HEALTH AND EMPLOYMENT BRIEFING

November 2012

HOW WORKING ENVIRONMENTS AFFECT HEALTH

Introduction

In recent years, where and how people work has changed, a trend that is likely to continue. There has been a shift away from staff working in cellular offices to open plan offices, from having individual desks and computers to sharing space and equipment, from being office based to working at home or on the move. Some of this change has been driven by technology as opportunities for more flexible working have become commonplace and affordable. Some has been driven by cost cutting as organisations seek to reduce energy and accommodation costs. Yet another reason for change is the desire to increase productivity and promote better communication amongst and between staff teams.

To date, there has been little research undertaken into how changing working environments affect health and much of the available evidence is inconclusive or ambiguous. Findings often suggest that benefits can be achieved from flexible working environments but only if changes are implemented carefully. This briefing summarises current evidence about: hotdesking, working in open plan offices. home working and remote working.

1. Hotdesking

Despite the increase in popularity of hotdesking, surprisingly little research has been carried out into its impact and effectiveness.

A recent survey carried out by Unison (2012) found that hotdesking amongst social workers was now common. However,

- 90% of respondents said it had a negative effect on morale
- 90% said it increased their stress levels
- 80% said they do not have the same access to peer support
- only 15% felt that flexibility and efficiency had increased

A large proportion of the respondents said they believed hotdesking could have been implemented more successfully. Those who said it was a positive experience had mainly benefited from proper IT support and good flexible working schemes being put in place.

Some studies suggest that hotdesking has the potential to undermine team identity. If organisations want to redistribute staff spatially, the impact on team working needs to be taken into account. This is potentially very important for teams where team working is critical.

2. Working in open plan offices

"The open-plan office concept originated in the late 1950s in Germany and America, and began to flourish in the UK during the 1970s, continuing to this day. The idea is that crafting an open 'office landscape' using furniture, decoration, and plants, makes work more efficient. This efficiency is achieved by better communication, peer learning, and enhanced creativity in the workforce. Crucially though this only happens when a variety of other social spaces exist nearby, like a canteen, or a sports facility, a place to relax, or a space to be quiet in.

Early open-plan buildings such as the Willis building in Ipswich, designed by Norman Foster, took care to build in these additional spaces. Over the years, however, they have gradually disappeared from office architecture, and the negative effects of open-plan have become more evident; the noise and interruption that leads to a lack of concentration, the generic look of the furniture, and the feeling of being continually observed and monitored. Rather than being stimulated and motivated we find ourselves stressed and irritable".

Professor Peter Lloyd, Professor of Design, Open University

Open plan offices are widely used today as they are presumed to improve communication and knowledge-sharing between workers, and therefore to promote better performance. The office environment is seen as an opportunity to achieve higher work efficiency, better interaction and social support among employees. However, there is no robust scientific evidence to support such beliefs.

Summary of research into how open plan workspaces compare to cellular offices with regard to staff health and wellbeing:

- Open plan workers have significantly impaired quality of sleep and a higher prevalence of fatigue.
- Difficulty in concentration found to be 8 times more pronounced in open plan offices compared to cellular offices.
- Open plan office layout found to be a potential stressor that in turn influences motivation and performance.

- Reduced cooperation and poor interpersonal relations amongst open workspace employees; caused by lack of control over interaction with co-workers.
- High risk for both physical and psychological ill health
- Open plan office workers have been found to have significantly inferior results for efficiency and accuracy of work.
- High risk of crowding stress due to reduced privacy- the psychological state of inadequacy of space
- Strong evidence that working in open workplaces reduces job satisfaction
- Open plan workspaces increase cognitive workload due to too many people and interactions and too close proximity to others
- Compared to cellular offices, occupants in open-plan offices have been found to have significantly (62%) more days of sickness absence.
- Higher frequency of mucous membrane symptoms in open plan offices- 2–3 times higher than in the cellular offices.
- Higher prevalence of headache symptoms among occupants of open plan offices.

Implications/ suggestions:

- Due to the unfavourable effect of workplace openness, (thermal discomfort, poor air quality, noise and invasion of privacy) to protect the well-being of the office worker, offices should provide sufficient shelter from unwanted acoustic and visual stimuli. Ergonomic research suggests offices should be supplied with an adequate number of enclosed, sound-insulated workstations. Examples include tall, enclosed or frosted glass sound insulating partitions between open workplaces, textile floor covering, acoustic ceiling tiles and printer cabinets.
- Additionally, open plan offices do not take into account individual differences. Certain individuals have a higher or lower need for privacy, tolerance for noise etc. Including workers in the design of office workspace may provide a better person- environment fit, assigning employees that are happy to be in an open space to such workstations.

