

The Physical and Psychological Effects of Stress and Fatigue



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CONSTANTLY REDEFINING EXCELLENCE

The Physical & Psychological Effects of Stress & Fatigue



Learning Objectives

- Understand the difference between stress & fatigue
- Identify the causes, warning signs & understand the physical and psychological effects of stress and fatigue
- Select appropriate lifestyle choices to manage your own stress and fatigue

Part 2: Fatigue

- Definition of Fatigue
- Types of Fatigue and Causes
- Physical Affects of Fatigue
- Psychological Affects of Fatigue
- What is the Difference Between Stress, Tiredness, Fatigue, Exhaustion & Burnout? Open discussion



Part 3: Methods to Manage Stress & Prevent Fatigue

- Manage Your Time
- Know Your Limits
- Set Boundaries
- Exercise
- Quality Sleep
- Eat Healthy
- Psychological & Emotional Regulation
 - Mindfulness - Present State Awareness
 - Negative Thought Pattern Interrupt
 - Breathing Techniques
 - Shift Perspectives



PART 1: STRESS



Part 1: Definition of Stress

Definition:

- Emotional pressure suffered by a human being or other animal.
- To apply emotional pressure to (a person or animal).
- (informal) To suffer stress; to worry or be agitated.

STRESS

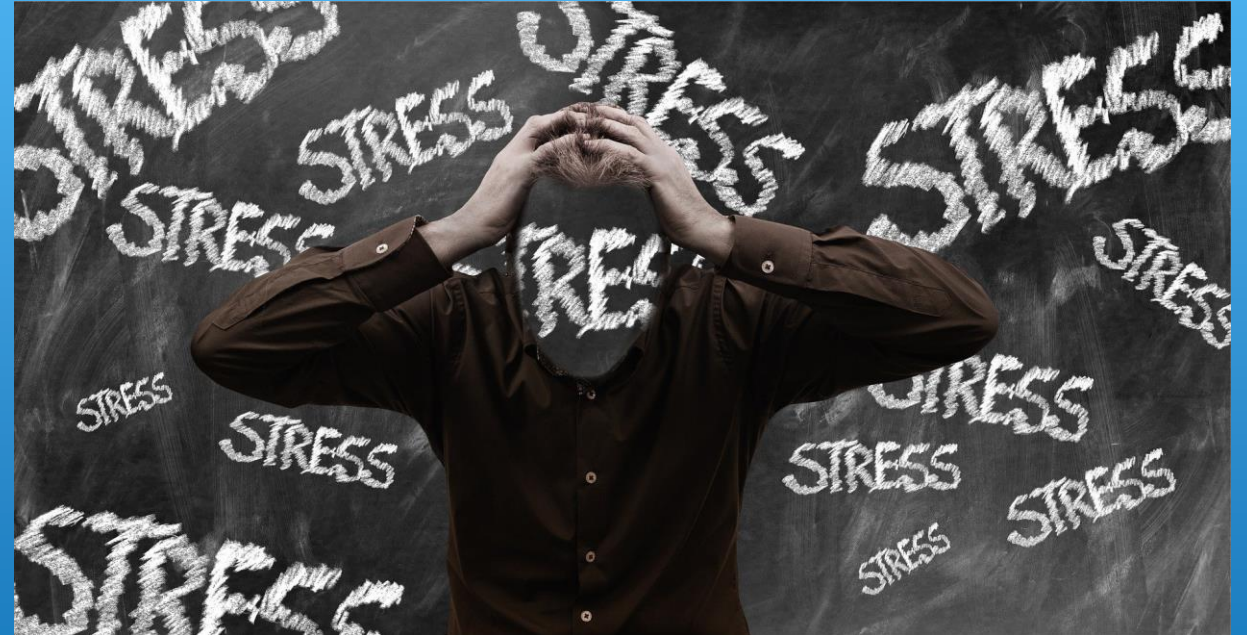
Eustress (Good)

Distress (Bad)



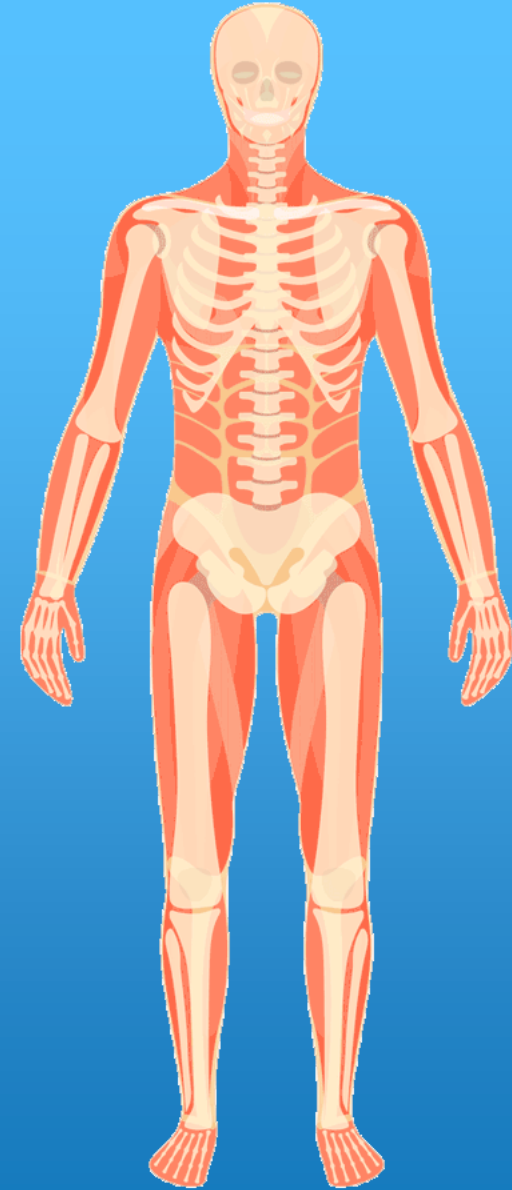
Types of Stress & Causes

- Acute
- Episodic Acute
- Chronic
- Acute vs Chronic
- Physical
- Emotional
- Traumatic



