

Concept of stress can be approached from three different perspectives

- (i) Stimulus: stress is seen as an external event / stimulus. Focus on identifying & studying the stressors - the specific events, conditions or situations that have the potential to induce stress. Stressors can be physical, psychological or social in nature. The emphasis is on understanding how these stressors impact individuals & their well being.
- (ii) Response: Stress is considered as response to stressor. Researchers investigate the physical & psychological reac's / strains that individuals experience as a result of exposure to stressors.  
physiological changes → ↑ heart rate, ↑ cortisol levels  
emotional rxns → anxiety, frustration  
behavioral changes → avoidance, coping strategies.
- (iii) Process: dynamic process involving ongoing interactions and adjustments between an individual & their env. This acknowledges that stress is not a one-time event but rather a continuous, evolving experience.  
transac": interac" & adjustment

Definition of Stress: Stress is the condition that results when person-environment transactions lead to a perceived discrepancy between the demands of a situation and the resources of the person's biological, psychological & social systems.

### Appraisals:

Cognitive appraisal is a mental process by which people assess two factors

- (i) whether a demand threatens their physical / psychological well being. (primary appraisal)
- (ii) resources available for meeting the demand. (secondary appraisal)

Primary appraisal: It produces one of three judgements

- Inrelevant: In some cases, individuals may appraise a situation as irrelevant i.e. it has no significant impact on their well being ⇒ unlikely to induce stress.
- Good: A situation is appraised as good, when it is seen as beneficial or positive & is unlikely to result in stress
- Stressful: A stressful appraisal occurs when a person perceives a demand or situation as potentially harmful, threatening or challenging. Stage where stress begins to manifest

## Secondary Appraisal:

↳ takes place only when a situation is appraised as stressful during primary appraisal.

The assessment includes:

- Harm/Loss: amt of damage that has already occurred
- Threat ~~future harm~~: expectation of future harm / negative consequences resulting from the situation.
- Challenge: opportunity to achieve growth, mastery or profit by using more than routine resources to meet a demand.

## Factors influencing cognitive appraisal:

Whether a person appraises a situation as stressful depends on a combination of individual and situational factors.

Individual factors: intellectual, motivation, personality characteristics  
Self esteem and Belief system.

Situational factors: strong demands, imminence, undesirability, major life transitions, timing in the life span

Stressors produce strain.

In emergency situations or when faced with acute stressors, the body often initiates a physiological response known as fight or flight rxn.

This response prepares the individual to either confront the threat (fight) or escape from it (flight).

## General Adaptation Syndrome (GAS)

⇒ describes the body's response to stressors.

⇒ consists of three stages:

- Alarm stage: body reacts to stressor by mobilizing its resources
- Resistance stage: if the stressor persists, body enters resistance stage where it attempts to cope with the ongoing stress
- Exhaustion stage: if the stress continues for an extended period, the body enters exhaustion stage, where its resources are depleted and it becomes susceptible to various health problems.



## Diseases of Adaptation:

Seyle suggested that prolonged exposure to high levels of stress can make individuals vulnerable to diseases of adaptation. These are simply health problems that can result from the body's attempt to adapt to chronic stress.

Eg: ulcers, high blood pressure.

## Allostatic Load:

- ⇒ cumulative wear & tear on the body ~~from~~ resulting from ongoing or repeated stress responses (overall total of physiological ~~run~~ to all stressors)
- ⇒ better than the magnitude of the response to any single stressor.
- ⇒ Factor affecting allostatic load:
  - exposure to stressors: How often an individual is exposed to stressors
  - Reactivity: How strongly an individual's body reacts to stressors
  - Recovery: How effectively an individual's body returns to the state of equilibrium after stress.
  - Restraint: activities like sleep, nutrition, exercise & "relax" techniques that help body recover from the effects of stress.

## psychosocial factors linked to stress:

- ⇒ impair cognitive functioning
- ⇒ reduce people's helping behaviour
- ⇒ increase their aggressiveness
- ⇒ Associated emotions like fear, anxiety, stress & depression, anger.

