

# Stress Management Techniques in Curriculums of Health Programmes

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# Stress and its effects

- Stressors
- Stress (stress response): the body's reaction to changes that requires physical, mental, or physiological adjustment
- Benefits of stress
- Effects of prolonged stress
- Need to manage stress

# Sources of stress among students

- Most common sources of stress
  - high parental expectations
  - the vastness of the courses
  - dissatisfaction with the course or teaching methods
  - overcrowding (lecture halls, residential)
- Stresses in first year, 2-3 years; 4-6<sup>th</sup> years

# Prevalence

- Stress among medical students
- Suicidal ideation among medical students: 25%

(Kaggwa MM et al, Suicidal behaviours and associated factors among medical students in Africa: A systematic review and meta-analysis, Journal of Affective Disorders Reports, Volume 11, 2023)

- Suicide among health professions also reported to be high

Olfson M et al. Suicide risks of health care workers in the US. JAMA 2023 Sep 26; 330:1161. (<https://doi.org/10.1001/jama.2023.15787>. opens in new tab)

# Barriers to effective stress management

- Some traditional beliefs
  - Health practitioners need to be emotionally strong
  - Emotionally weak students should be taken out of the training programmes early
  - Help seeking is a weakness and often frowned upon
- Lack of appropriate services, confidentiality, stigma

# Curriculum of health programmes

- MB ChB common core curriculum (KMPDC)
- Content in behavioural sciences (University of Nairobi, Maseno University, Moi University) (pre-clinical years)
  - Timing (1<sup>st</sup> year)
- Psychiatry: 4<sup>th</sup> and 6<sup>th</sup> year
  - main emphasis on disorders of behaviour
  - Inadequate time during the rotation (six weeks/ two weeks)
  - Disconnect between what is learnt earlier regarding psychology, sociology and psychiatry

# Curriculum content

- Theories of stress (introductions in first year, 4<sup>th</sup> year)
  - Psychodynamic
  - Behavioural theories
  - Cognitive
- Management – derived from the above theories (4<sup>th</sup> - 6<sup>th</sup> years)

