Ergonomics of Occupational Mental Health

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May is Mental Health Awareness Month

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Session Overview

- Definitions & "Fast Facts"
- Consequences
- Causes
- Hope
- Help
- Ergonomics

Mental Health Definition (CDC)[1]

- Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices.

Mental Health Definition (WHO)[8]

- Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community.

Some Fast Facts About Mental Health

- 1 out of 5 adults live with a mental illness[1,2,3]

- 15% of working-age adults were estimated to have a mental disorder in 2019[4]

- The most common forms of mental illness (% of total population):[5]
    - Anxiety disorders: 19.1%
    - Major depression: 8.3%
    - Post-traumatic stress disorder (PTSD): 3.6%
    - Bipolar disorder: 2.8%
    - Borderline personality disorder (BPD): 1.4%
    - Binge eating disorder: 1.2%
    - Obsessive-compulsive disorder (OCD): 1.2%
    - Schizophrenia: 0.25 -0.64%

- Poor mental health increases the risk for diabetes, heart disease, stroke, and cancer[6,7]

- Suicide is the 2nd leading cause of death among people ages 10 to 24[7]

Consequences of Poor Mental Health

- "Poor mental health has a negative effect on a person's cognitive, behavioural, emotional, social and relational well-being and functioning, their physical health, and their personal identity and well-being as related to work. A person's capacity to participate in work can be consequently impaired through a reduction in productivity and performance, reduction in the ability to work safely, or difficulty in retaining or gaining work."[10]
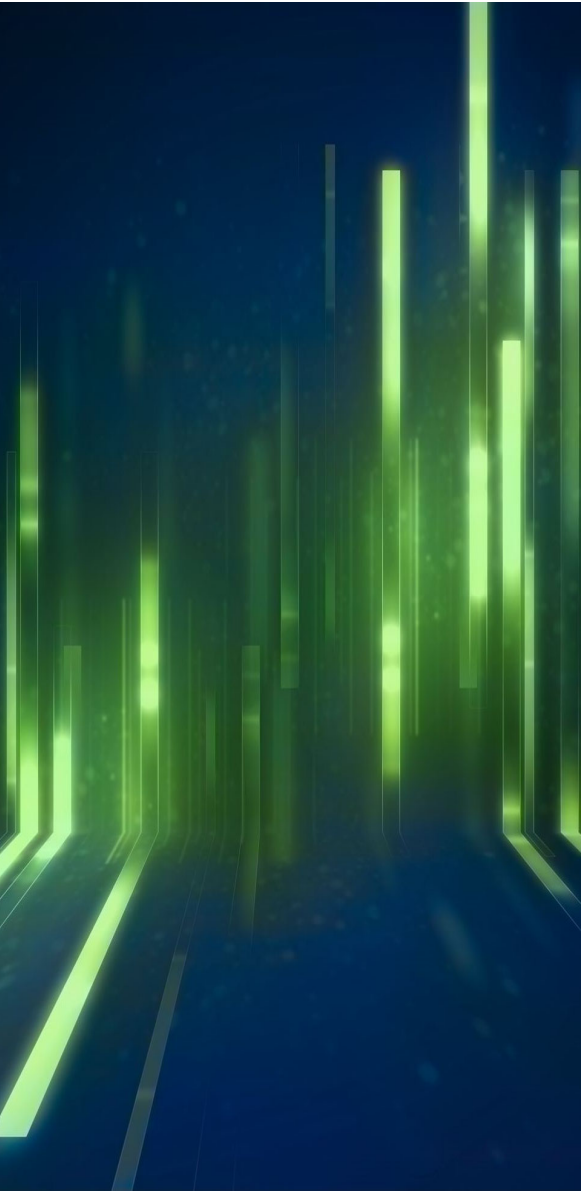
Causes of Mental Illness

