Ergonomics Research Review

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Belief in straight-back lifting is associated with viewing the back as more vulnerable

Study findings: people who perceive straight-back lifting as safest have more negative beliefs about back vulnerability and capability. A previous study found manual handling advisors have more negative beliefs about the back than physiotherapists.

Key message - Education campaigns may need to emphase a 'trust your back' message rather than a 'protect your back' one. Continued activity is vital.

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Posture-monitoring biofeedback device significantly reduces control room operator fatigue and discomfort

Iranian petrochem-plant control room operators were a posture monitoring biofeedback device. 6 and 12 month significant improvements in posture and fatigue were recorded.

Wearables to nudge us about our posture are available at relatively low cost. Possibly even approaching cost effectiveness as a Wellness intervention.

Airplane economy seat-size needs increasing

You probably didn't hear it here first! Recent research supports what most of us have felt. Airline economy seat size no longer reflects the size of the modern population. Leg room and seat width are identified as particular areas where clearances need to be increased.

The paper suggests the need for an international law prescribing minimum seat sizes. An ambitious thought and maybe necessary!

Longer bouts of sitting linked with less upper limb discomfort

Not a typo! A counterintuitive finding if we look at the broader tone of current ergonomics advice. Before we start throwing out our standing desks - the suggestion is that the direction of cause and effect is that people suffering from upper limb discomfort alternate to standing more frequently, as a way of managing that discomfort (not that sitting reduces upper limb pain!).

If the cause direction suggested is correctly-this study could support the case that giving staff sit-stand equipment benefits not just the back, but the upper limbs as well. More research needed to confirm this.

Keeping you up-to-date with a selection of the latest research and developments in occupational ergonomics and human factors, and our take on how they might apply to the 'real world'. Click on headings for abstracts and articles.

We will aim to produce a new review on a bi-monthly basis, or sooner if research reaches a critical mass!

We will also include any other bits and pieces that might be of interest.

Long hours raises MSD risk

Korean research confirms a link between long working hours and musculoskeletal disorders. Useful to note - this was a large scale project (24,783 subjects), which adjusted for occupation, movements and postures, and psychosocial facotors - in other words the suggestion is that simply time at work can have an effect independent of other key factors.

Implications for Wellbeing initiatives and underpins a need for phased return to work after MSDs.

QEC MSD assessment tool shows strong consistency between users

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MSD assessment tools can introduce scope for rater bias / subjective variabiltiy. This research found the QEC has high reliabiltiy (consistency) between raters.

QEC also has a number of other positives: It addresses back and upper limb issues in the same tool, it also looks at combined pairs of risk factors. Click here to download it.

A closer look:

The psychosocial work environment (PWE)

It's a term that's used often but how well is it understood? OSH Wiki provides a useful overview of the key elements of the PWE.

Most research is carried out under controlled conditions, and there are limitations in how much findings can be relied on and applied more broadly in the real world. This review aims to raise awareness and stimulate ideas - we're not suggesting you drop everything and change the way you do things!