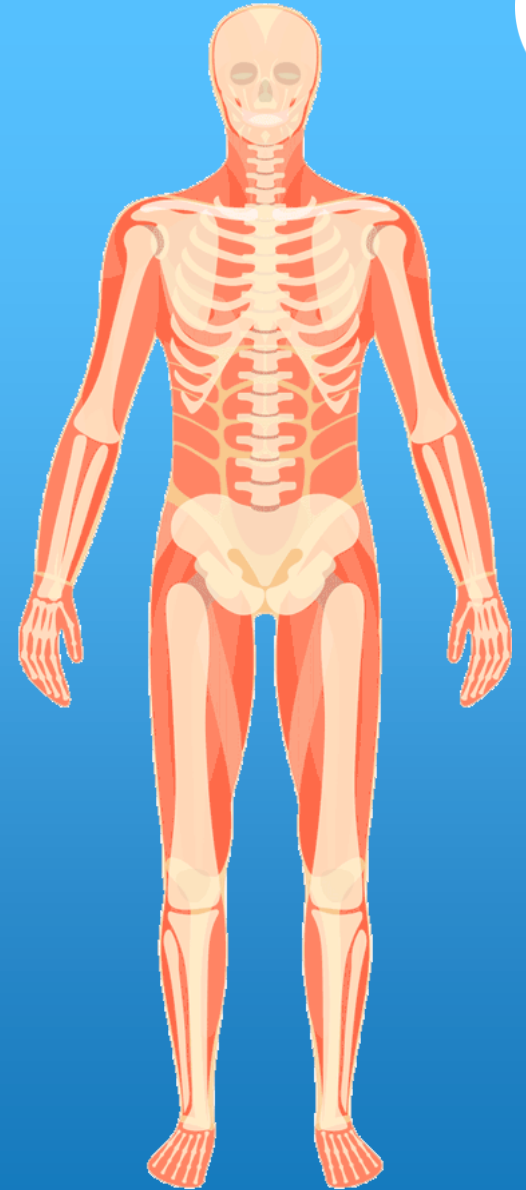
Physical Affects of Stress

- Musculoskeletal
- Respiratory
- Cardiovascular
- Endocrine
- Gastrointestinal
- Nervous



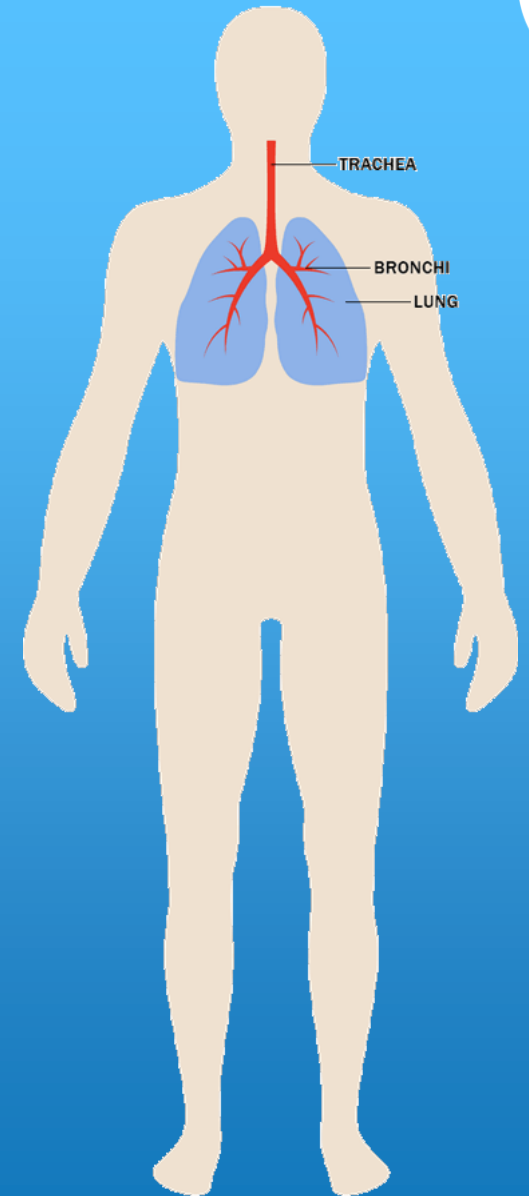
Physical Affects of Stress: Musculoskeletal

- Muscle tension
- Tension headaches
- Muscle pain
- Lower back pain
- Muscle atrophy (wastage)
- Joint pain and inflammation



