

## **Innovative Strategies for WRMSD Prevention**

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Experiencing fatigue or negative emotions while working with digital devices and screens all day can contribute to Zoom fatigue and symptoms such as eye strain, back pain, neck and shoulder discomfort, exhaustion, stress, sleep disturbances, anxiety, depression, anger, and boredom. The presentation overviews why digital devices contribute to these symptoms. Strategies to prevent and reduce symptoms and optimise performance are discussed using wearable feedback devices that provide posture, muscle (electromyography to monitor muscle tension and optimise ergonomics), respiration, and heart-rate variability feedback. Reviewed are psychophysiological procedures and training strategies to prevent and reduce WRMSD at work and home.

### **Learning objectives:**

1. To understand the negative impacts of excessive screen time and digital device use on physical and mental health in the workplace, including the various symptoms that can arise, such as eyestrain, back pain, and negative moods like anxiety and depression.
2. To identify the different categories of digital device misuse and abuse that can contribute to these negative effects, including improper display use, addictive notifications, and poor ergonomics, and to learn strategies for mitigating these issues.
3. To explore the use of wearable devices and psychophysiological assessment procedures as tools for monitoring and optimising health in the workplace, including posture feedback, electromyography for muscle tension and ergonomics, and cardio-respiratory synchrony feedback to balance the sympathetic/parasympathetic nervous system.