2015). The physical environment plays a crucial role in supporting employees' performance, especially when it aligns with employees responsibilities.

#### ***The office layout influences the physical workplace environment***

Office design is pivotal in creating layouts that align with organizational and employee requirements (Berliana et al., 2025; Zhuang et al., 2022). It directly influences well-being and workplace functionality. Research indicates that thoughtful office interior design can enhance the employees experience by improving health, safety, and welfare. Understanding an organization's nature, work practices, office culture, and specific needs allows employers to propose optimal combinations of various space types and physical environments, fostering innovation in office design. This highlights the importance of interior elements, such as furnishings, in supporting employees' task performance. Additionally, proper office planning is essential to avoid negative impacts

on employees and maintain a positive organizational image (Berliana et al., 2025). Given that employees typically spend eight to nine hours at the workplace, creating a supportive and positive environment is crucial. Effective office design contributes significantly to employee productivity, safety, and health. By fostering a positive environment through innovative design approaches, organizations can achieve greater satisfaction, increased value, and a better future. Moreover, office design significantly influences privacy, which is crucial for minimizing distractions and maintaining concentration (Zhuang et al., 2022). A well-designed physical office environment is essential for sustaining employee well-being and productivity, underscoring the importance of organizational support in creating conducive workspaces.

### ***Lighting***

Natural light is highly valued in the workplace, significantly impacting employees' quality of life (Aryani et al., 2020; Hamidi et al., 2020). The amount of light required depends on the tasks being performed, whether indoors or outdoors, and can influence performance positively or negatively. Poor lighting conditions, such as high glare, dim lighting, or lack of natural light, can cause distress and lead to poor job performance. Brightness levels affect concentration, alertness, and task performance, and improving the quality and nature of light can enhance working experience and productivity. In any workplace, whether office or industrial, adequate lighting is essential for safety and task completion. Different work environments and tasks require varying lighting standards. Factors such as lighting quality can affect employee performance, with poor lighting leading to eyestrain, headaches, irritability, and reduced productivity. Unwanted reflections, glare, and shadows from light sources, including the sun, can cause discomfort and interfere with visual tasks. A poor lighting system can decrease employee performance and productivity, particularly for tasks involving reading, which can cause vision problems and fatigue. Conversely, good lighting quality can lead to faster work with fewer errors. Common types of office lighting include natural daylight, fluorescent lighting, incandescent lighting, and high-intensity discharge lamps. Natural lighting offers psychological benefits but may need control on bright days. Fluorescent lighting, resembling natural light, is common but costly to install. Incandescent lighting, though less energy-efficient, can be effective in offices. High-intensity discharge lamps, typically used for street and stadium lighting, are efficient but can affect color perception. The sufficiency of light in the workplace depends on task details, reflection and contrast, the condition of the eyes, and the importance of speed and accuracy. Different tasks require different levels of illumination, with more detailed tasks needing higher light levels. Good quality light should be free from glare, evenly diffused, and minimize shadows to ensure visual comfort and a pleasant atmosphere.

### ***Temperature***

Temperature plays a significant role in the workplace environment, particularly in how the body maintains an ideal temperature (Tabassum et al., 2021). The theory of effective temperature includes four components: air temperature, humidity, airflow, and the temperature of surrounding objects. These factors determine how hot or cold that influences the environment. Effective temperature is also influenced by heat radiation from other objects in the workplace. For example, sitting in a group can make someone feel hotter than sitting alone. Additionally, humidity and air temperature interact with

the body's systems of radiation and evaporation. High humidity reduces the body's ability to release heat through evaporation, and when the air temperature exceeds body temperature, the body cannot radiate heat effectively.