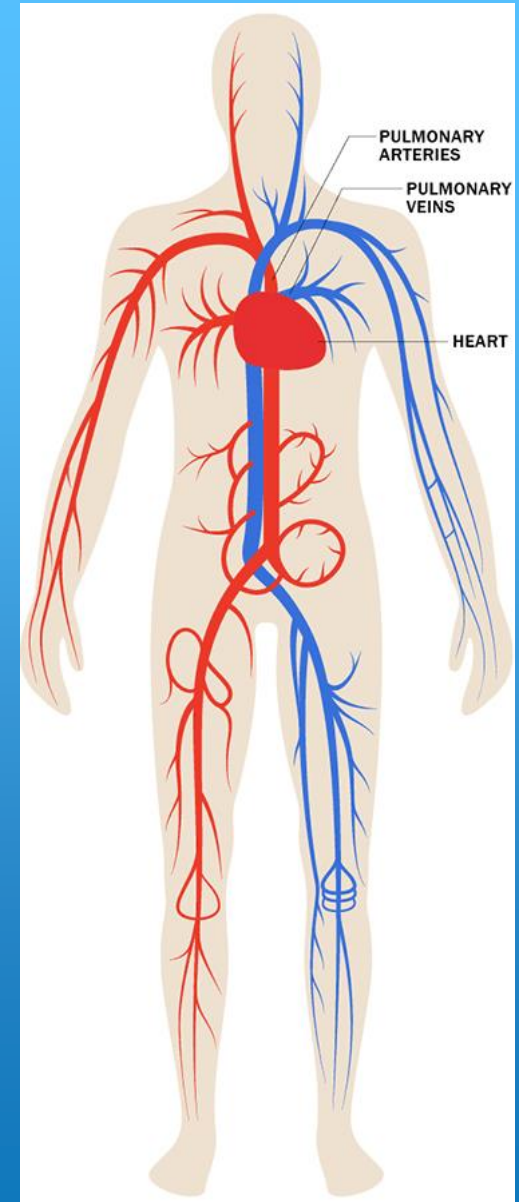
Physical Affects of Stress: Respiratory

- Stress & strong emotions can cause constriction of the airway between nose and lungs
- Shortness of breath, rapid breathing
- Psychological stressors exacerbate existing breathing problems
- Acute stress can trigger asthma attacks
- Rapid breathing/Hyperventilation can trigger panic attacks



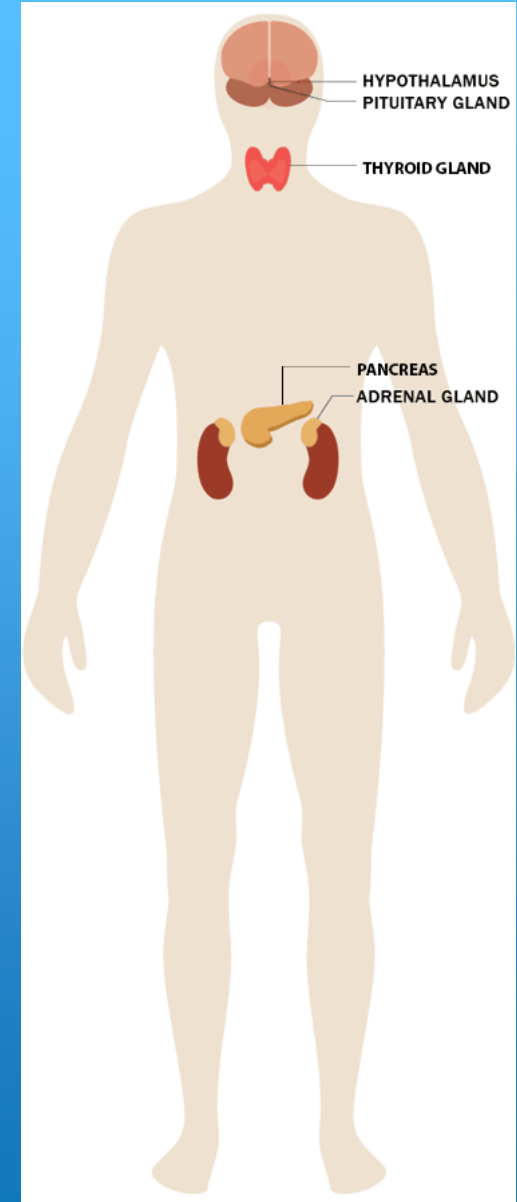
Physical Affects of Stress: Cardiovascular

- Acute Stress - Increased heart rate, respiration & blood pressure - Short term
- Chronic Stress - hypertension & increased risk of heart attack or stroke
- Both can lead to inflammation of the circulatory system, particularly in the coronary arteries due to prolonged exposure to Stress Hormones



