

# Active workplace design

## Current gaps & Future pathways

Insufficient physical activity and excessive sitting among office workers are linked to health and economic risks.

This paper identifies the need to examine the interactive effects of

**Norms & culture**  
**Building layouts**

**&**

**Workers' behaviours**

**Accurate behavioural measures**

**Existing gaps**  
**Future directions**

1

**Interactive effects of workplace social environments**

**Workplace norms and culture** affect workplace design and shape workers' behaviour.

**Cross-regional research** are needed to explore how workplace norms and design influence behaviour.

**Mixed methods** are needed to understand the interplay between workplace design, norms, and behaviour.

2

**The influence of building layout on workplace behaviour**

Previous studies fail to consider how the **overall spatial layout** influences movement and behaviour.

It is **challenging or impossible** to make significant changes to building layout.

**Space syntax** treats spatial configuration as a whole, which may partially address this knowledge gap.

3

**Precision in tracking workplace behaviours**

**Global positioning systems (GPS)** has limited accuracy in tracking worker location in indoor environments.

**Indoor Positioning Systems (IPS)** can provide the precise location of workers indoors via WiFi and Bluetooth.

**Geospatial AI (GeoAI)** can analyse workers' movement patterns derived from IPS by combining geospatial layers.

## Conclusions

**The interactive effects of workplace norms and culture on behaviour.**

**Conduct cross-cultural research to identify similarities and differences between cultures.**

**Future research should**

**Use innovative methods to accurately measure behaviour in the workplace and where it occurs.**

**Apply spatial syntax theory to provide valuable insights for designing active work environments.**

### Reference :

Koohsari, Mohammad Javad, Andrew T. Kaczynski, Akitomo Yasunaga, Tomoya Hanibuchi, Tomoki Nakaya, Gavin R. McCormack, and Koichiro Oka. "Active workplace design: current gaps and future pathways." British journal of sports medicine 58, no. 19 (2024): 1157-1158.

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