### **Noise**

Noise is a significant source of dissatisfaction in open-plan offices, greatly affecting employee comfort and the overall workplace experience (Tabassum et al., 2021; Hamidi et al., 2020). Unwanted sounds, such as conversations, disrupting employees and negatively impacting their performance on tasks requiring cognitive processing. This type of noise can interfere with concentration, increase cognitive load, and lead to higher stress levels. This affected employees experience of reducing productivity and making more mistakes. In open-plan offices, noise and disturbances from others' conversations or phone calls are frequently cited as significant issues during quiet, focused work (Golmohammadi et al., 2017). This environment can be particularly challenging for employees who need a quiet space to concentrate and perform their tasks effectively. The lack of personal enclosure and constant background noise can significantly impact productivity and overall job satisfaction. In addition, closer physical proximity enhances communication, open-plan offices can actually decrease the frequency of face-to-face interactions. The office designs, intended to promote employee interactions, do not always result in better communication. Moreover, the negative effects of noise and privacy issues, coupled with increased distractions, can indirectly hinder collaboration in open-plan offices. Therefore, office layouts that emphasize open-plan designs are not ideal for employees who need privacy and focus to perform their tasks effectively. Consequently, office innovations that prioritize open-plan layouts are not suitable for employees who require privacy and concentration to perform tasks effectively.

### ***The physical workplace environment significantly impacts employees***

#### ***Productivity and performance***

The work environment is where employees perform a daily task, and a comfortable setting can significantly enhance productivity and performance (Voordt and Jensen, 2023; Massoudi and Hamdi, 2017; Amofa et al., 2016). When employees feel secure and at ease at the workspace, they are more likely to work efficiently and stay engaged. A positive work environment can boost morale and reduce stress, leading to better focus and effective use of time. Consequently, employees who are fond of their work environment are more likely to maintain high levels of productivity and deliver better performance. A comfortable, safe, and healthy work environment fosters a sense of joy among employees, which can boost productivity. The physical work environment significantly impacts individual productivity. Both positive and negative physical conditions can affect employee health, thereby influencing productivity.

#### ***Employee wellbeing***

Employee well-being is deeply influenced by various environmental factors in the workplace (Fayyad et al., 2024). Sources of noise, such as office chatter, phone ringing, photostat machine, sounds from the compressor, fan and vacuum within the workspace. The unwanted noise can be a source of distraction and discomfort in the workplace, potentially impacting on employee well-being. This increases stress and fatigue, making

it difficult for employees to concentrate and perform tasks efficiently. Inadequate lighting, whether too dim or too harsh, can cause eye strain and headaches, further contributing to fatigue and reducing overall comfort. These physical discomforts can escalate stress levels, which in turn can impair cognitive functions, including decision-making abilities.

### ***Job Satisfaction and Engagement***

Employee satisfaction is closely linked to employees sense of security at work, which in turn affects job satisfaction and high performance (Wadu Mesthrige and Chiang, 2019; Atmaja and Puspitawati, 2018). A safe workplace makes employees experience a sense of calm that enhances their focus and efficiency. This security fosters a high level of satisfaction, leading to increased loyalty to the organization (Atmaja and Puspitawati, 2018). Open-plan office design is reducing certain conditions conducive to lack of privacy, employee satisfaction dan concentration.

### ***Collaboration and communication***

The concept of open-plan offices is affecting employees actual interaction by removing a partition or low partition (Kim and De Dear, 2013). Extensive research consistently highlights noise and lack of privacy as major sources of dissatisfaction in open-plan office layouts. Exposure to uncontrollable noise in the workplace can significantly diminish task motivation. When employees are subjected to constant, unpredictable noise, it can lead to increased stress and distraction. This environment makes employees concentrate on their tasks, resulting in frustration and decreased motivation to perform well. employees often face excessive and uncontrolled social interactions and interruptions because of their proximity to others and the perceived lack of privacy. This phenomenon, known as overstimulation, leads to overall negative feelings and dissatisfaction with their office environment.