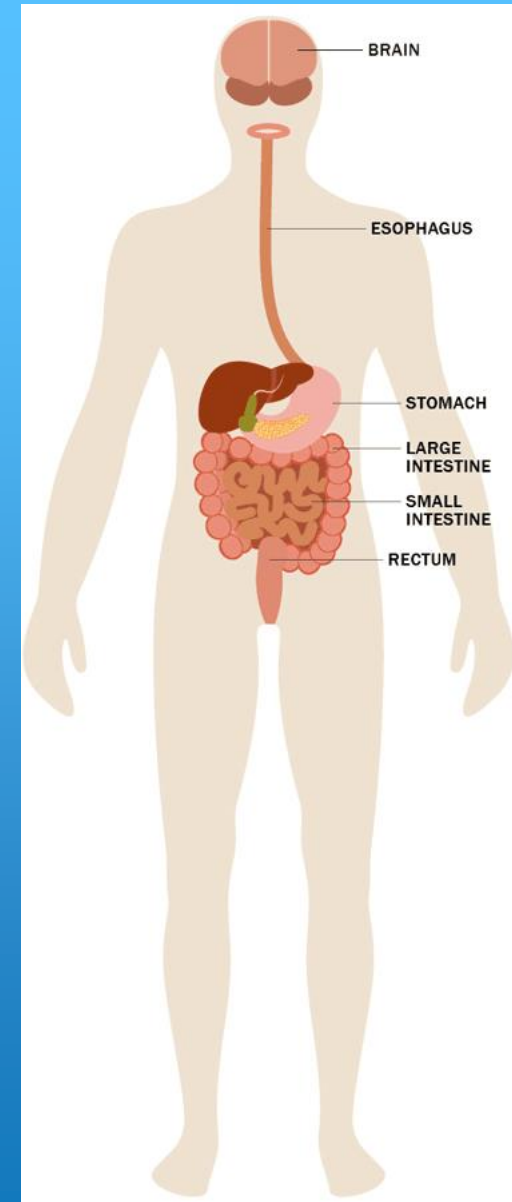
Physical Affects of Stress: Endocrine

- Hypothalamus-Pituitary-Adrenal Axis (HPA) activation to initiate endocrine stress response
- Release of Glucocorticoids - Stress Hormones
- Chronic stress affects immune system and HPA Axis communication
- Chronically impaired communication can lead to - chronic fatigue, metabolic disorders (obesity, diabetes) depression and immune disorders



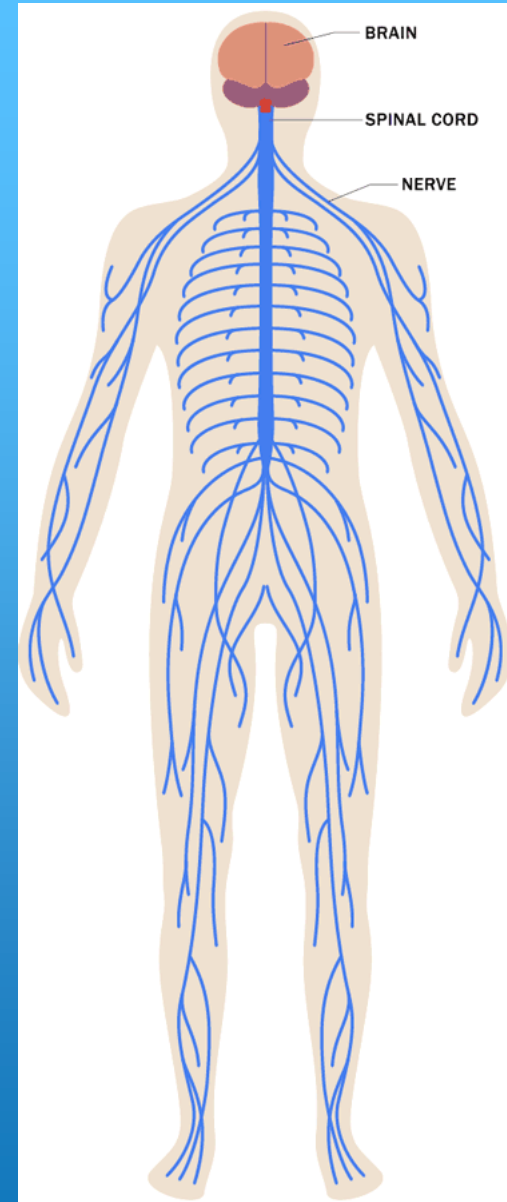
Physical Affects of Stress Gastrointestinal

- Interferes with gut-brain communication
- Changes gut bacteria which affects mood
- Acid reflux, heart burn, Oesophageal spasms
- Burping, gassiness, bloating, IBS, IBD
- Gut nerves more sensitive
- Changes in bowel movements



Physical Affects of Stress: Nervous

- Sympathetic Nervous System Activation (SNS) - Fight, Flight, Freeze, Fawn
- Adrenaline (Epinephrine) & Cortisol Release
- Increase heart rate, respiration and blood pressure
- Chronic stress affects all bodily systems through the nervous system



Psychological Affects of Stress

Cognitive Signs of Stress:

- Mental slowness
- Confusion
- General negative attitudes and thoughts
- Constant worrying
- Racing mind
- Difficulty concentrating
- Forgetfulness
- Reduced ability for logical thought & processing
- Feeling overwhelmed by life
- Unable to problem solve

Emotional Signs of Stress:

- Erratic mood swings
- Loss of sense of humour
- Frustration
- Jumpy, overexcited
- Feeling overworked
- Feeling overwhelmed
- Sense of helplessness
- Feeling lost, adrift
- Apathy

Behavioural Signs of Stress:

- Reduced contact with family & friends
- Poor work relations
- Poor work performance
- Loneliness
- Loss of libido
- Self isolating
- Loss of interest in hobbies, sports and other activities etc



“Your subjective experience carries more power than your objective situation.”



**“Your belief carries more power
than your reality.”**

PART 2: FATIGUE

Definition of Fatigue

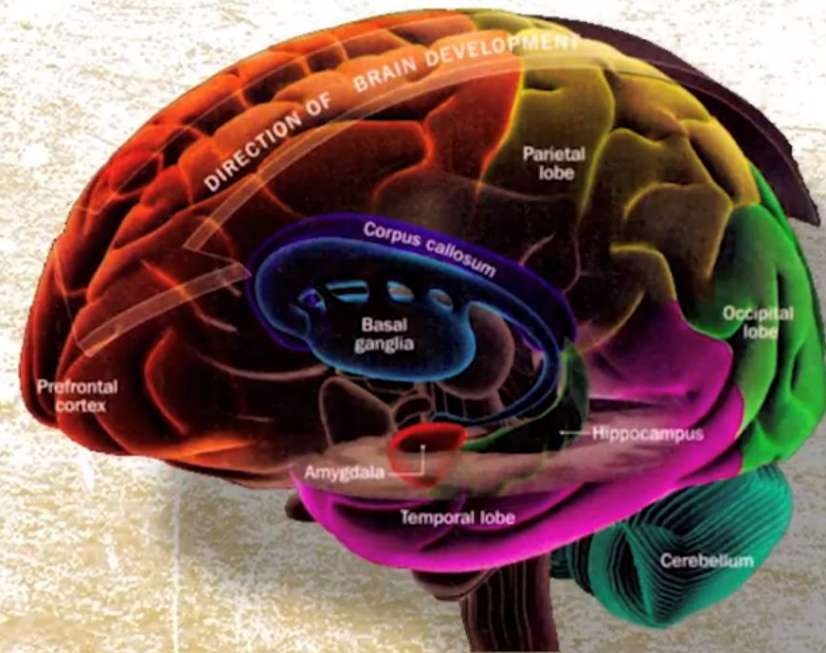
A physiological state of reduced mental or physical capability, which may develop as a result of sleep loss or extended wakefulness, disrupted circadian rhythm or increased workload.