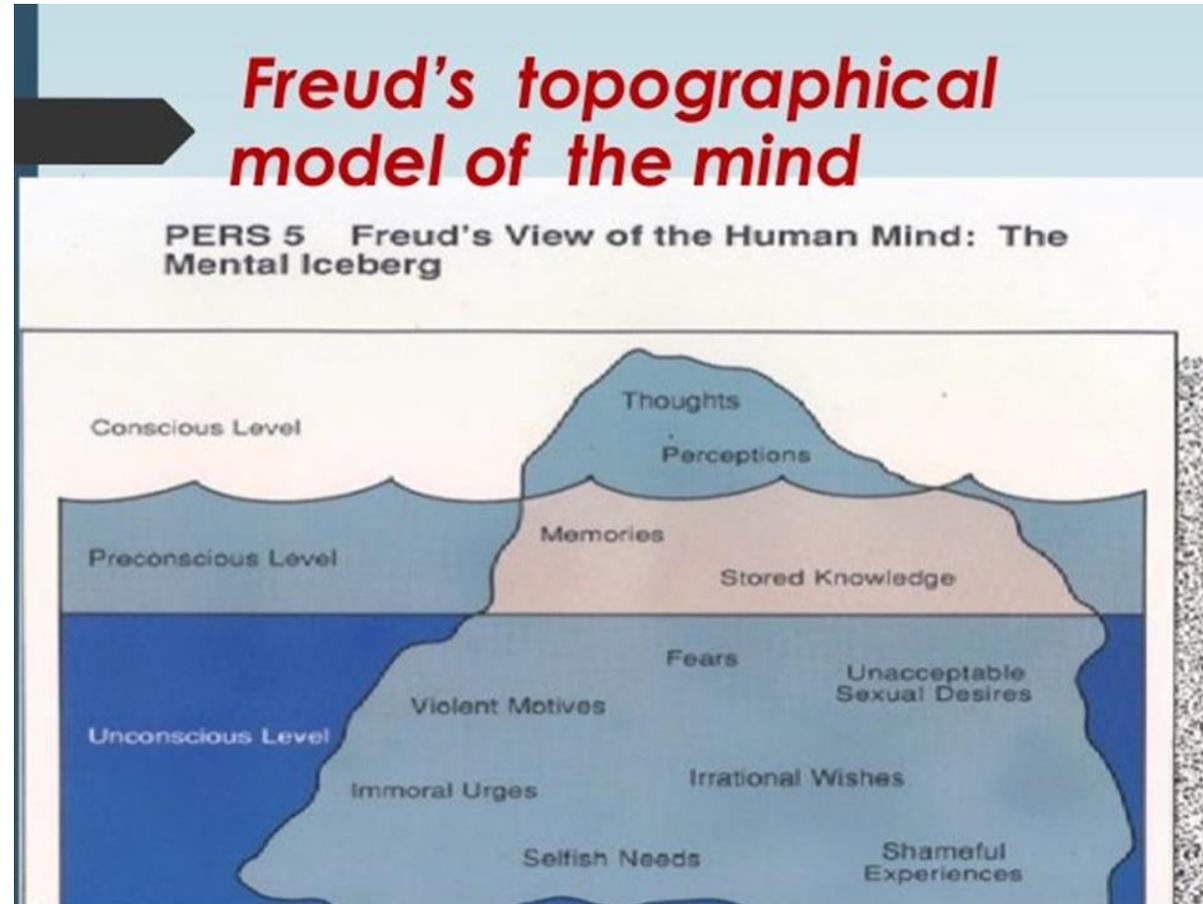
# Theories of stress

- Stress reaction as an adaptive mechanism
- Evolutionary theories of emotions
- Psychodynamic theories
  - Ego defence mechanisms
  - Psychotic, immature, neurotic and mature
- Behavioural theories (gradually move from animal experiments to clinical examples)
- Cognitive behaviour theories
  - Cognitive distortions
  - Cognitive triad
  - Mental Schemas

