

The Science of Sensory, Cognitive, and Organisational Load

What Is Ergonomics?

Ergonomics is the science of designing work environments that fit how humans naturally think, feel, and function, to create holistic systems that support human performance and wellbeing.



Physical Ergonomics

Posture, equipment design, workspace layout, physical comfort



Cognitive Ergonomics

Mental workload, decision-making, information clarity



Organisational Ergonomics

Routines, workflows, communication

Neurodiversity at Work

ADHD is one of the most common forms of neurodivergence in the professional workforce, and brings strengths like **high energy, creativity, and pattern recognition**. The challenge lies not in the person, but in **environments that overload attention and lack structure**.

The Three Types of Workplace Load

Sensory Load

What it is: Overstimulation from environmental factors like lighting, noise, temperature, textures, and clutter.

Impact: Sensory overload can trigger discomfort, stress, or shutdown, especially for those with ADHD or autism.

Solutions:

- ✓ Have quiet spaces available
- ✓ Adjustable lighting, temperature, air quality options
- ✓ Minimalist, organised workspaces
- ✓ Choice in workspace location
- ✓ Sensory break rooms with calming elements

Cognitive Load

What it is: The mental effort needed to process information, make decisions, and complete tasks

Impact: Cognitive overload can lead to decision fatigue, increased errors, and mental exhaustion. ADHD brains experience this more intensely.

Solutions:

- ✓ Clear, step-by-step instructions
- ✓ Reduced context-switching, interruptions
- ✓ Simplified decision-making process
- ✓ Documentation of process
- ✓ Task and deadline clarity
- ✓ Strategic breaks and time blocks

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Organisational Load

What it is: Stress from unpredictable schedules, unclear expectations, poor communication, chaotic workflow

Impact: Creates anxiety, reduces job satisfaction, and affects neurodivergent people who benefit from structured autonomy and clear frameworks

Solutions:

- ✓ Clear role definitions, expectations
- ✓ Consistent schedules, advance notice of changes
- ✓ Structured communication
- ✓ Flexible work arrangements
- ✓ Written documentation of processes and decisions

Why Load Management Benefits Everyone

Inclusive ergonomic design isn't just for neurodivergent workers. It creates a **better space for all employees**. When we design for the full spectrum of human cognitive and sensory differences, everyone performs better. Neurodivergent strengths become organisational assets.

Enhanced Focus

Reduced distractions improve concentration for all workers

Lower Stress Levels

Predictable environments reduce stress and anxiety

Higher Productivity

Optimised cognitive load increases task efficiency

Equitable Access

Universal design principles support diverse abilities

Reduced Fatigue

Less cognitive strain preserves mental energy

Better Collaboration

Clear systems improve team communication

Implementation Impact Areas

Physical Spaces



Workspace design and environmental modifications

Digital Interfaces



Simplified software, clear navigation, reduced clutter

Team Dynamics



Communication protocols, meeting structures, collaboration tools

Process Design



Streamlined workflows, clear procedures, predictable structures

Training and Support



Awareness programs, accommodation processes

Performance Metrics



Inclusive methods that account for different working styles

Design for difference, celebrate cognitive diversity, and unlock everyone's potential to succeed.

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