- A weariness caused by exertion; exhaustion
- To tire or make weary by physical and/or mental exertion
- To lose so much strength or energy that one becomes tired, weary, feeble or exhausted
- To undergo the process of fatigue, to fail as a result of fatigue

Conscious

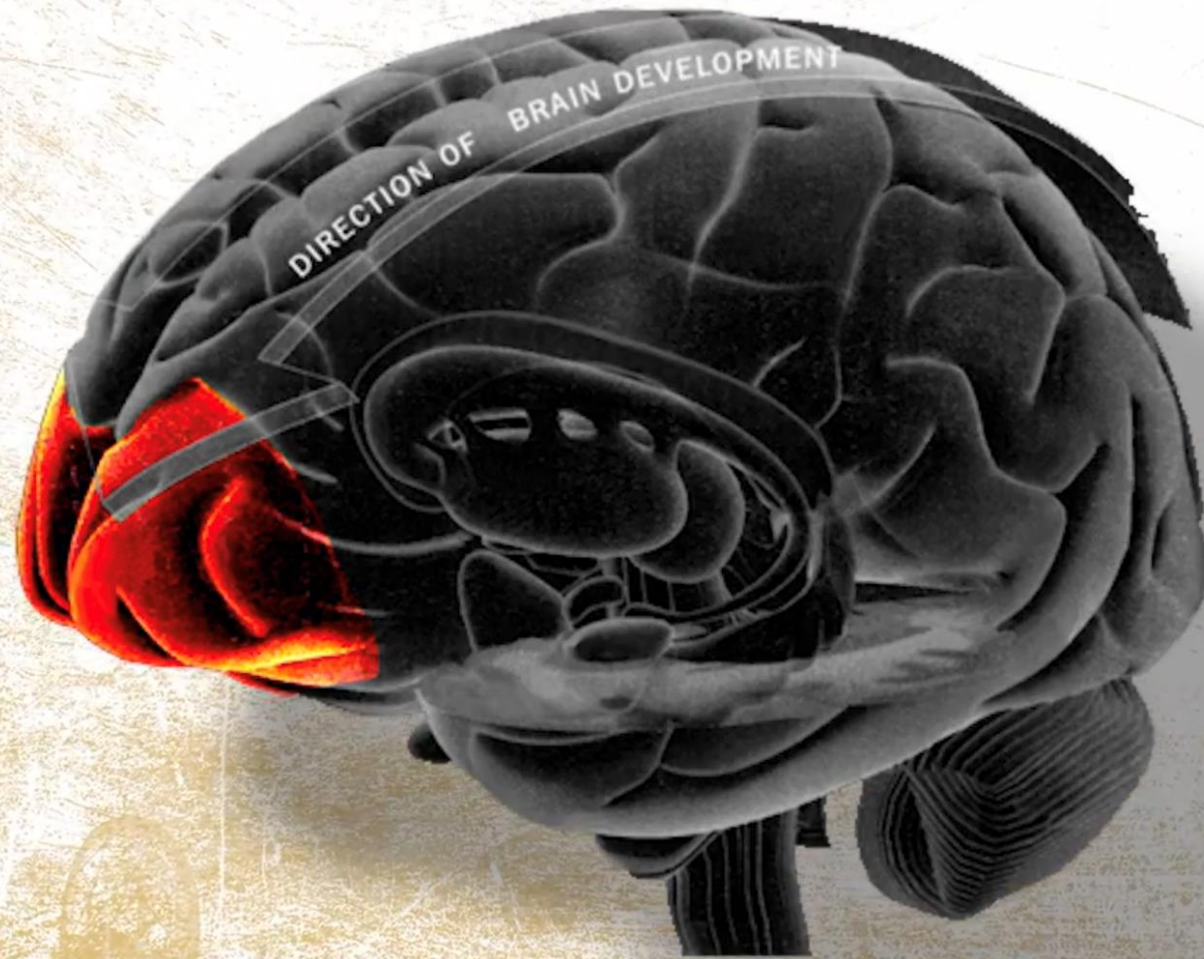


Subconscious



Conscious