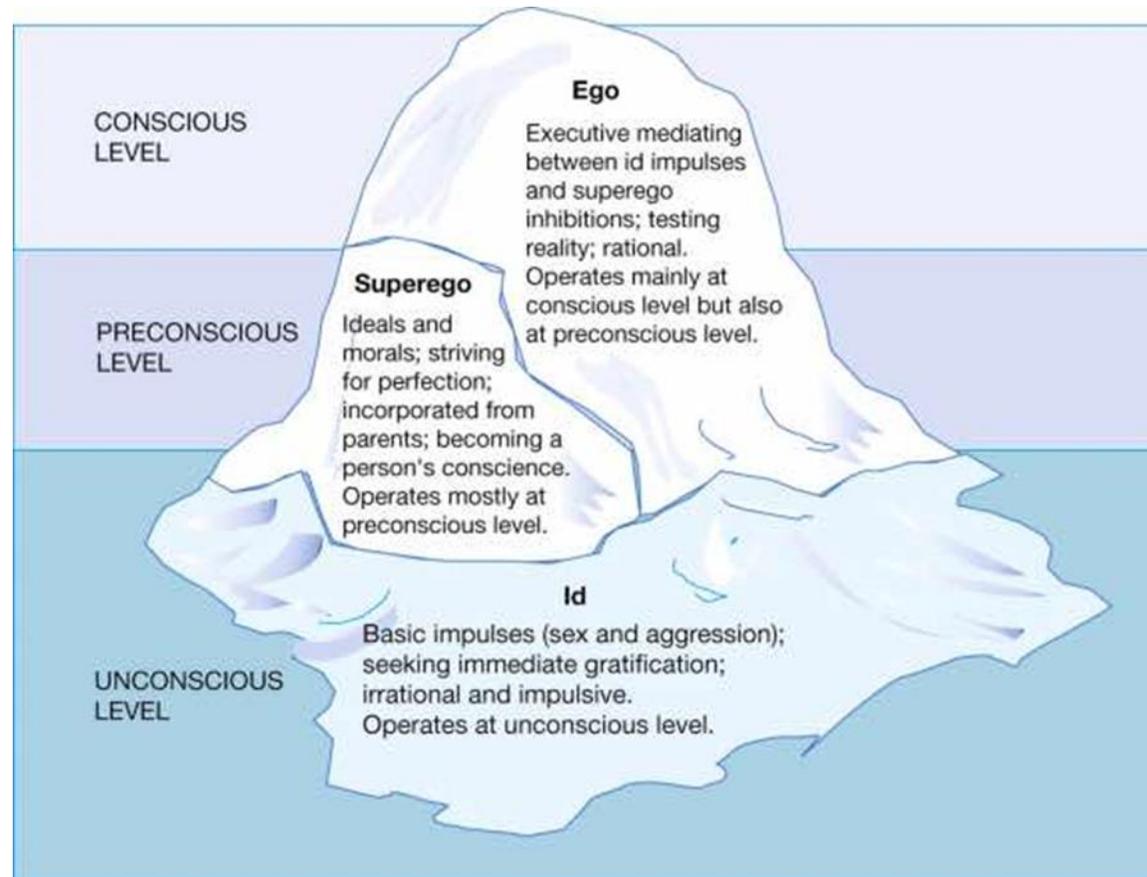
# Psychodynamic theories

- Freud's theories
  - psychosexual stages of development
  - Topographical theory (conscious, preconscious and unconscious) (1910)
  - Structural theory of the mind (id, ego and superego) (1923)

