Making the Case for Ergonomics and Where it Stands in Mobile Technology

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Mobile computer technology has become ubiquitous and often serves as a worker's primary computing device.
Injury models for computing technology demonstrate relationships between factors and outcomes.

Field studies tell us two things

• Time spent using device associated with thumb, shoulder, and neck pain

• People use the devices in lots of non-desk environments that lead to a lot of non-neutral postures

Berolo *Appl Ergon*. 2011;42(2):371-378
Single handed and two-handed use both utilizing the thumb accounted for approximately 95% of all observations.

44%  
46%  
2%

“I’m all thumbs!”

For single handed use smaller is better for thumb posture and performance

Thumbs and tablets and
a lot of reach

Smaller (e-reader size) is better for reaching with thumbs as well as holding the devices. Cases and split keyboards can help.

Wrist and tablets......

Extended during typing

Deviated while holding

Young Work. 2013;45(1):59-71
Head and neck postures are often flexed with mobile technology.

Take advantage of their mobility – don’t get stuck in any posture for too long – and accessorize!

Cases let us go hands free and improve viewing angles

Thinner external keyboards get the hands out of the way and promote straighter wrists
The state of ergonomics for mobile technology is a work in progress

THANK YOU

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