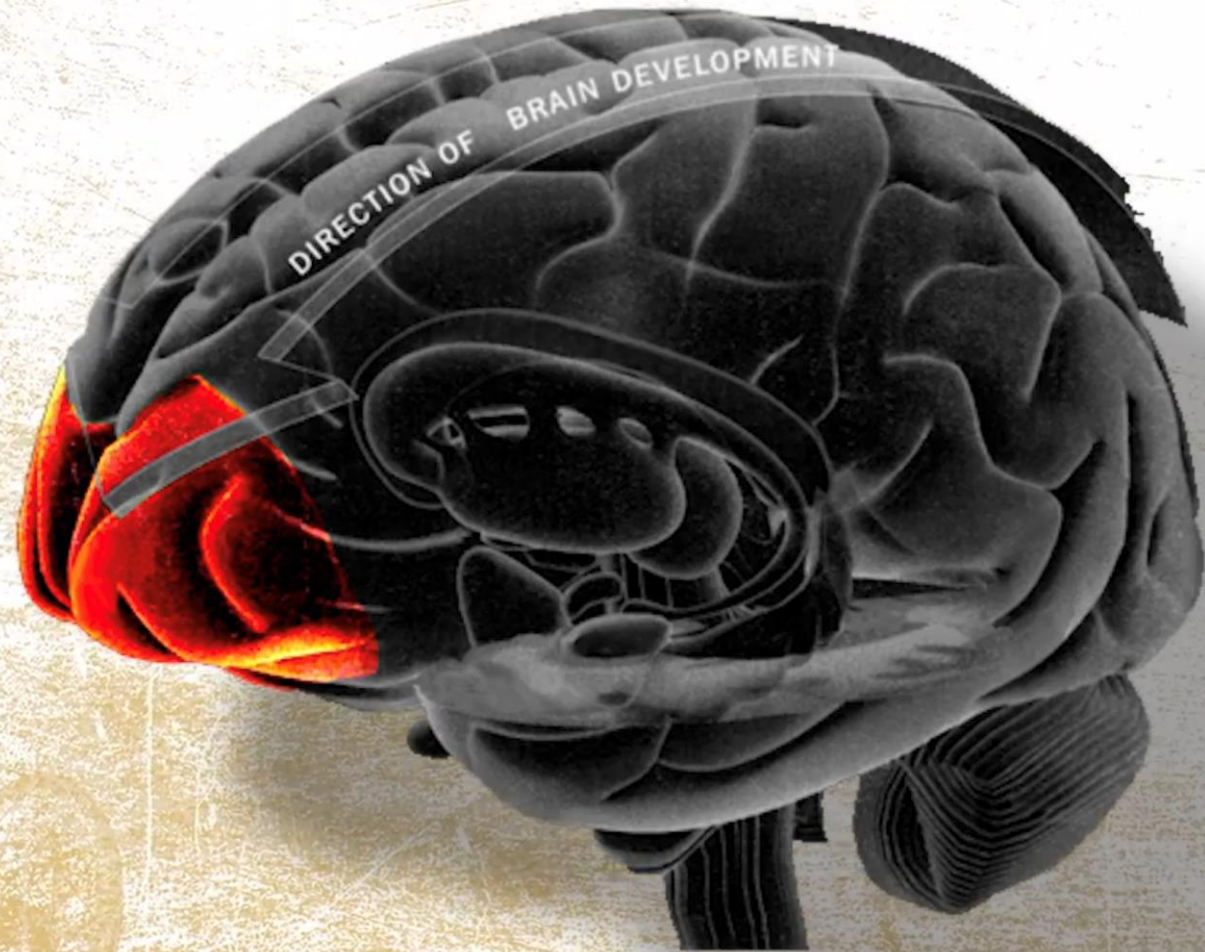
**Prefrontal
Cortex**



Conscious

Wishes,
Desires,
Aspirations

Positive
Thinking

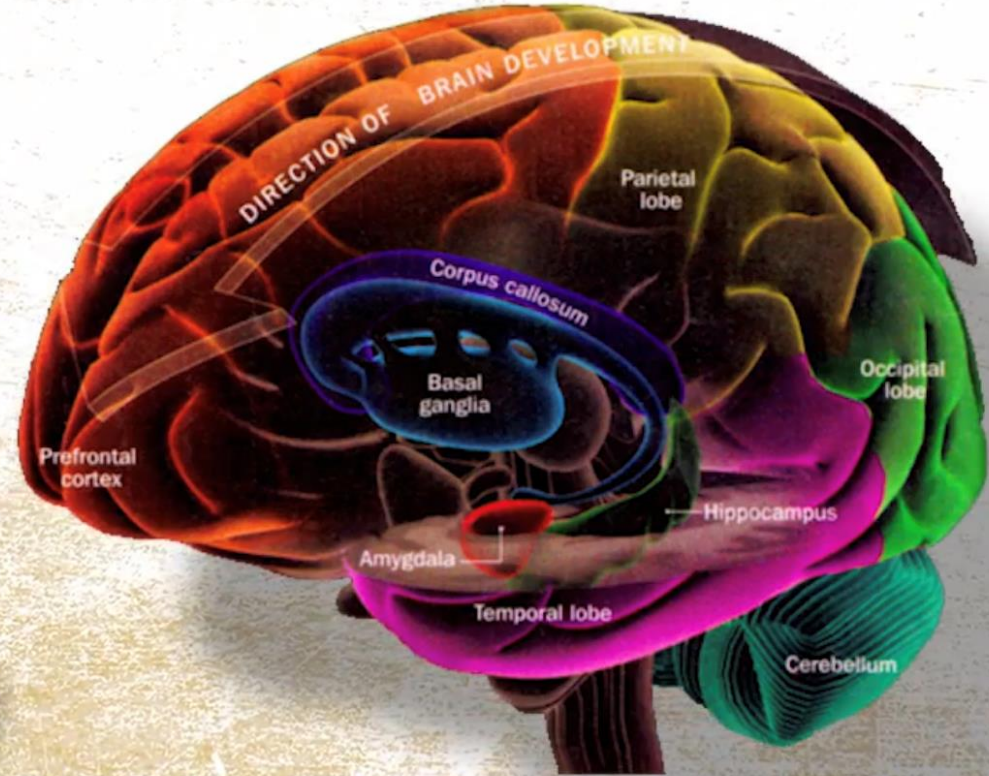


**Record-Playback
Mechanism**

Habitual

**Instincts, Experiences
Acquired Behavior-Belief**

Subconscious



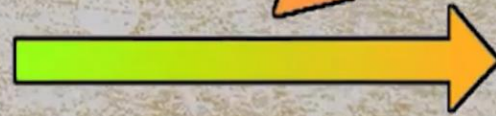
Signal 90% Disease

10% Disease

Protein

(Dis-ease)