## Sources of Stress:

- Internal factors: when they are ill / experiencing an emotional turmoil
- Family dynamics: marital conflicts, serious illnesses or death of a family member
- Caregiving responsibilities: responsible for children / elderly relatives.
- Parenting: child with a difficult temperament can be stressful for parents.
- Community & Society: job related stress, environmental conditions, qualities of neighbourhood & the experience of discrimination.

## Measuring Stress:

Researchers employ various methods to measure stress, like

- physiological assessments (e.g. BP, heart rate)
- biochemical analyses (e.g. cortisol & catecholamine levels in blood or urine)
- surveys that gauge individual's experiences of life events, daily hassles & chronic stressors.

## Psychosocial factors that modify the impact of stress:

⇒ Social support: comfort, caring, ~~set~~ esteem & help a person actually receives or simply perceives as available from others.

four types of support.

- emotional & esteem
- tangible or instrumental: help with tasks, financial aid.
- informational: providing advice, guidance or inform<sup>n</sup>.
- companionship: simply being present and spending time with someone

⇒ personal control: includes belief about one's locus of control i.e., whether control is internal or external to the person and self efficacy.

acquiring personal control: develop personal control through their experiences both successes and failures.

personal control & capability of managing stress.

learned helplessness: a situation where individuals believe they have no control over their circumstances, even when they do.

Attribution: cognitive process where individuals assign causes or reasons to events in their lives.

⇒ Hardiness and personality traits: Hardiness is a personality trait characterized by a sense of commitment, control and challenge.

five factor model of personality can help to organize the growing list of personality traits that modify stress.

(Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism).



⇒ people's tendency towards either Type A or Type B behaviour:

- Type A behaviour: competitive achievement orientation  
time urgency  
anger / hostility  
vigorous / controlling vocal style.

Compared with Type Bs, Type A individuals respond more quickly and strongly ~~with~~<sup>to</sup> stressors. Anger / hostility is the component of this pattern that is most closely associated with the development of coronary heart disease (CHD) and hypertension.

### Effects of chronic stress:

- Health-compromising behaviours: chronic stress can lead individuals to engage in health compromising behaviours as a way to cope with stress.  
Eg: ↑ alcohol & cigarette use  
poor dietary choices.  
health issues caused include cardiovascular problems & compromised immune function
- Physiological Effects: Chronic stress triggers physiological responses in the body, including the release of stress-related hormones like catecholamines (e.g. adrenaline) and corticosteroids (e.g. cortisol).  
prolonged exposure to these hormones ~~can~~ harm the heart & blood vessels, leading to hypertension & CHD (coronary heart disease)
- physical effect of stress ⇒ impair healing of wounds
- psychoneuroimmunology focuses on how psychosocial processes and the nervous, endocrine and immune systems are interrelated.
- Stress → ulcers, inflammatory bowel disease, irritable bowel syndrome, asthma & tension-type & migraine headache.  
hypertension, CHD and may also affect cancer.

# Physiological Response to Stress (Cannon (1932))

## Autonomic Nervous System

Sympathetic nervous system (active in conditions of stress)

(person is calm & relaxed) parasympathetic nervous system

↓  
triggers discharge of two hormones called adrenaline & noradrenaline

↓  
enters bloodstream & circulate to all the parts of the body.