# Freud's topographical theory of the mind



# Freud's structural theory of the mind



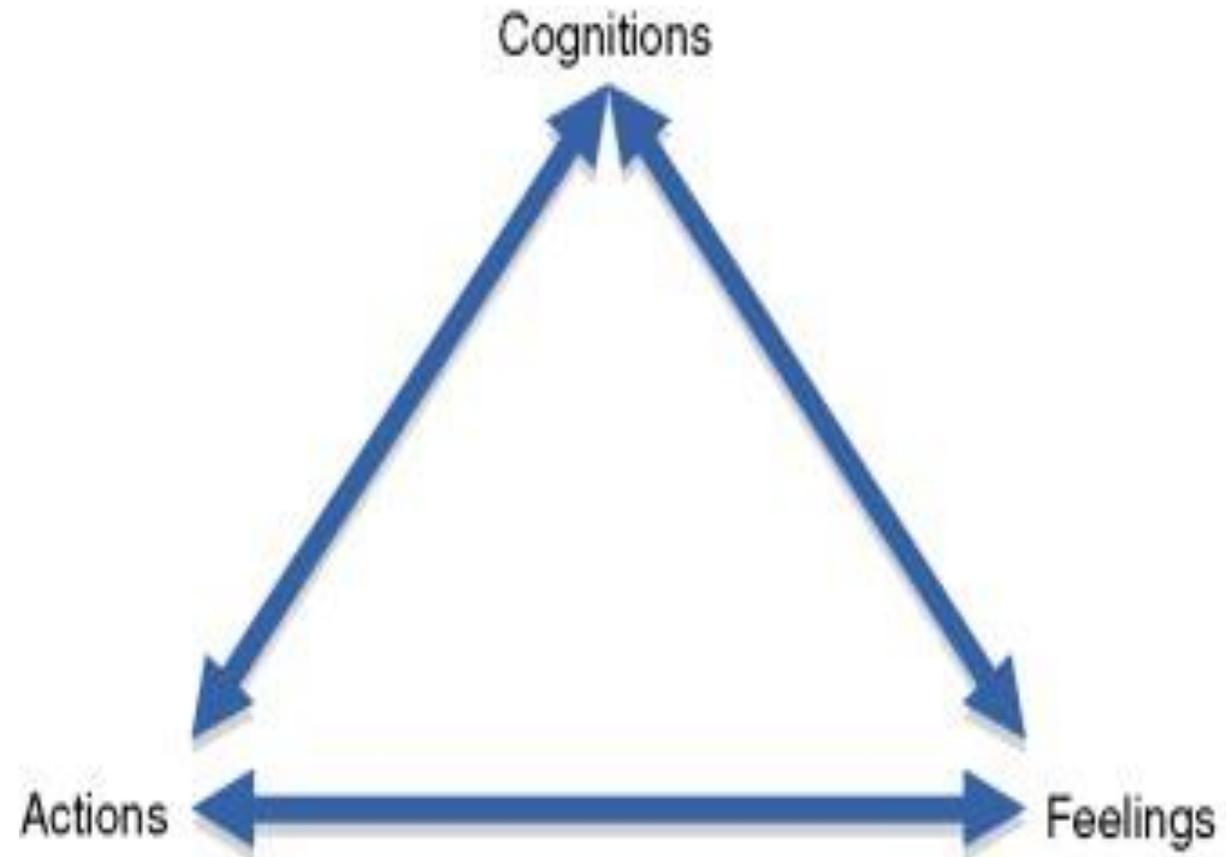
# Ego defense mechanisms

- 1st level: psychotic defenses (common in PTSD): delusional projection, psychotic denial, and psychotic distortion; common in young children, dreams, and psychosis.
- 2nd level: immature defenses (also common in PTSD): acting out; passive aggression (cutting oneself); autistic fantasy; dissociation (out-of-body experience during torture, multiple personalities common after childhood abuse); and projection (paranoia).
- 3rd level: intermediate (neurotic) defenses. keeps potentially threatening ideas, feelings, memories, wishes, or fears out of awareness. Examples are: displacement), isolation, repression, manifest clinically as phobias, compulsions, somatizations, and amnesias.
- 4th level: Mature: altruism, sublimation, suppression, and humor.

# Cognitive behaviour theories

- Cognitive triad
- Mental schemas
- Cognitive distortions
- Negative automatic thoughts
- Socratic questioning

# Cognitive triad



# Mental schemas

- a mental framework that helps individuals organize, process, and store information about their environment.
- essential for understanding the complexities of the world,
- Help in interpreting new experiences through the lens of pre-existing schemas.
- Can lead to prejudice

# COGNITIVE SCHEMA

A cognitive schema is a cognitive framework that organizes information about the world around us. It is a packet of information in our brain that categorizes objects and concepts into groups.

## EXPLANATION

Our brains like to group things based on common features. We call this a schema.

Having schema in our mind makes it easier for us to identify new objects and try to define them based on our existing knowledge of similar objects and concepts.

For example, you might see a raspberry and know it's a berry due to its similarities to strawberries and mulberries. Here, you're using your berry schema.