"At any one time, a diverse set of individual, family, community and structural factors may combine to protect or undermine mental health. Although most people are resilient, people who are exposed to adverse circumstances – including poverty, violence, disability and inequality – are at higher risk of developing a mental health condition."[8]

"There is no single cause for mental illness. A number of factors can contribute to risk for mental illness, such as:

Adverse Childhood Experiences, such as trauma or a history of abuse (for example, child abuse, sexual assault, witnessing violence, etc.)	Experiences related to other ongoing (chronic) medical conditions, such as a traumatic brain injury, cancer, or diabetes	Biological factors or chemical imbalances in the brain	Use of alcohol or drugs	Having feelings of loneliness or isolation"[1]

Can Mental Health Conditions be Treated?

"Many mental health conditions can be effectively treated at relatively low cost, yet health systems remain significantly under-resourced and treatment gaps are wide all over the world. Mental health care is often poor in quality when delivered. People with mental health conditions often also experience stigma, discrimination and human rights violations."[8]

Hope is Critical

We must have hope that things can get better

- Proverbs 13:12, Psalms 13:27

How can work help?

What can help at work?

"Decent work supports good mental health by providing:

- a livelihood;
- a sense of confidence, purpose and achievement;
- an opportunity for positive relationships and inclusion in a community; and
- a platform for structured routines, among many other benefits.

For people with mental health conditions, decent work can contribute to recovery and inclusion, improve confidence and social functioning."[4]

What can help at work?

- "Health workers reported fewer mental health issues when they said they work in supportive environments. Factors that may make workplaces more supportive include:

- Participation in workplace decisions

- Trust between management and workers

- Proactive and helpful supervisors that promote:
  - Stress prevention,
  - Psychological health,
  - Support for productivity,
  - A harassment-free workplace, and
  - Enough time to complete tasks."[9]
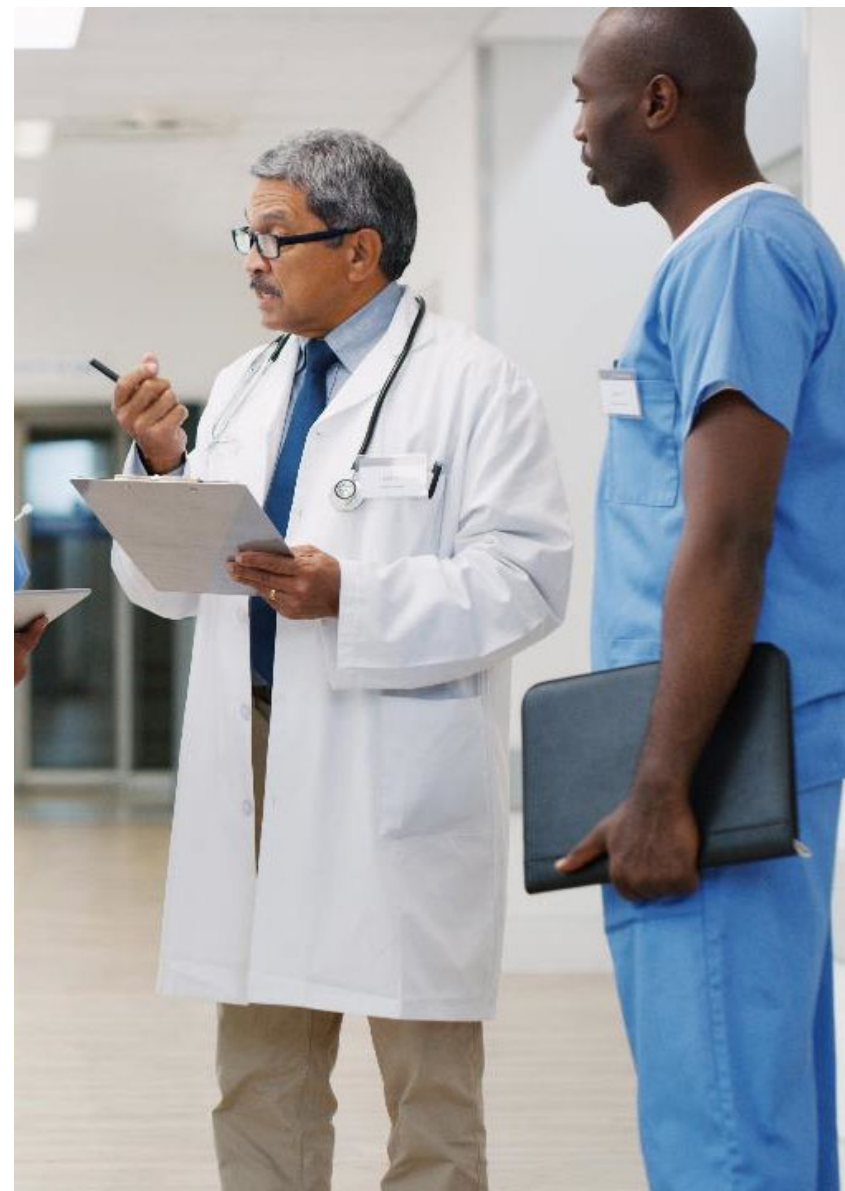
What can help at work?

