EXAM 2 REVIEW

Reminders

- Read the textbook:
  - https://assets.openstax.org/oscms-prodcms/media/documents/Psychology2e-WEB_0eRvAre.pdf
- You will have 75 minutes
- Thursday 10/28
- Starts at 11:10
- Bring your laptop and charger: it's on canvas
- Check out with me before you leave
- 50 MC

Consciousness

Studying Consciousness

Structuralist View	• Introspection • Bias
Behaviorist View	• Study behavior • Does Not study consciousness-->doesn't tell you exactly what is happening in the mind
Psychophysiology	• Studying physical responses • Measure physical • Study psychological • **Subjective report**

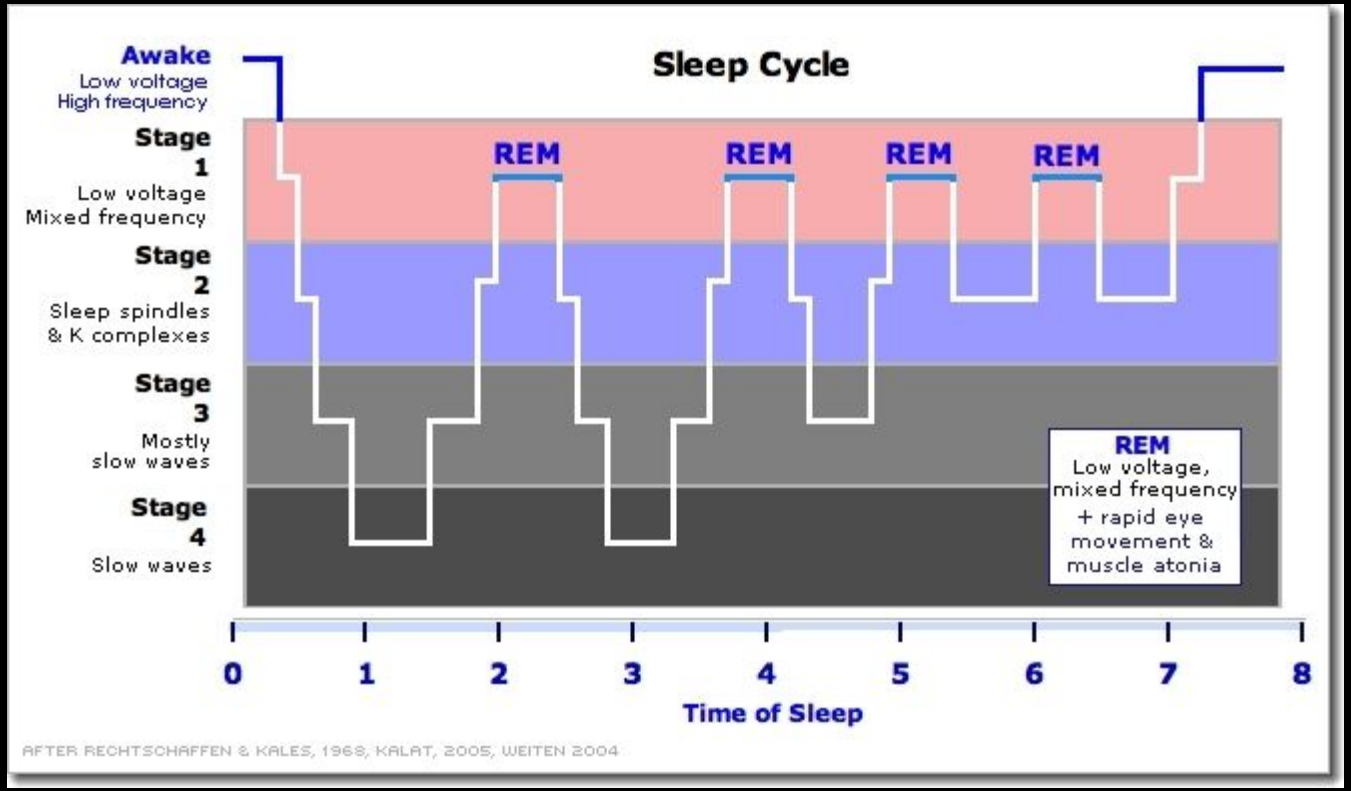
- Scientists use a combination of all of these

States of Consciousness

- Frame of mind
- Conscious
- Unconscious
- Internal
- External

Sleep Cycle

Stage 1	Lightest stage Hypnagogic =Falling into sleep
Stage 2	Deeper sleep Sleep spindles K complexes Heartbeat/ breathing slow, muscles relax
Stage 3	Deep sleep Sleepwalking/ talking
Stage 4	Deep sleep Very hard to wake someone up
REM	Rapid Eye Movement A lot when you're young Dream Longer stages the longer you sleep **REM Rebound**= making up missed rem sleep, suggests we need this **Paradoxical sleep**= sleep paralysis Genital arousal, Increased HR, Increased breathing


