PSY 101 Notes

CONSCIOUSNESS

Consciousness

- refers to the different levels of awareness of one's thoughts and feelings
- creating images in one's mind
- following one's thought process
- unique emotional experiences

Continuum of Consciousness

- refers to a wide range of experiences from being acutely aware and alert to being totally unaware and unresponsive
- ranges from controlled processes to unconscious

controlled process

↓

automatic process

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day dreaming

↓

altered states

↓

sleep & dreams

↓

Unconscious

Controlled Processes

- activities that require full awareness, alertness and concentration to reach some goal

Automatic Processes

- activities that require little awareness, take minimal attention and do not interfere with on-going activities

Daydreaming

- is an activity that requires low-level of awareness
- involves fantasizing or daydreaming while awake

Altered State

- results from meditation, psychoactive drugs, hypnosis or sleep deprivation, to produce an awareness that differs from normal consciousness

Sleep and Dreams

- sleep consists of 5 different stages as well as different levels of physiological arousal
- dreaming is a unique state of consciousness in which we are asleep but experiences a variety of astonishing visual, auditory and tactile images and often in color

Unconscious

- cognitive unconscious consists of mental and emotional processes that we are unaware of but that bias and influence our conscious feelings, thoughts and behavior

Sleep

- consists of 5 different levels of awareness and consciousness

Rhythm of Sleeping and Waking

Biological Clock

- are internal timing devices that are genetically set to regulate various physiological responses for different periods of time

Circadian Rhythm

- refers to a biological clock that is genetically programmed to regulate physiological responses within a time period of 24-25 hours
- the waking-sleeping time is located in a group of cells in the Suprachiasmatic (group of cells that make up the hypothalamus)

Stages of Sleep

Alpha stage – characterized by feeling relaxed and drowsy and usually with the eyes closed

Non-REM (Rapid Eye Movement) Sleep (80% of sleep):

Stage 1 sleep is transition from wakefulness to sleep and lasts from 1 – 7 minutes. You gradually lose responsiveness to stimuli and experience drifting thoughts.

Stage 2 – marks the beginning of what we now know as sleep. There are traces of high frequency burst of brain activity called sleep spindles. Your muscle tension, heart rate, respiration and body temperature gradually decrease and become difficult for you to be awakened.

Stages 3 and 4 – about 30-45 minutes.. refers to as deep sleep or delta sleep and it is very difficult to wake someone from them. In deep sleep, there is no eye movement or muscle activity.

Stage 5 – also known as REM stage. Breathing becomes more rapid, irregular and shallow, eyes jerk rapidly and limb muscles are temporarily paralyzed. Brain waves during this stage increase to levels experienced when a person is awake. Also heart rate increases, blood pressure rises, male develop erections and the body loses some of the ability to regulate its temperature. This is the time when most dreams occur, and if awoken during REM sleep, a person can remember the dream. Most people experience three to five intervals of REM sleep each night.

DREAMS AND THEORIES OF DREAMS

Sleep Problems

1. Insomnia
    - difficulties of going to sleep or staying asleep through the night/sleep continuously.
    - Overloading of stresses/worries

How to arrest insomnia? Create a regular sleeping time.

- Go to bed when you are sleepy. Bedroom is only for sleeping
- Lights off. Darkness induces sleepiness.

2. Sleep apnea
    - Characterized by shallow or pauses in breathing when you sleep

3. Narcolepsy
    - Characterized by excessive daytime sleepiness (ESD) in which a person experiences extreme fatigue and possibly falls asleep at inappropriate times, such as while at work or at school.

Sleep Disturbances:

1. Night Terror – waking up and screaming (stage 3 and 4)
2. Nightmare – more vivid (during REM)
3. Sleep Walking

DRUGS

Psychoactive Drugs – consciousness, moods, behavior

Depressants – depresses Central Nervous System

Stimulants – increase arousal, CNS functions actively

Hallucinogens – change perceptual experiences

Depressants:

1. Alcohol
2. Barbiturates
    a. Nembutol
3. Minor tranquilizers
    a. Miltoun
    b. Valium
4. Opiates
    a. Codeine
    b. Heroin
    c. Morphine

Stimulants:

1. Amphitamines
    a. Benzidrine
    b. Dexedrine
    c. Methedrine
2. Cocaine
3. Nicotine
4. Caffeine

Hallucinogens

1. LSD (Lysergic acid diethylamide)
2. Mescaline
3. Psilocybin
4. PCB (Pheniclidine)

BAC – Blood Alcohol Content: 1/10 of 1% of alcohol for every mg of blood (0.20 – incapacitated; 0.40 - dead).

Alcoholism – inability to stop drinking; you can't get through the day without drinking

MEMORY

Repressed memories – would lead to psychological disorders

Memory: the ability to retain info over 4 processes: encoding (forming), storing and retrieving

Memories are not copies but representatives of the world that vary in accuracy and are subjected to error and bias.

3 Memory Processes:

1. Encoding – refers to making mental representation of information so that it can be placed into our memories
2. Storing – is the process of placing encoded information into relatively permanent mental storage for later recall.
3. Retrieving – is the process of getting or recalling information that has been placed into short term and long-term storage.