## **Materials and Methods**

The paper analyses analytical reviews of the existing literature to explore the relationship between physical workplace environment and its impact employee for organizational support. The paper primarily focuses on existing data related to office design within the physical office environment emphasizing how the physical workplace environment influences employees that affected employees effectiveness. The information used in this paper is obtained from secondary sources, including journal articles from Google Scholar and academic research publications. Before the screening and reviewing process, a preliminary database search was conducted by the criteria of the papers, as illustrated in *Table 1*. Initially, titles were scanned to exclude irrelevant papers. Papers were then selected based on their focus on the physical workplace environment. Subsequently, the papers were classified according to the identified features of the physical workplace environment. To summarize the research results, initial classifications were developed.

***Table 1. Inclusion and exclusion criteria used in the selection papers.***

Inclusion criteria	Exclusion criteria
Articles published within the last 10 years. Articles written in English.	Articles published before the selected time frame. Articles written in languages other than English.

Articles that address topics such as office layout, noise levels, cleanliness, resource accessibility, or ergonomic design. Studies explore the impact of physical environments on employee productivity, health, performance and satisfaction. Review articles, case studies, or empirical research papers. Research conducted in office environments (e.g., open-plan offices, workspaces or traditional office setups). Studies involving adult working populations.	Articles focused solely on virtual or remote work environments without discussing physical space. Studies emphasize non-environmental factors like purely organizational culture or management styles. Opinion pieces, blog posts, or non-peer-reviewed articles. Studies involving non-office settings, such as industrial, retail, or educational environments. Research focuses on non-working populations (e.g., students or retirees).
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## Results and Discussion

The selected studies were conducted in offices, companies, and institutions across various countries, all situated within a specific region of the world. One study was conducted by Rotimi and Rasheed (2024) in Auckland, New Zealand; two studies were conducted in Malaysia (Hamidi et al., 2020); one in Pakistan (Tabassum et al., 2021); one in Kowloon, Hong Kong (Wadu Mesthrige and Chiang, 2019); one in Ethiopia (Lemma et al., 2024); and one in Anambra State, Nigeria (Nzewi et al., 2018) and Jordan (Al-Omari and Okasheh, 2017). Additional studies were conducted in Wilayah Menado, Indonesia (Rorong, 2016), and in France (Pierrette et al., 2015). A study by Fayyad et al. (2024) focused on the influence of ergonomics on employees in the workplace. Studies by Tabassum et al. (2021) as well as (Rorong (2016) examined factors in the physical workplace environment. Studies by Nzewi et al. (2018) and Al-Omari et al. (2017) specifically investigated the impact of lighting on the physical workplace environment. Studies by Wadu Mesthrige and Chiang (2019), Pierrette et al. (2015) as well as Shafaghat et al. (2014) explored how workplace design affects employees. The summary of the main findings of the papers is shown in *Table 2*.

**Table 2.** Summary of main finding for physical workplace environment from various organization of location.

No.	Authors/Year	Country/Organization	Studies Area	Main Findings
1.	Rotimi and Rasheed (2024)	Auckland, New Zealand	Workplace design	Workplace design that incorporates natural elements and reflects unique cultural aspects as significantly enhances employee satisfaction, productivity, and well-being.
2.	Hamidi et al. (2020)	Government Agency, Malaysia	Lighting	Proper lighting is identified as the most influential factor, enhancing employee performance by improving comfort and reducing strain. A well-designed physical environment boosts employee satisfaction, commitment, productivity, well-being and employees' performance.
3.	Tabassum et al. (2021)	Higher Education Institution, Karachi, Pakistan	Factor of physical workplace environment	The physical workspace environment significantly affects both employee performance and turnover intention. Factors include noise, lighting and temperature. Poor conditions in these areas can lead to decreased performance and higher turnover intention and while optimal conditions enhance productivity and reduce the likelihood of employees leaving.
4.	Wadu Mesthrige and Chiang (2019)	Real Estate Consultancy Firm, Kowloon, Hong Kong	Workspace, Activity-based work (ABW)	Activity-based work (ABW) significantly influences employee productivity. The distraction, overcrowding and noise is detected affected in this ABW working environment
5.	Lemma et al. (2024)	Dejen Aviation Industry (DAVI), Ethiopia	Factor of physical workplace environment	It emphasizes the physical environment plays crucial roles in employees' performance. The factors of temperature, noise, and poor lighting affected employees' health and productivity.
6.	Nzewi et al. (2018)	Brewing Firms, Anambra State, Nigeria	Workspace, Ergonomics equipment	It emphasized that workplaces designed with ergonomics in mind boost employee performance by minimizing risks and mistakes. The equipment and machinery are important to fit workers' needs,