Sleep Cycle
Awake
Low voltage
High frequency
Stage 1
Low voltage
Mixed frequency
Stage 2
Sleep spindles
& K complexes
Stage 3
Mostly
slow waves
Stage 4
Slow waves
REM
REM
REM
REM
REM
Low voltage,
mixed frequency
+ rapid eye
movement &
muscle atonia
0
1
2
3
4
5
6
7
8
Time of Sleep
AFTER RECHTSCHAFFEN & KALES, 1968; KALAT, 2005; WEITEN 2004

Sleep Disorders

Insomnia=
habitual sleeplessness; inability to sleep.
Treatment: Use sleeping aid (sleeping pills)
common

Narcolepsy=
unexpectedly fall asleep
Fall asleep in the middle of conversations, while driving

Sleep Apnea=
not getting enough oxygen when sleeping
Causes: uvula gets really long
Also common

Sleepwalking=
walking around while asleep
Sleeper rises and wanders around
During NREM, Stage 3 or 4
Mainly children
As you get older, you grow out of it

Theories for the purpose of sleep

1

Restorative Theory=

- Purpose is to restore the body
- Restore body's neurotransmitters
- get rid of waste
- deep sleep (3 and 4)

2

Growth Theory=

- In children
- the pituitary gland releases growth-stimulating hormones during sleep

3

Memory Consolidation Theory/ Learning Theory=

- adequate sleep→ remember better what they learned that day.
- Sleep makes memory more permanent

4

Adaptive Non-Responding Theory=

- evolved sleep patterns to avoid predators
- sleeping when predators are most active

Attention

=How much mental work you can do

Automatically= didn't take any attention to do

Dichotic Listening

- measure attention & multi-tasking
- listen to two different things in each ear
- **Attended message**= what you are listening to in one ear
- **Unattended message**= What you are not supposed to listen to
- **shadowing**= listening to something you are hearing and saying the words as you hear them
  - Difficult
  - measure how many words they failed to say

Selective Attention

- =Selecting what you pay attention to when multiple stimuli are present

"Cocktail Party" Phenomenon

- channel of attention =what you focus on
  - ex) conversation
- Many stimuli
- Only have so much attention

- Divided Attention= multi-tasking

Drug States

1. Hypnosis

2. Meditation
    a. has a change in physiological patterns

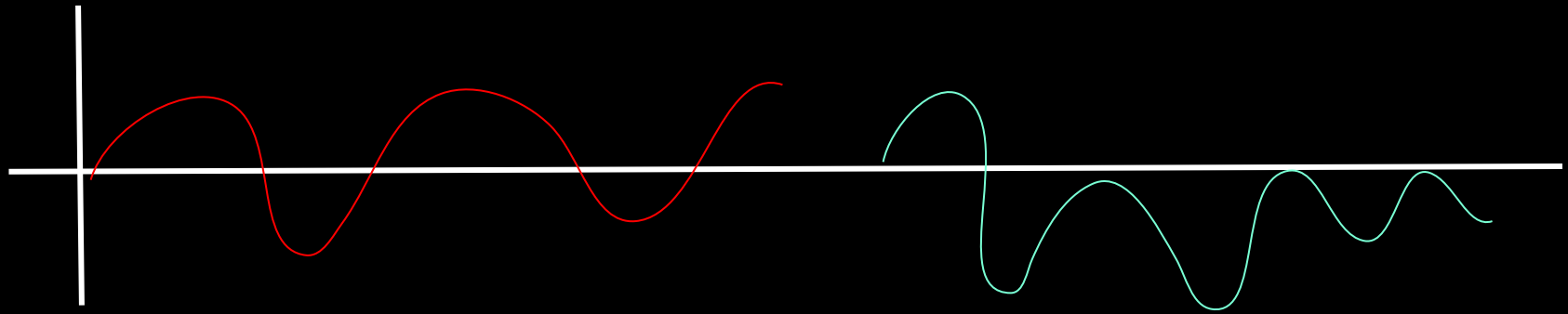
3. Near-death experiences
    a. many report similar experiences

4. Being on drugs/ addiction

Drug Stae: Addiction

Opponent Process Theory

- Addiction↠ pairing emotions with pleasure + withdrawal
- Needing a drug to reach baseline
- The more addictive a drug, the stronger and faster the affect



Psychoactive Drugs

- Affect CNS
- Alter thinking
- Alter perception
- Alter memory

Physical dependence

- **Addiction**- drug substitute for natural neurotransmitters

  Psychological dependence + tolerance + withdrawal
- **Tolerance**- needing more of the drug to feel the same effects
- **Withdrawal**- symptoms when you stop taking a drug