According to the "WHO guidelines on mental health at work"[10] the workplace intervention with the **best evidence** of success in reducing worker mental health issues is:

- "***Training managers*** to support their workers' mental health should be delivered to improve managers' knowledge, attitudes and behaviours for mental health and to improve workers' help-seeking behaviours."

What can YOU do to help?

"If you know someone with poor mental health, you can help by:

- Reaching out and letting them know help is available.

- Helping them access mental health services.

- Learning and sharing the facts about mental health, especially if you hear something that isn't true."[7]

Why Ergonomics Matters

Realistic –

People do what people do

Capabilities & Limitations

Individual Variability

Population Stereotypes

Behaviors are hard to change

Recognizes the power of psychosocial factors and *mindset*

Empathetic –

Don't blame the worker

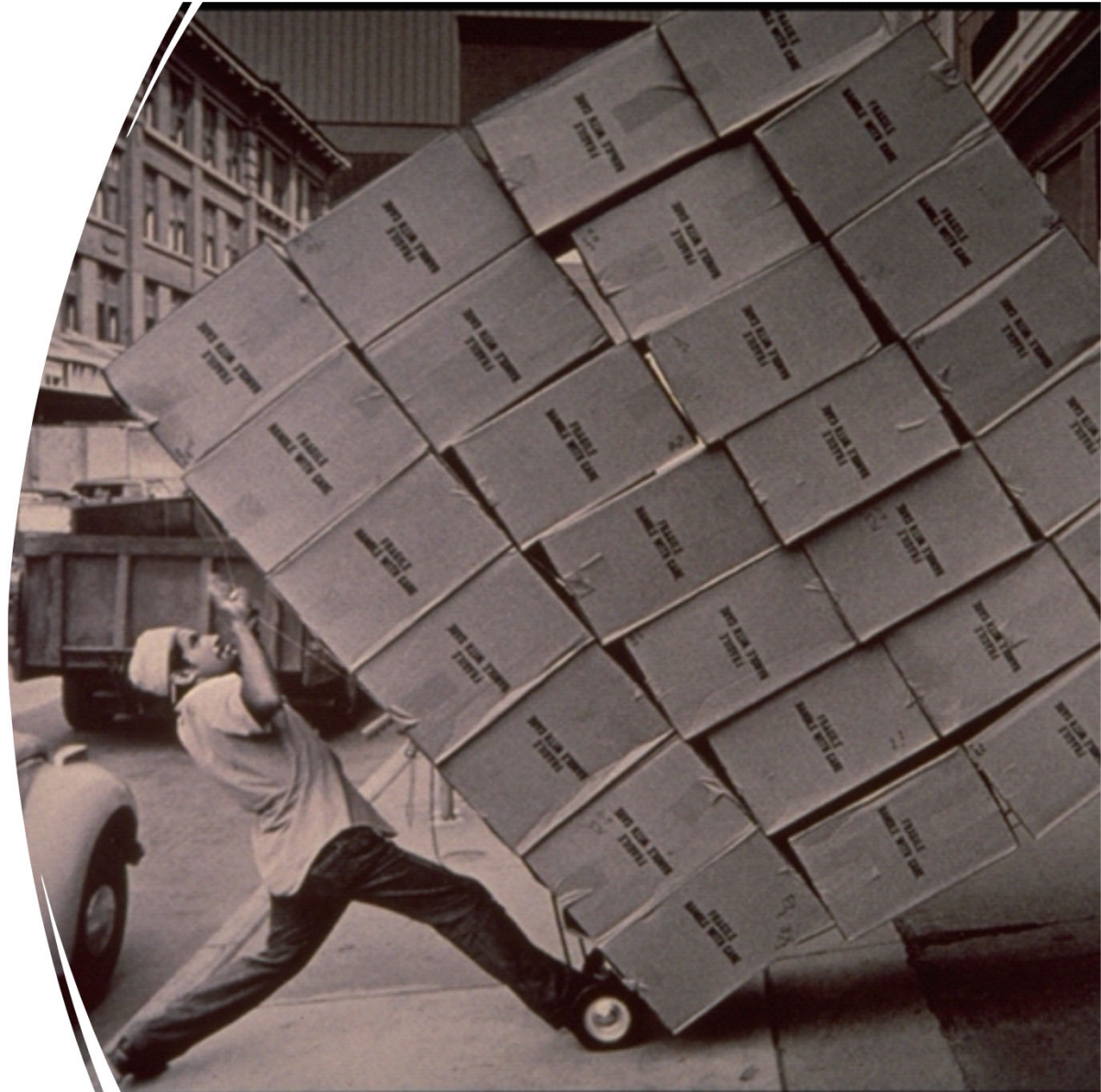Supervisor response to injury

Balanced

Not too little, not too much

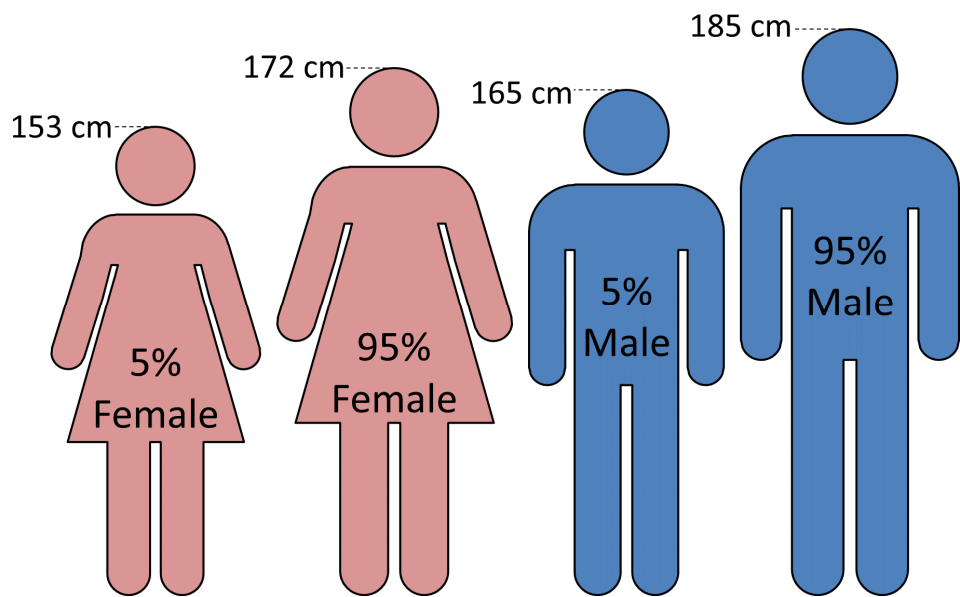Physical tasks within capabilities

Meaningful work

Ergonomics is Realistic

The Ergonomics Perspective in its simplest form is recognizing true things about real people and not what you **_WISH_** was true about them.