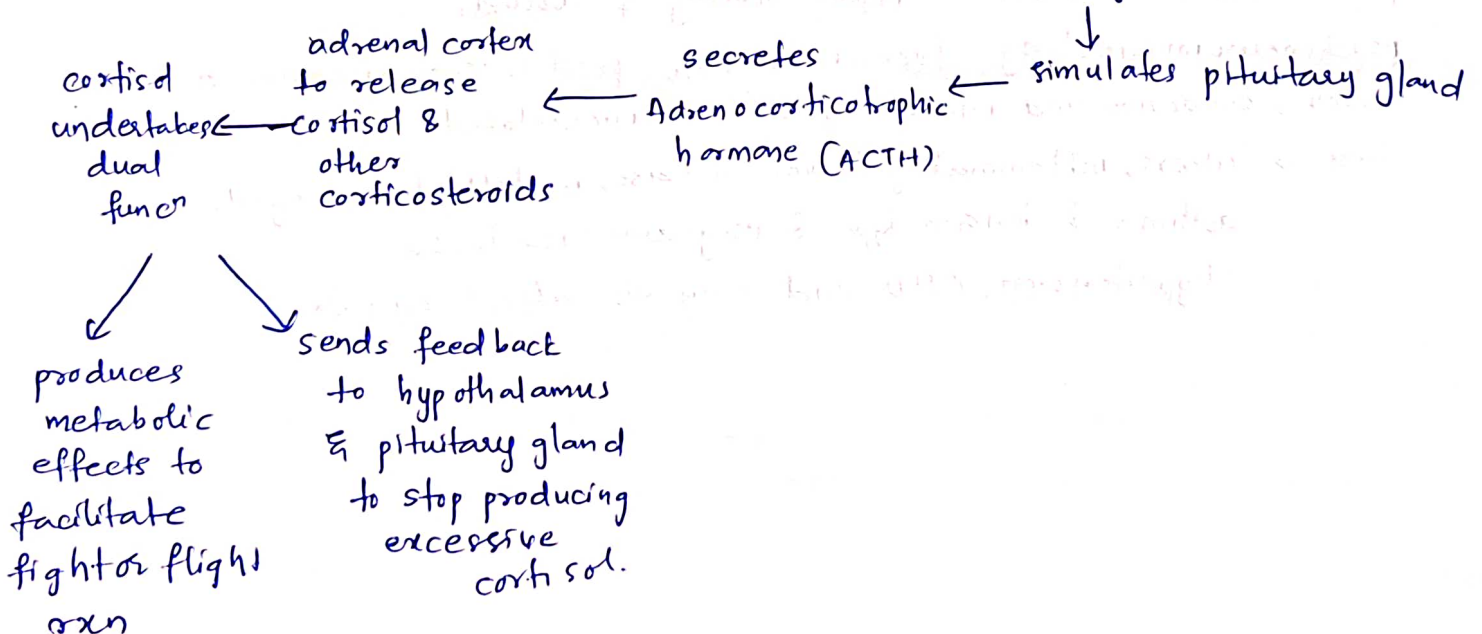
Adrenaline → reaches liver → mobilise glucose into blood → supplies extra energy  
↓  
heart beat faster

↓  
constrict peripheral blood vessel → increase in the blood pressure

our body's resources are mobilised in two ways:

- (i) activation of the sympathetic nervous system
- (ii) anterior pituitary gland.

stress → ↑ activity in the limbic system → activates hypothalamus to secrete corticotrophin releasing hormone (CRH)



## Sources of stress :

- Environmental stress (Uncomfortable physical environments)
- Change-Induced stress (major life changes, include +ve ones)
- Personality related stress (low self esteem, fear of failure/judgement)
- Interpersonal issues (Close relationships & emotional attachments)
- Stress caused by system values (families, workplaces, educational institutions)
- Competition induced stress (among students)
- Stress in public offices (among colleagues)

## Coping Styles & Strategies

↓  
overall disposition of an individual in responding to stressful events

↓  
specific technique/approach used to deal with stress in a particular situation.

with age & experience → individuals develop a broader range of coping strategies

flexible Vs rigid coping styles

↓  
many coping strategies for various situations

↓  
relies on a limited set of strategies for different stressors

Proactive Vs avoidant coping styles.

↓  
confronting stress directly, planning ahead & taking preventive action

↓  
minimize or avoid dealing with the stressor

Five stages for proactive coping (Aspinwall & Taylor (1997))

- Resource accumulation
- recognition of potential stressors
- Initial appraisal
- Preliminary coping efforts
- Elimination & use of feedback