Behavior



Psychological Affects of Fatigue

Cognitive Signs of Stress

Include:

- PSYCHOSIS

Emotional Signs of Stress

Include:

- NEUROSIS

Behavioural Signs of Stress

Include:

- PSYCHOSIS/NEUROSIS

Acute & Chronic Stress Reaction, Physical & Psychological Breakdown, Illness & Disease

Fatigue Management Strategies

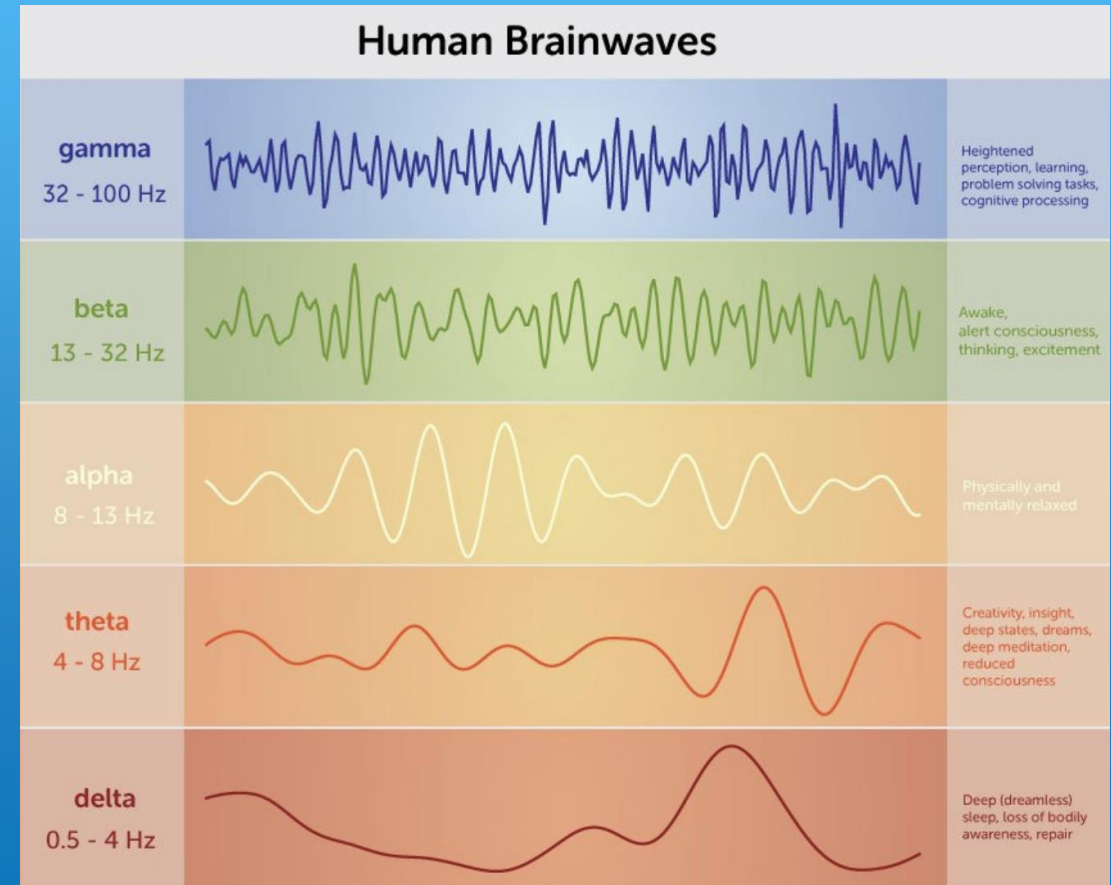
- Education
- Policy
- Shift Design and Rostering
- Work Environment Changes
- Adequate Staffing
- Worker Consultations
- Observation and Monitoring



PART 3:
Methods to Manage Stress
& Prevent Fatigue

Part 3: Methods to Manage Stress & Prevent Fatigue

- Psychological & Emotional Regulation
 - Brain Frequency & How this Effects Thoughts, Mood and Behaviour