Psychological dependence

- = the belief that a drug is necessary to maintain an emotional/ psychological dependence

Psychoactive Drugs

Addictive

Stimulants	• Affect CNS • Affect Sympathetic Nervous system • More active, awake	Coke, Meth, Amphetamines, ADHD meds (Adderall), Caffeine, Nicotine
Depressants	• Slows CNS	Alcohol, Barbiturates, Sleeping pills, Valium, Narcotics (Opiates)
Hallucinogens	• Affect prefrontal cortex • Visual, auditory	LSD, MDMA, Psilocybin, Mecaline, PCP, Ketamine
Marijuana	• Many different effects	

<u>Narcotics</u>

- suppress pain
- Clinical pain killers
- Block receptors
- Poppy seeds
- ex) Morphine, opium, heroin, codeine, vicodin

Memory

Forgetting

=loss of learned info, can't retrieve info

"Organic" reasons
-Alzheimer's
-Substance abuse

Interference
-response competition
-contemplating other similar memories
Ex: Mixing up names

Retrieval failure
-Most forgetting
-Can't retrieve from long term memory

Repression
-Trauma emotional/ physical

Distortion
-Remembering the original memory but it is distorted
-false memories

Prospective memory failure
-Trying to remember to do something in the future but failing

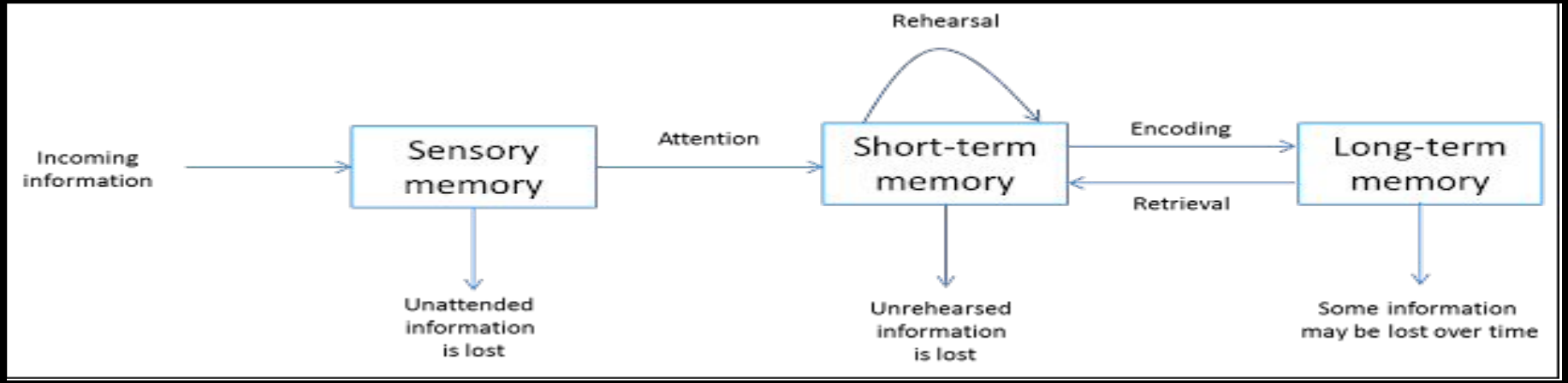
Forgetting

Forgetting= memory fails

Schacter's Seven Sins of Memory

Sin	Type	Description	Example
Transience	Forgetting	Accessibility of memory decreases over time	Forget events that occurred long ago
absentmindedness	Forgetting	Forgetting caused by lapses in attention	Forget where your phone is
Blocking	Forgetting	Accessibility of information is temporarily blocked	Tip of the tongue
Misattribution	Distortion	Source of memory is confused	Recalling a dream memory as a waking memory
Suggestibility	Distortion	False memories	Result from leading questions
Bias	Distortion	Memories distorted by current belief system	Align memories to current beliefs
Persistence	Intrusion	Inability to forget undesirable memories	Traumatic events

Modal Model



capacity= how much

Duration= how long

Sensory memory= sensory info, very short term

decay= losing information because a little time goes by

Short term memory=working memory, 20-30 seconds, Consciously Aware

Displacement decay= info leaving short term memory

Rehearsal= restating to remember it longer

Pattern recognition= paying attention to what you recognized, Use long term memory to make connection

encoding= transferring short term info into long-term memory, making memories

Long term memory= semi-permanent, not always aware

retrieval= becoming aware of long-term memory

Short term Memory

small capacity

Memory span test=hear a series of digits and you have to say them back correctly. What doesn't match up is probably what wasn't held in short term memory

