Homeworking during COVID-19 lockdown: Relationships between the physical and social environments at home, work-related burnout, and musculoskeletal pain.

Background:

This study examines the impact on workers of the rapid migration to homeworking during the COVID-19 pandemic. During lockdown many workers have worked from home while managing additional demands (e.g. childcare, shared homeworking spaces) and often in the absence of adequate ergonomic equipment, such as adjustable height display screen equipment, supportive chairs, and appropriate desk space that enables workers to sit comfortably for prolonged periods. Previous research suggests poor privacy fit at work (privacy needs not being met) is associated with lower wellbeing and greater work fatigue and burnout (Laurence, Fried, & Slowik, 2013; Weber, 2019). It is also widely acknowledged that poor ergonomics of office furniture can result in musculoskeletal pain, especially if equipment is not easily adjustable or optimally set up for an individual's needs (Derjani Bayeh & Smith, 1999; Sauter, Schleifer, & Knutson, 1991). As the global pandemic continues, it seems likely that many workers will continue with homeworking for some time, and it is important that we understand potential impacts of homeworking during the pandemic. This study therefore examines factors in the physical and social environment at home that contribute to privacy fit, burnout, and musculoskeletal pain while working from home during the COVID-19 lockdown.

Aims:

This study explores:

1) how people's physical and social environments during lockdown affect their experiences of privacy fit during homeworking

2) whether differences in privacy fit, the social environment, and job-related factors predict levels of burnout amongst people working from home during lockdown

3) whether people working from home during lockdown report experiencing new or increased levels of musculoskeletal pain, as affected by their home-working setup

Methods:

We conducted an online survey, opportunistically recruiting members of the public via social media, as well as by email to our own extended networks of colleagues, friends, and family. Power calculations for multiple regressions indicated a minimum sample size of 199 would be needed to detect a medium effect size.

We measured privacy fit, environmental factors that contribute to privacy fit (e.g. perceptions of crowding, noise, number of people present), environmental factors related to lockdown (e.g. childcare, where working at home, adequacy of equipment at home), job-related factors (e.g. job demand, job control, changes to hours worked), burnout (physical, mental, and emotional fatigue), and musculoskeletal pain.

Planned analyses:

We recruited 479 people; participants were located in Germany (*n* = 119), Switzerland (*n* = 130), the United Kingdom (*n* = 135), and other countries (*n* = 95). Multiple regression models will be used to explore the impact of the physical and social environment at home on experiences of privacy fit during homeworking, the impact of privacy fit, the social environment, and job-related factors on burnout, and the impact of home-working setup on musculoskeletal pain. We will explore potential differences between countries and gender, as well as consider potential mediators and moderators between privacy fit, the environment, and burnout.

Implications:

This multinational survey will provide insights into the impact of people's homeworking environments during the COVID-19 lockdown on privacy fit, work-related burnout, and levels of musculoskeletal pain. Findings will guide future interventions to support those continuing to work from home in the challenging circumstances of the ongoing COVID-19 pandemic.

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Authors:

Dr Clara Weber, Zurich University of Applied Sciences, clara.weber@zhaw.ch

Dr Sarah E. Golding, University of Winchester, sarah.golding@winchester.ac.uk, @SarahEGolding

Dr Eleanor Ratcliffe, University of Surrey, eleanor.ratcliffe@surrey.ac.uk @el_ratcliffe

Dr Jo Yarker, Birkbeck University of London, j.yarker@bbk.ac.uk @AffinityHAW

Dr Rachel Lewis, Birkbeck University of London rachel.lewis@bbk.ac.uk @rachelclewis11 @AffinityHAW

Dr Fehmidah Munir, Loughborough University, f.Munir@lboro.ac.uk

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