7.	Al-Omari and Okasheh (2017)	Engineering Company, Jordan	Ergonomic from used furniture	prioritizing health and safety to enhance overall productivity. The highest factors affecting employees' performance from the discomfort of used furniture have a highly negative impact on employees. Creating a conducive work environment to increase motivation and performance.
8.	Rorong (2016)	PT. Bank Negara, Kantor Wilayah Manado, Indonesia	Factor of physical workplace environment	A comfortable workplace is good support for the employees. Physical workplace environment such as lighting, noise, air conditioning can increase satisfaction, performance and productivity at the workplace.
9.	Pierrette et al. (2015)	French Companies, France	Open-plan office layout, sources of noise	Intelligible conversations between colleagues are the primary source of noise annoyance in open-space offices. The perceived intensity of noise and its sources, such as conversations and office equipment, play a crucial role in noise annoyance.
10.	Shafaghat et al. (2014)	Office Workspaces, Johor Bharu, Malaysia	Open-plan office layout features	Both positive and negative features of open plan office designs. Positive features include efficient workflow and performance, flexible design, and cost efficiency, which contribute to improved staff productivity and satisfaction. Negative features such as auditory distractions, decreased work feedback, job dissatisfaction, illness, and stress.

Based on *Table 2* multiple studies have explored various aspects of workplace design and its impact on employees. Specifically, several studies have focused on the physical workplace environment and its components. The physical workplace environment encompasses various elements that can significantly influence employee well-being and productivity. For instance, some research has examined the overall design of the workplace, considering factors such as layout and the functionality. These studies suggest that a well-designed workplace can enhance employee satisfaction, reduce stress, and improve overall performance. Other studies have delved into specific factors within the physical workplace environment. For example, lighting has been identified as a crucial element. Proper lighting can reduce eye strain, improve mood, and increase productivity. Studies focusing on lighting have highlighted its role in creating a comfortable and efficient work environment. Ergonomics is another critical factor that has been extensively studied. Ergonomic design involves creating a workspace that supports the physical needs of employees, reducing the risk of injury and promoting better posture. Research in this area has shown that ergonomic improvements can lead to significant benefits in terms of employee health, comfort, and productivity. Overall, the research underscores the importance of considering various aspects of the physical workplace environment to create a space that supports employee well-being and enhances performance. By addressing factors such as overall design, lighting, and ergonomics, organizations can create a more conducive and productive work environment.

## Conclusion

In conclusion, the physical workplace environment plays a crucial role in enhancing productivity and performance, employee well-being, job satisfaction, and engagement. Factors such as ergonomic design, proper lighting, and a well-thought-out layout contribute significantly to these outcomes. Additionally, fostering collaboration and communication within the workplace is essential for creating a cohesive and efficient work environment. Organizational support is vital in addressing these factors, ensuring

that employees have the necessary resources and conditions to thrive. As promoted by the International Labour Organization (ILO), maintaining safety in the workplace is fundamental to providing a harmonious working environment. This not only supports employees in performing their tasks effectively but also promotes overall organizational success. By prioritizing these elements, organizations can create a conducive environment that benefits both employees and the organization as a whole.

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### **Conflict of interest**

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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