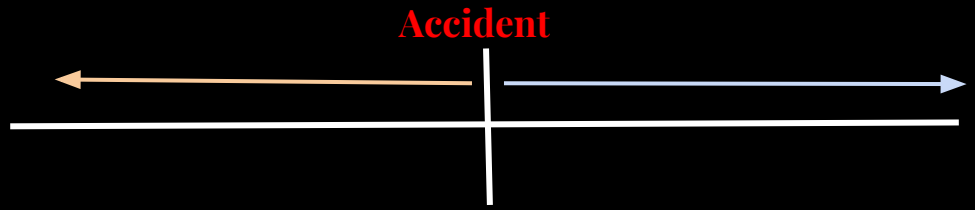
Chunks= meaningful unit of information
Ex: Group letters together to remember them better
Can hold about 7 things at once (5-9)

253674920

Vs

253 674 920

Long term Memory: Amnesia



physical and/or emotional trauma

Organic amnesia=physical injury
Psychogenic amnesia= traumatic emotional experience

Episodic memories=personal experience
- what, when where it
-Most fragile

Retrograde Amnesia
-affects memories that were formed before the onset of amnesia.
-The worse the trauma↠ the more you forget
-Can recover and get older memories back
-Older memories recovered first
-Episodic memories lost

Anterograde Amnesia
-a decreased ability to retain new information
-Can remember what happened before
-Long term memory AFTER accident is affected
-Can't learn new things
-Can be tricked into using memories of newly learned things:
Word fragments test
Memento Amnesia

Memory

separate systems

Conscious Memory (Explicit)=conscious long-term memory
easily and intentionally recalled and recited
people with amnesia cannot recall

Unconscious Memory (Implicit)= Things people don't try to remember, not able to consciously bring it into awareness
people with amnesia can recall
Automatic

Types of Memory

Procedural Memory	-how you do things -Motor movements -Muscles memory	Mostly Implicit	Learning how to cook pasta	
Episodic Memory	-things that happened to you -Life events -Autobiography	Explicit and Implicit -Fragile	Remembering your last family vacation	-One even to be encoded
Semantic Memory	-Facts Permanent Knowledge	Explicit and Implicit	Remembering this information for your exam	Encoded after many experiences

Faulty Memory

- **Misleading question**s= information is suggested in the question but isn't true
  - Causes **misinformation effect**

- **Eye-witness memory**= not very reliable, subject to false memories
  - court/criminal justice
  - Leading cause of wrongful convictions

- **Biased Photo Spread**= one person looks different

- **False memories**= a recollection that seems real in your mind but is fabricated
  - in part or in whole
  - What your falsely recalling fits what you are trying to recall
  - Meaning makes sense

Problem Solving

Point of Views

Gestalt:

- Insight
- Ah ha
- Unpredictable
- whole> parts
- Kohler
  - chimps

Associationist:

- behaviorism
- Trial-and-error
- Reinforcement and punishment
- Problem solving is learning
- parts>whole
- Thorndike
  - mouse in a maze

Types of Problem Solving

Reproductive Problem Solving

= using prior knowledge to solving a problem

Algorithm

- step by step solution
- following the rule
- don't deviate

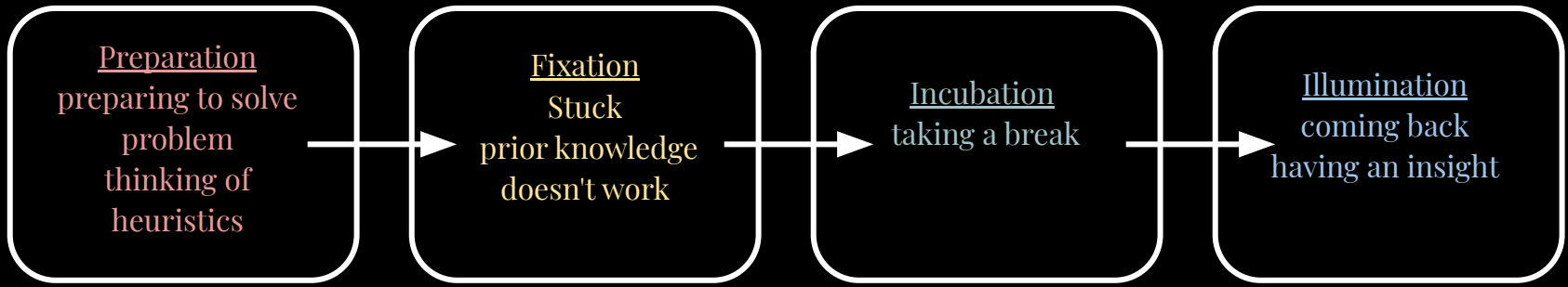
Heuristics

- "Rules of Thumb"
- Usually works, but not always
- What's generally done
- Shortcuts

Creativity

Creative Problem Solving

- **Creative Problem Solving** = making an original solution to a problem when prior knowledge doesn't work
  - New solution
  - Can't use reproductive problem solving
- **Insight problems**= solution appears suddenly, overcoming initial blocks
- **Stroop Effect** =the delay in reaction time between congruent and incongruent stimuli.