- Capabilities
- Limitations

Ergonomics Recognizes Individual Variability

- Not just physical dimensions
- Not just strength
- Cognitive
- Skills
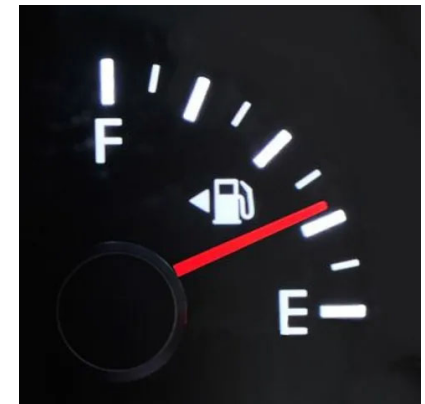- Temperament
- Age
- Disabilities
- *WITHOUT CONTEMPT*

Figure labels: 153 cm — 5% Female; 172 cm — 95% Female; 165 cm — 5% Male; 185 cm — 95% Male

Ergonomics Recognizes Population Stereotypes

When it works the way you expect it to:

- Less Errors
- Less Effort
- Less Emotions!

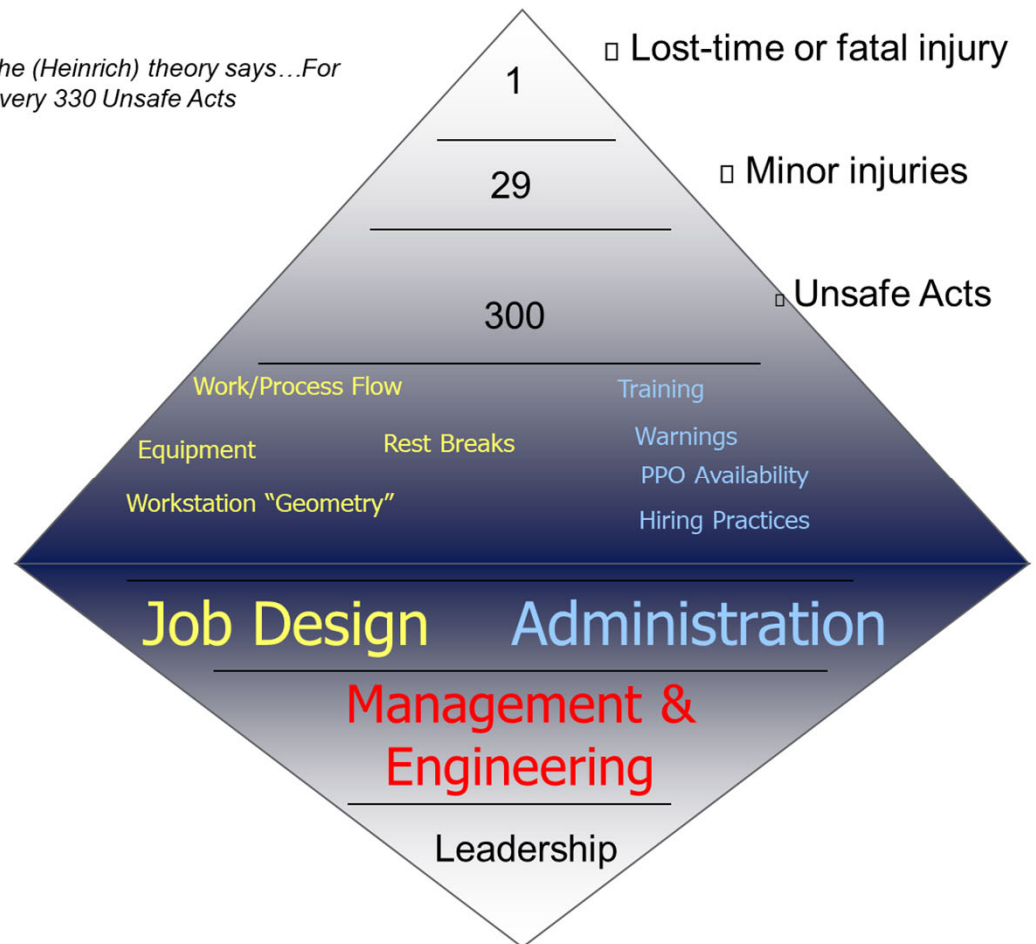# Ergonomics Sees Behaviors as Consequences of *Design*