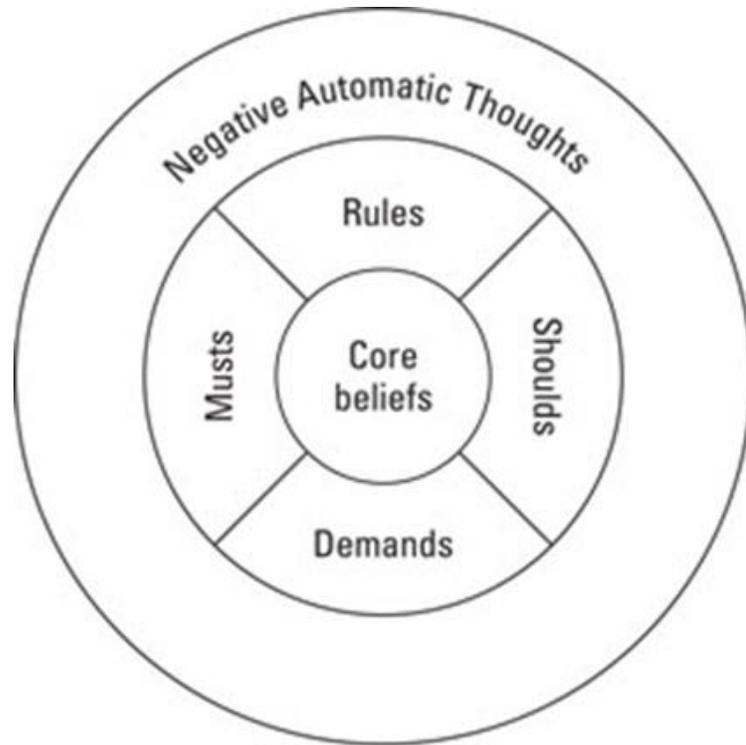
## EXAMPLES

- 1 **Object Schema:** Learning the difference between car and bus.
- 2 **Role schema:** Learned gender roles
- 3 **Event Schema:** Differentiating between seasons
- 4 **Self-Schema:** Learning about personal aptitudes
- 5 **Person Schema:** Learning about other people's personalities, roles, and preferences

# Cognitive distortions

- Tendencies or patterns of thinking or beliefs
- Usually false or inaccurate
- Have the potential to cause psychological damage
- Examples
  - Fortune telling
  - Mind reading
  - Catastrophising
  - Minimisation and magnification

# Negative automatic thoughts



Core beliefs dartboard



Beth's dartboard

# Stress management

- Assessment
- Investigate (biological, psychological, social)
- Check for co-morbidities (depression, substance use disorder)
- Psychological approaches
- Biological approaches

# Stress management techniques

- Cognitive Behaviour Therapy
- Cognitive strategies:
  - meditation
  - mindfulness practices
  - autogenic training, and
  - visualizations.
- Cognitive restructuring
- Socratic questioning

# Socratic questioning

Question type	Examples
Clarification	What do you mean when you say X? Could you explain that point further? Can you provide an example?
Challenging assumptions	Is there a different point of view? What assumptions are we making here? Are you saying that... ?
Evidence and reasoning	Can you provide an example that supports what you are saying? Can we validate that evidence? Do we have all the information we need?
Alternative viewpoints	Are there alternative viewpoints? How could someone else respond, and why?
Implications and consequences	How would this affect someone? What are the long-term implications of this?
Challenging the question	What do you think was important about that question? What would have been a better question to ask?

# Cognitive behavioural therapy for stress

- Relaxation
- Controlled breathing: 5, 6, 7;
- Diaphragmatic breathing
- Progressive muscle relaxation
- Exercise
- Extracurricular activities
- Keep a journal
- Recognise cognitive distortions (faulty thinking, negative thought patterns)
- Positive coping strategies
- Seek help

# Biological treatments

- Medications
- Antidepressants,
- Avoid prolonged use of benzodiazepines, sleeping tablets, propranolol

# Conclusions

- Behavioural sciences inadequately covered
- Teaching methods within the same college school not always harmonised
- Link between the theories and practice not strong
- Limited recreation spaces within the working areas or campus

# Recommendations

- Review of curriculum for appropriate content and timing of behavioural sciences
- Each school should adopt uniform or similar teaching methods across the years
- Increase student support for self-learning
- Development of multidisciplinary teaching to entrench good practices in interrelated topics such as doctor-patient relationships, communication skills and stress management
- The training sessions could be held as seminars with teachers from different disciplines and should incorporate lots of role plays and other forms of active learning
- Encourage students and healthcare staff to seek help
- University students' health to include a multidisciplinary team for ease of referral and consultation

Thank you