Motivation

Motivation

- Sources of energy arousal
- change in behavior potential
- Can lead to learning
- Directs behavior
- intrinsic= internal
- extrinsic= external

Motivation state:

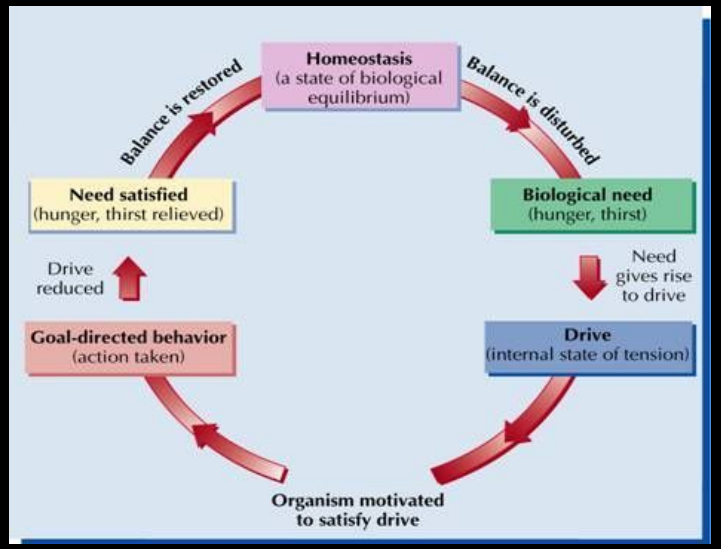
Changes rapidly
Hunger

Motivational Traits:

Personality
Take a long time to change
steady

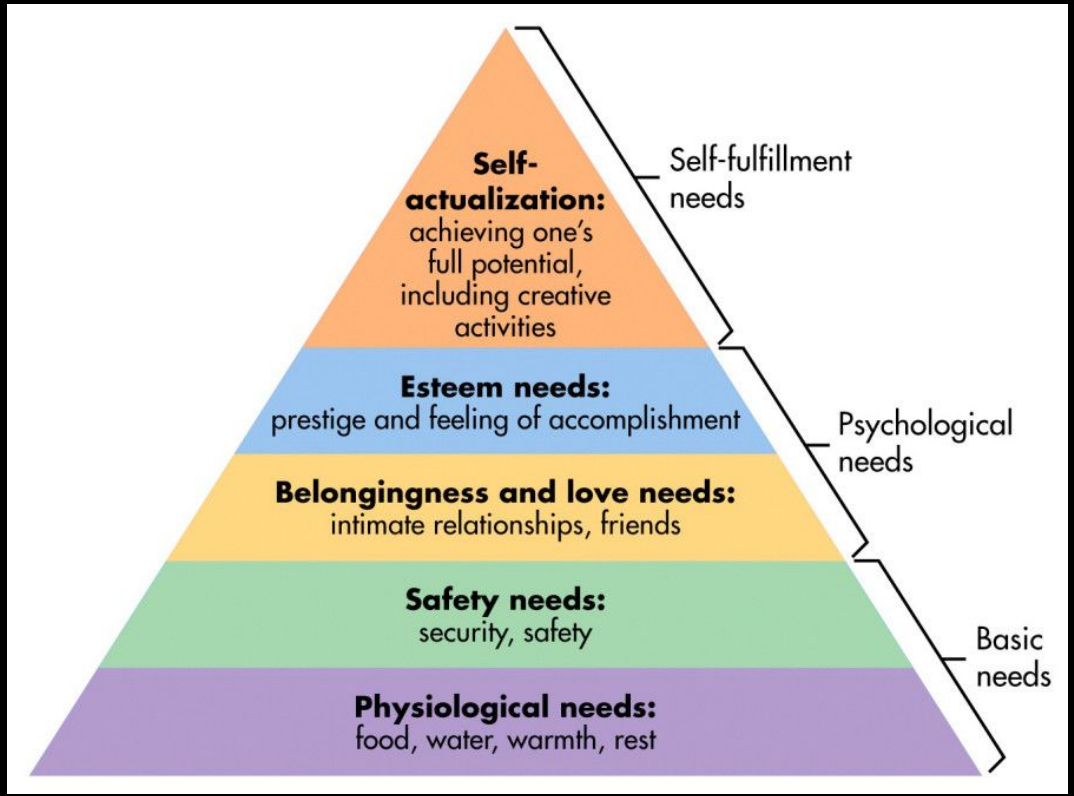
Drive Reduction Theory

- Hull
- Motivation=energy source
- Learning = directs behavior
- The goal of an organism is to reduce drive
- drive= a pool of motivational energy (arousal)
    - want to get rid of this
- Being deprived motivates
- Hunger
- **Consummatory behavior**= behavior to reduce drive