Traditional Safety sees Behaviors as Causes:

- Implies BLAME
  - → Mental Stress

Ergonomics sees behaviors as inevitable consequences of the *design* of work and the *work culture:*

- The worker is NOT to blame
  - → Mental Health

The (Heinrich) theory says…For Every 330 Unsafe Acts

1 — Lost-time or fatal injury

29 — Minor injuries

300 — Unsafe Acts

Work/Process Flow   Training

Equipment   Rest Breaks   Warnings

PPO Availability

Workstation "Geometry"   Hiring Practices

Job Design   Administration

Management & Engineering

Leadership

Ergonomics Recognizes the Importance of Psychosocial Factors

Long-term Disability is most closely related to:

- Supervisor Response to Worker Pain (Blame or Empathy?)
- Worker confidence in Self-Efficacy

Key Values:

- Empathy
- Responsiveness
- Adaptability
- Independence/Freedom/Autonomy

Ergonomics Recognizes the Power of Worker Mindset
## Crum and Langer, 2007

- 84 Hotel Housekeepers in 7 Hotels
- 4 Hotels – Your work meets/Exceeds the CDC's Exercise Recommendations – Oral, Written, Posters
- After 4 Weeks, Housekeepers in the Informed Group:
  - Significant Reductions in weight, blood pressure, body fat, waist-to-hip ratio, and body mass index!
- No Significant Changes in Control Group.
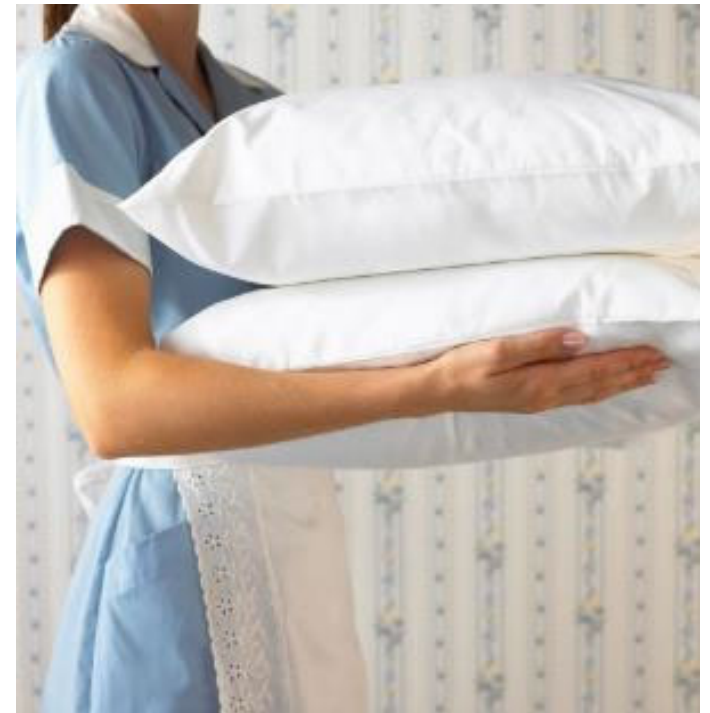
Ergonomics Recognizes the Value of Balance: Too Much OR Too Little Stress is Bad for Productivity