3. Home working

In response to major technological advances many employees now have the ability to do their jobs anywhere and at any time. As a result, employers are increasingly offering employees the opportunity to work from home; this is thought to cut costs and increase employee flexibility in promoting work life balance.

Summary of positive outcomes as a result of working from home:

- Employees maintain a better balance of home and work life as they spend more time at home instead of losing time commuting to and from work.
- Increase in the flexibility of the hours worked- employees are free to work at times that they are most productive.
- Flexible work hours allow home workers to participate in activities they enjoy, such as going to the gym.
- Working from home increases the opportunities disabled workers have in getting a job.
- Compared to office workers, home workers have been found to have reduced stress occasioned by commuting to work and office politics.

Summary of negative effects of home working:

- Social isolation; home workers report being lonely and having no one to talk to after a hard day
- Home workers experience higher levels of emotional ill health due to the lack of emotional support for co-workers.
- Office workers may report more stress but home-worker exhibit more physical symptoms of stress.
- High levels of presenteeism, for example, working when sick to maintain privilege of working from home; to dispel employer doubts about working from home. Homeworkers often return to work more promptly when feeling ill, for example, they take the morning off and return to work in the afternoon as they do not have to commute to office. This is not in the employee's best interest as they do not recover properly.
- Higher levels of stress in relation to work performance; homeworkers tend not to receive as much feedback on work performance and quality.
- Blurring of boundaries; working at home blurs the distinction between work and home roles for the family members and employee. Research suggests the lack of boundaries increases work-family conflict which is a cause of stress for women.
- Home workers report finding it difficult to switch off once finishing work. Compared to employees in a conventional office, homeworkers have been found to overwork.

- Walking to and from public transportation has been found to help physically inactive people improve their daily physical activity. This opportunity is not provided to homeworkers as the walk to and from transit daily is avoided.

Implications/ suggestions:

Research has found homeworkers to display more physical symptoms of stress than office workers. Isolation and the lack of support have been suggested to be important contributing factors.

Ways to counter possible effects of isolation and lack of support:

- One way to do this is for homeworkers to split their time between home and the office. It is recommended to spend a minimum of 20% of working time in the office, calculated on a weekly or monthly or other basis.

- Additionally the company should ensure group meetings and social events to include and support homeworkers.

- Introduction of health circles that allows open discussions of problems homeworkers commonly face.

- It has been recommended that homeworkers be kept on information distribution lists (access to intranet from home) in order to receive the same information as other workers.

- To ensure that employees have an adequate, safe, work station adapted to their needs, employers should supply the necessary furnishings and material, according to the same health and safety criteria as purchases made for traditional work.

4. Remote working

Remote and mobile workers (RMWs) are individuals who spend the majority of their working time away from a home or work base. One of the most significant challenges is how to effectively engage remote workers in the life of the organization and in the delivery of shared outcomes. If remote workers are members of teams, it is essential to establish communication media and processes to ensure that staff are connected to other team members and managers, regardless of their physical location.

Summary of health implications related to mobile working:

- Remote and mobile workers report higher levels of lower back pain
- High reporting of musculoskeletal symptoms of the neck and shoulders especially for vehicle drivers
- Poor mental health amongst RMWs with jobs characterised by high work demands, lack of control, low variation in work and high levels of uncertainty.
- Social isolation from colleagues and supervisors found to impact mental health
- Personal security at risk

Implications/suggestions:

- Research recommends a job re-design to achieve more time spent in the workplace. Vehicle design issues also need to be addressed due to the high reporting's of musculoskeletal symptoms.

- Buddy system may be useful to reduce the effects of lone working. This creates a support system as a way of confirming workers are safe at the end of their shifts.

- Research has found that the more time spent with customers can mediate some of the negative psychosocial effects. Therefore, increasing the contact with clients (social aspect) might be beneficial.

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The information contained in this briefing is not comprehensive. If you are aware of other research relevant to this topic, please let us know and we will be pleased to add it to future editions.
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