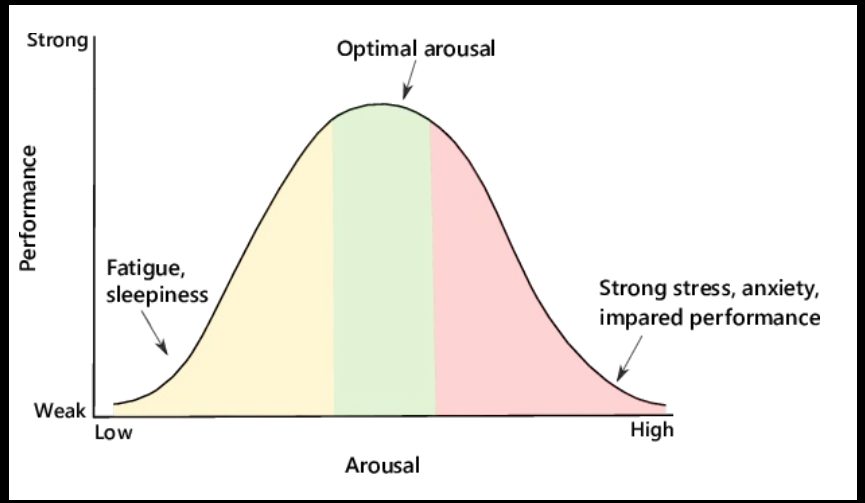
Maslow's Hierarchy of needs

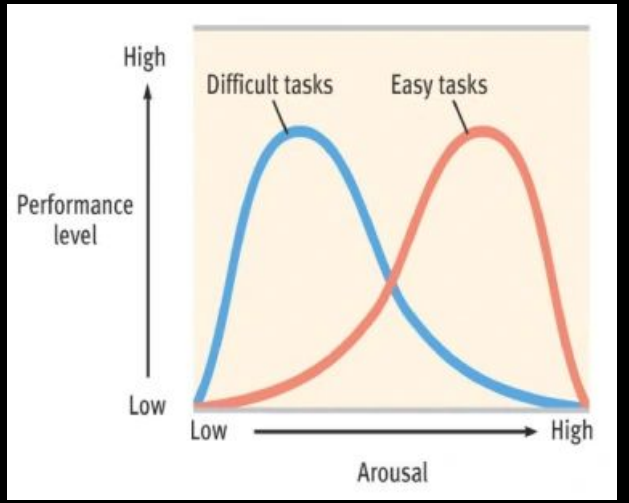
- Motivated to become self-actualized



Yerkes-Dodson Law

- optimal arousal theory
- optimal= best or ideal level for doing something
- Optimal level of arousal
- Arousal level can vary
- Depends on:
    - difficulty of the task
    - Mental activity of the individual





Emotions

Methods for Assessing Emotions

Physiological Responses:

- how aroused someones sympathetic nervous system is
- Can be wrong↣ we can interpret them wrong

Behavior:

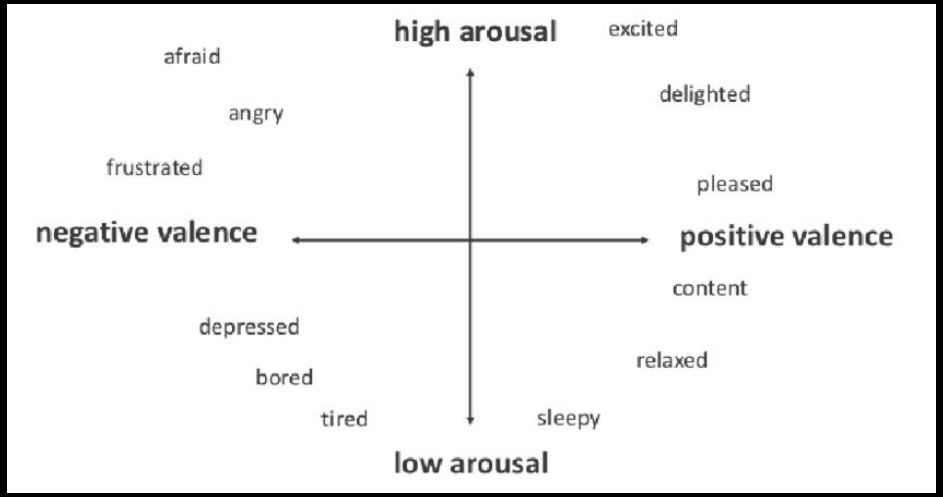
- facial expression
- body language
- Actions
- Can be wrong↣ you can lie/ act