3 types of memory:

1. Sensory memory – refers to an initial process that retrieves and holds environmental information in its raw form for a brief period of time, from an instant to several seconds
2. Short-term memory – a.k.a. working memory, refers to another process that can hold only a limited amount of info – an average of 7 items – 2 to 30 seconds.
3. Long-term memory – refers to the process of storing almost unlimited amount of info over long periods of time.

2 kinds of sensory memory:

1. Ichonic memory – holds visual info for about a quarter of a second (or more)
2. Echoic memory – holds auditory info for about 1 or 2 seconds

Function of sensory memory:

1. Prevents being overwhelmed
2. Gives decision time
3. Provide stability, playback and recognition

Short-term memory

2 Features:

1. Limited duration
- Information remains for a brief time, usually 2-30 seconds and then disappears. You can keep information longer by maintenance rehearsals (refers to the practice of involuntarily repeating or rehearsing info so that it remains longer in the short-term memory)
2. Limited Capacity
- Can hold only about 7 items (+/- 2)
- One main reason why information disappears from memory is because of interference
- Interference – results when new info enters short-term memory and overwrites or pushes out info that is already there
- It is possible to increase the number of info and duration of time by chunking
- Chunking – combining separate items of info into a larger unit, or chunk, and then remembering chunks of info.

Long-term memory

1. Capacity and Permanency
2. Retrieval and Accuracy

Content and Accuracy may undergo change and distortion across time – inflating positive events and eliminating negative ones.

Long term Memory: Steps in Memory Process

1. Sensory Memory
2. Attention
3. Short-term memory
4. Encoding – process of transferring information from short-term to long-term by paying attention to it.
5. Long-term
6. Retrieval

Long-term memory: Storing

1. Declarative Memory – includes memories for facts or events such as scenes, stories, words, conversations, faces or daily events.
    a. Semantic Memory – involves knowledge of facts, concepts, words, definition and language rules
    b. Episodic Memory – involves knowledge of specific events, personal experiences or activities.
    c. Procedural Memory – involves memories for skill

Long-term memory: Econding/Transferring

1. Automatic Encoding – is the transfer of information from STM to LTM without any effort and usually without any awareness.
2. Effortful Encoding – involves the transfer of information from STL to LTM either by working hard to repeat or to rehearse the information or especially, by making associations between new and old information.

Methods of Effortful Encoding

1. Maintenance Rehearsal – refers to simply repeating or rehearsing the information rather forming any new associations.
2. Elaborative rehearsal – involves actively making meaningful association between information to be learned and stored in LTM.

Repressed Memory – is the process by which the mind pushes a memory of some threatening or traumatic event into the unconscious. It cannot be retrieved at wil and may remain there until something releases it and the person becomes aware.

Unusual Memories

1. Photographic Memory
- Occurs in adults
- The ability to form sharp, detailed visual images after examining a picture or a page for a short

period of time and to recall the entire image at a later date.

2. Eidetic Memory

- A form of photographic memory that occurs in children
- Is the ability to examine a picture or page for 10-30 seconds and then for several minutes hold in one's mind a detailed visual image of the material.

Flash Bulb Memories

- Are vivid recollections, usually in great detail, of dramatic and emotionally charged incidents that are of interest to the person.
- The information is encoded effortlessly and may last for long periods of time.

INTELLIGENCE

Theories:

A. Two-factor Theory (Charlier Spearman)
   1. General Ability Factor (g) – common sense
   2. Specific Ability Factor (s) – aptitude tests

B. Triarchic Theory (Robert Sternberg)
   Info processing approach analyses the cognitive steps in solving problems
   1. Analytical or logical thinking (lawyers)
   2. Problem-solving skills
   3. Practival Thinking – help cope with social environment

C. Multiple Intelligence Theory (Harvard Gardner)
   1. Verbal & Language
   2. Rhythm o& Music
   3. Logical & Mathematics
   4. Visual – Spatial
   5. Bodily Kinesthetic
   6. Interpersonal Intelligence/Social Intelligence
   7. Intrapersonal Intelligence

Other Intelligence: emotional intelligence – to monitor one's feelings

   a. Self-awareness – ability to recognize own feelings
   b. Imagining emotion – handling or feeling
   c. Motivating oneself
   d. Empathy – sensitivity to other's feelings
   e. Handling Relationships –handling emotions with others.

IQ:

130 - 145: Gifted

70 - 130: Average (near 130 is superior)

50 – 70: Borderline Mentally-Retarded

35 – 50: Mildly/Moderately Mentally-retarded

20-45: Severely Mentally-Retarded

Borderline Mentally-retarded

- With special training – can learn to read and write; can gain special competence; can master simple occupation

Mild

- With special training – partially-independent

Severely

- Far limited skills: only self
- Something wrong with the motor skills.

Causes:

1. Organic/Natural Retardation – genetic/brain damage, chromosomal mutations
2. Cultural Familial Retardation – food taken in while still young