Part 3: Methods to Manage Stress & Prevent Fatigue

- Psychological & Emotional Regulation
 - Mindfulness - Present State Awareness





Part 3: Methods to Manage Stress & Prevent Fatigue

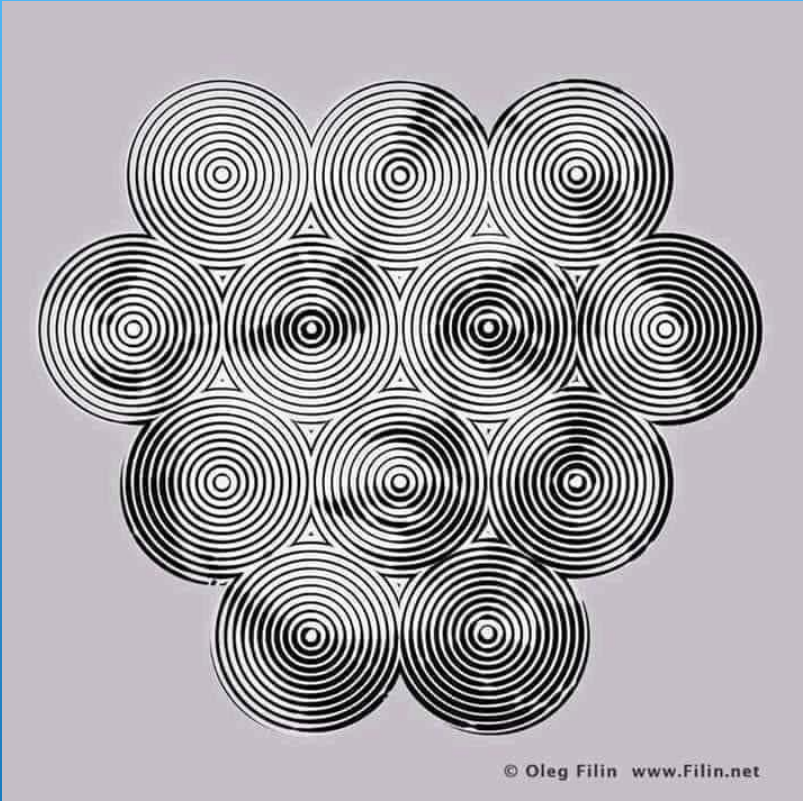
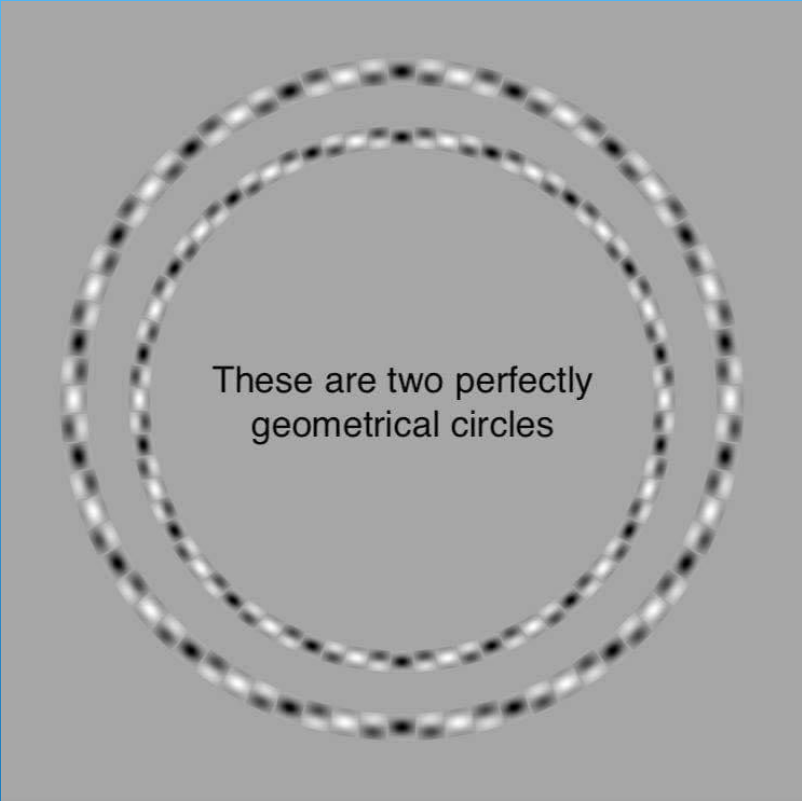
- Psychological & Emotional Regulation

Shift Perspective

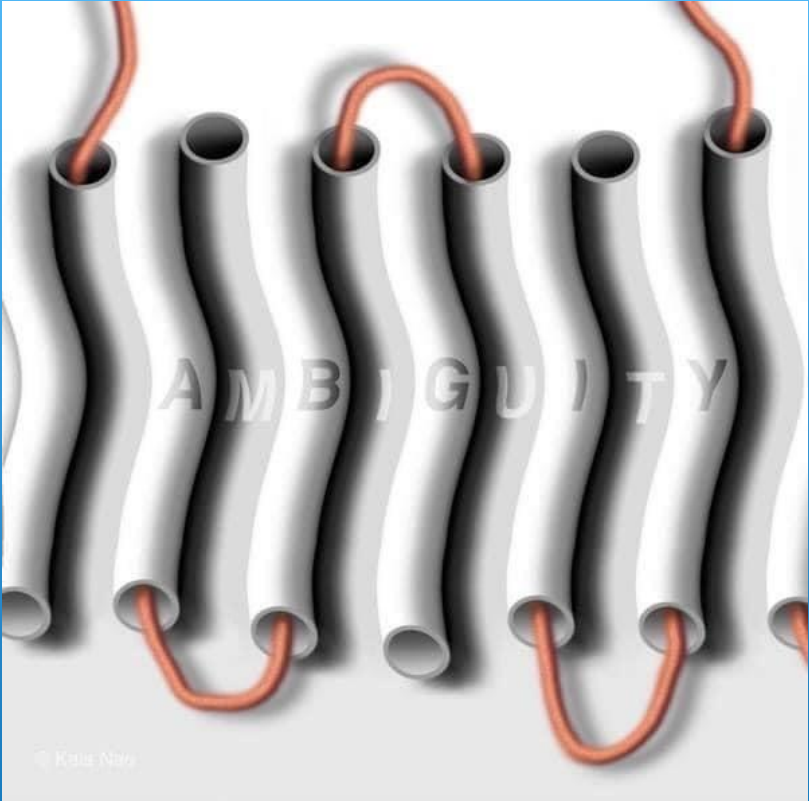
What We Think, We Believe - What We Believe We Become

The images on the next few slides will challenge your perspective

Part 3: Shift Perspectives



Part 3: Shift Perspectives





Questions, Thoughts, Ideas?