Subjective Report:

- Ask them
- how someone describes their own emotional state
- give them a label/ scale to rate their emotional state
- bias↣ can lead to wrong answers

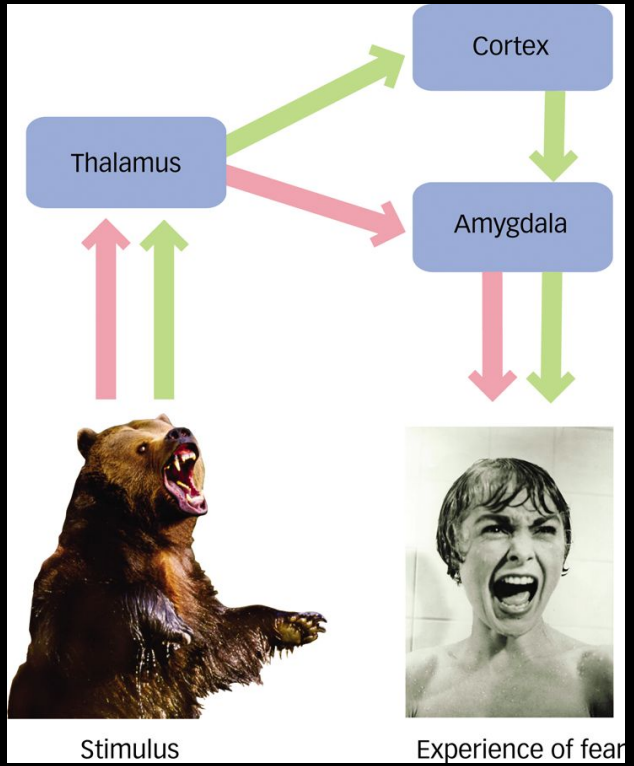
Methods for Assessing Emotions

- **Valence**= used to describe emotions
  - Positive: happy
  - Negative: angry
- **Intensity**= how intense the emotions is
  - High arousal= high intensity
  - Low arousal= low intensity
  - Physiological arousal is the most direct arousal
  - Little sad or very sad

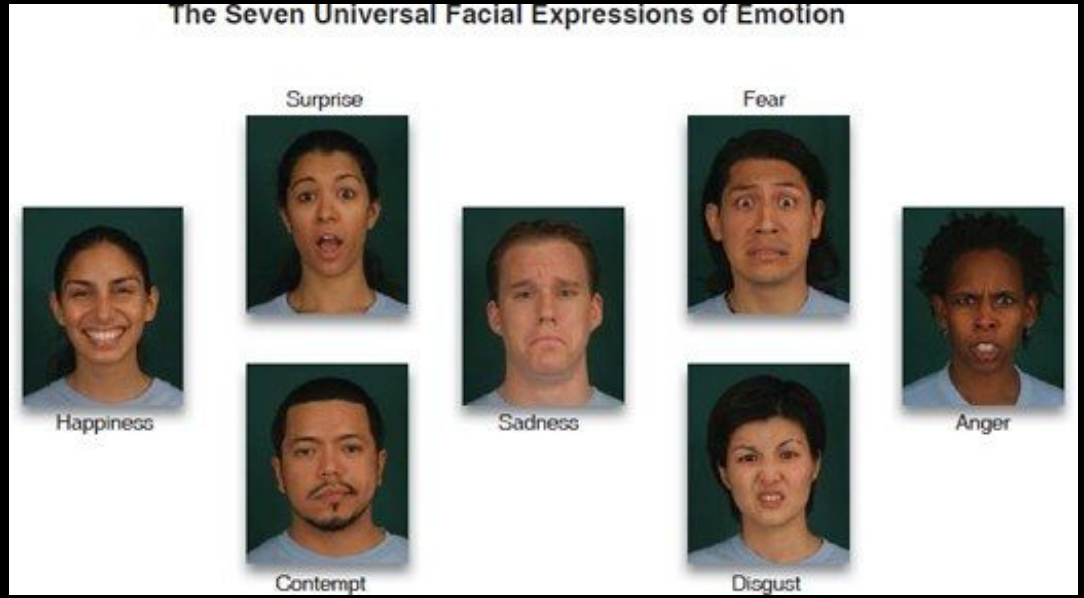


Fear

- Processed in the Amygdala
- If that part of the brain is stimulated, a person will feel fear

