States of Consciousness

Why do we Sleep?

Conserve Energy/Stay Safe

Restore mental functions

To Heal Oneself

Questions to Ponder (Go ahead and start pondering …)

- Why do we sleep?
- Why do we sleep at night?
- Why does traveling make me so tired?
- What is the point of dreaming?
- What are common sleep disorders?

Why do we sleep at night?
Why does traveling make me so tired?

Evolution
Think of animals

- Memory
- Problem Solving

- Body replenishes itself
- Body gets rid of toxins
- Damaged brain cells repair at night

Restore mental functions

To Heal Oneself

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Questions to Ponder (Go ahead and start pondering …)

- Why do we sleep?
- Why do we sleep at night?
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- What are common sleep disorders?
Get rid of “Garbage”

- Sleep to get rid of stimuli unwanted
- Dream to Forget

Why do we sleep at Night?

Circadian Rhythms

- Body is on a 25 hour clock
- Clock is run through your hypothalamus
- Regulates:
  - Metabolism (when you use energy)
  - Heart rate
  - Body temperature
  - Hormonal activity
- Triggered by Light/Dark signals

Why does traveling make us tired?

- Doing something “out of the ordinary” will upset your circadian rhythms
  - Traveling
  - Staying up all night to study
  - Going to a place that is all dark/all light

Sleep Cycle
Do you get enough Sleep?
- Answer the following questions HONESTLY:
  - Do you often get sleepy in classes?
  - Do you sleep late on weekends?
  - Do you usually get sleepy when you get bored?
  - Do you often fall asleep while reading or watching TV?
  - Do you usually fall asleep within five minutes of going to bed?
  - Do you awake in the morning feeling that you are not rested?
  - Would you oversleep if you did not use an alarm clock to drive you out of bed?

Sleep Debt
- Most people suffer Chronic Sleep Debt
- Symptoms:
  - Groggy/Sleepy when alarm goes off
  - Afternoon drowsiness
  - Sleepy during meetings/class
- Effects:
  - Impaired cognitive functions

What are Dreams?
- Every night you dream
- When you dream, you are paralyzed
  - Why?
- There are still debates as to whether dreams mean anything.

Do dreams mean anything?
Dreams as Meaningful Events

- Freud’s Theory of Dreams:
  - Sleep Guardian (keep you asleep)
  - Wish fulfillment:
    - Work through your unconscious desires
  - Manifest vs. Latent Content
  - Dream’s Story vs. Dream’s Symbols

Dreams vary by culture, gender, and age

- Age:
  - Children dream of big, scary animals
  - Adults dream of little, cute animals
- Gender:
  - Women dream of children
  - They also dream of men and women equally
  - Men dream of aggression, tools, weapons
  - They also dream of men 2x more than women
- Culture:
  - People in Ghana dream of cow attacks
  - Americans dream of embarrassment
  - Mexican Americans dream of death
  - WHY?

Dreams and Recent Experience

- Dreams may be gossipers:
  - 1st dream: connected to the day
  - 2nd dream: adds to it, expands it, and modifies it
  - 3rd dream: etc.
  - 4th dream: some connection still, but may be so distant that you can not tell the connection

Dreams and Cognition

- Restores our ability to make new memories or to add new memories into our older memories
Dreams as Random Activity
- Activation-Synthesis Theory – brain is just trying to make sense of its energy

Dream as Creative Insights
- Dreams (whether meaningful or not) do inspire our creativity…
- Think of any dreams that have inspired a creative outburst in you.

Daydreams vs. Night dreams
- Daydreams: Ability to escape into memory/fantasy and forget current situation
  - More Control

Sleep Disorders

Insomnia
- 1/3 of all adults
- Chronic inability to fall asleep
- Frequent arousals
- Early morning awakenings

Microsleeps (typically blackouts)
**Sleep Apnea**
- Disorder where sleeper stops breathing randomly
- 100s of times a night for up to 1 minute
- Causes body's hormones to react and awaken the sleeper (rarely remembers)
- May be a cause of SIDS

**Night Terrors**
- In deep sleep (Stage 4 not REM)
- Occurs mainly in children
- May be genetic
- No known cause or treatment

**Narcolepsy**
- Random attacks of sleep
- Cataplexy – loss of muscle control (like sleep paralysis)
- Can be caused by excitement (laughing, sex)
- Genetic disease
One Week Assignment

- You are to keep a dream journal.
- Every morning when you wake up, write down the dreams you had.
- Be Honest (if you don’t remember, write “I don’t remember”)
- This will be due next Tuesday (Sept. 13th)