Frederick Taylor – The Principles of Scientific Management, 1911
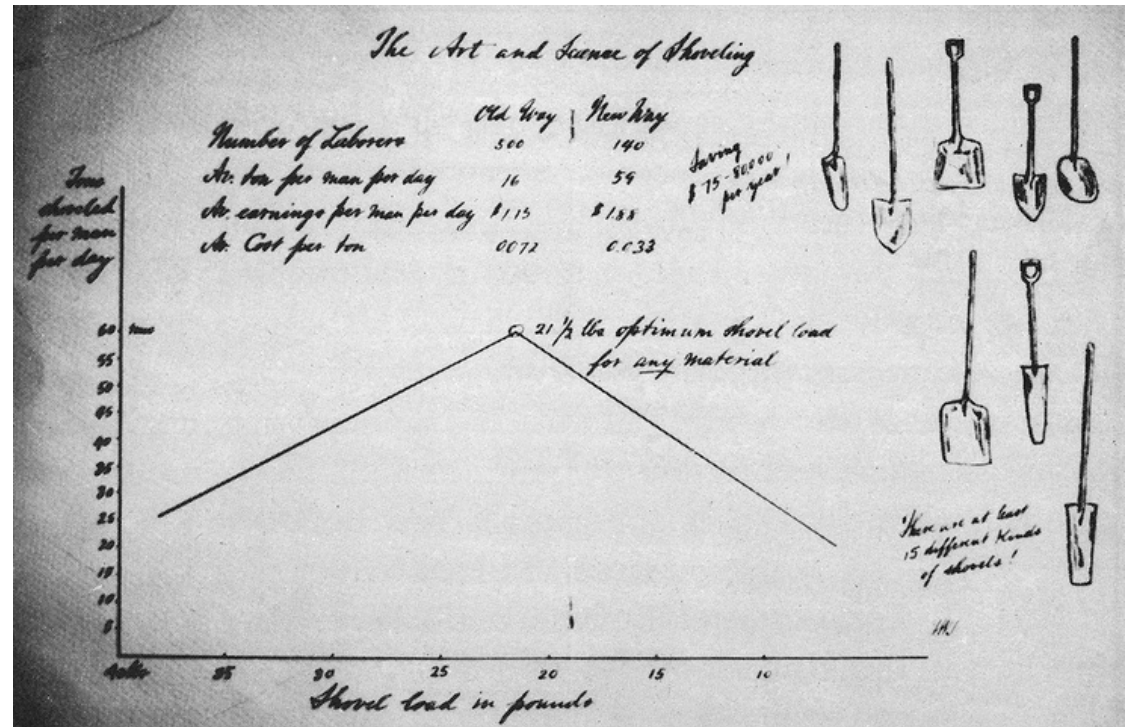
Ergonomics Recognizes the Value of Balance: Too Much OR Too Little Stress is Bad for Productivity

- Monotony causes stress

- Excessive physical or mental workload causes stress

- Ergonomics seeks the balance of designing work so it is meaningful, engaging, and able to be performed by the broadest possible population.