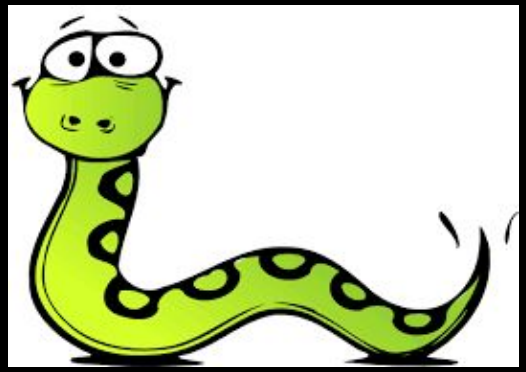


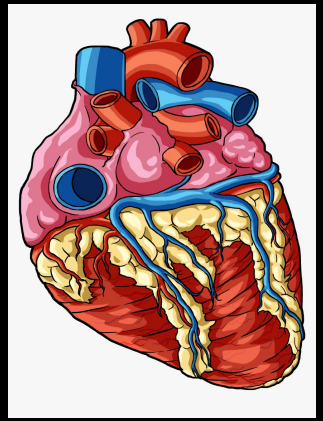
Seven Universal Emotions



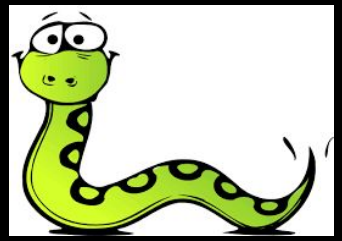
James-Lange Theory

S_E → Physiological Response → labeled with Emotion



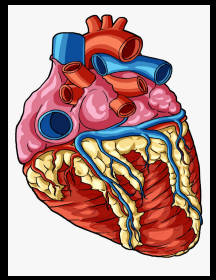


Cannon-Bard Theory



S_E → Thalamus → Experience of Emotion

Thalamus → Physiological Response



Occurs simultaneously and independently

Schachter's Cognitive Theory of Emotion

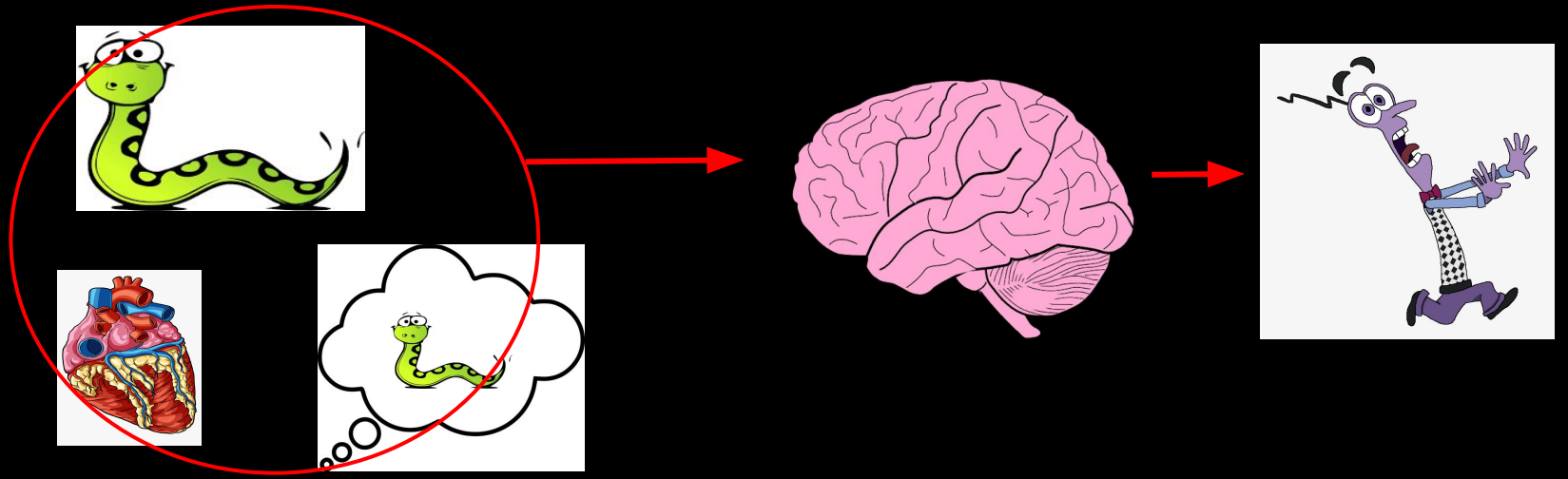
Memories

S_E

Physiological Arousal

Cognitive Appraisal → Experience of Emotion

experiencing and identifying emotional states are functions of both physiological arousal and cognitive interpretations of the physical state.



Questions?