Job "Stress" versus Performance

Performance Or Output

"Stress" or Task Demands
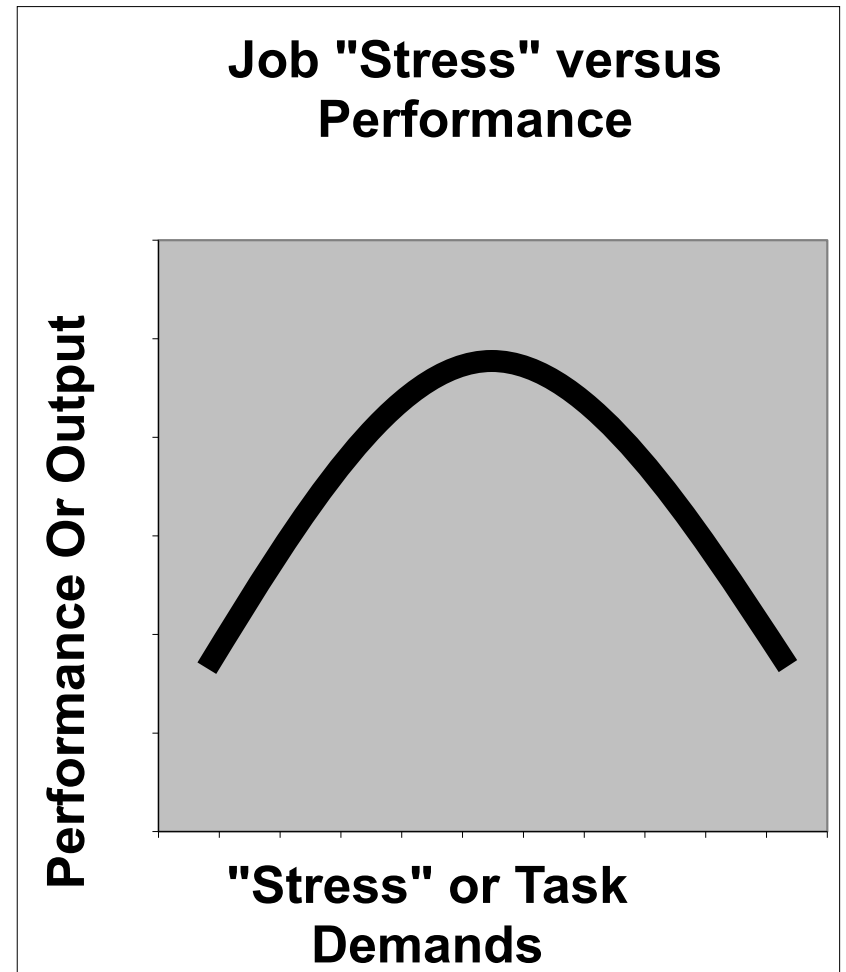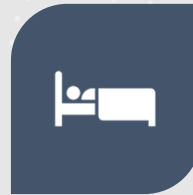
Lessons from Occupational Stress Claims

Peaked in 1991 – Mostly in CA

My experiences

My take-aways

- Leaders reflect the strengths and weaknesses
- The problem is NOT hard to find

Other (Ergonomic) Aids to Mental Health

SLEEP/REST

INCREASE EFFICIENCY & REDUCE STRENUOUSNESS TO REDUCE STRESS

EXERCISE/ACTIVITY, ESPECIALLY RECREATIONAL IS HEALING

FOOD/DRINKS/DRUGS

REWARD THROUGH CARING RELATIONSHIP (AND $)

Wrap-up

Mental Health is crucial to life and work.

Supportive work can improve our mental health.

Training Supervisors in supporting worker mental health helps.

Showing personal caring and supporting help-seeking makes a difference.

Ergonomics is an approach that supports empathetically recognizing people's capabilities and limitations.

References

1. https://www.cdc.gov/mentalhealth/learn/index.htm
2. https://www.nimh.nih.gov/health/statistics/mental-illness
3. https://www.hopkinsmedicine.org/health/wellness-and-prevention/mental-health-disorder-statistics
4. https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work
5. https://www.usa.edu/blog/mental-health-statistics/
6. https://www.cdc.gov/mentalhealth/learn/index.htm
7. https://www.cdc.gov/mentalhealth/quiz/index.htm
8. https://www.who.int/health-topics/mental-health#tab=tab_1
9. https://www.cdc.gov/vitalsigns/health-worker-mental-health/index.html
10. WHO guidelines on mental health at work https://www.who.int/publications/i/item/9789240053052