

Consciousness

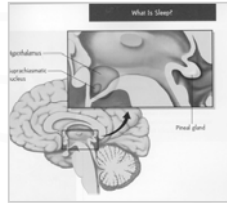
Sleep/Dreams
Hypnosis
Meditation
Drugs

Biological Rhythms

- **Ultradian:**
periods of time within which we become hungry
- **Infradian:** menstrual cycles
- **Circadian:** sleep/wake cycle lasting about a day (24.18 - 25 hr.)

Biological Regulation of Sleep

1. Melatonin
 - hormone
 - its secretion is regulated by light
2. Suprachiasmatic nucleus
 - internal biological clock



Individual Differences in Circadian Rhythms

- Larks - morning People
- Owls - evening People

Disruptions to Normal Circadian Rhythms

- Jet lag
- Seasonal Affective Disorder (SAD)

Disruptions to Normal Circadian Rhythms

Seasonal Affective Disorder (SAD)

- Winter depression
- Oversleeping
- Overeating/crave carbohydrates
- Runs in families

Stages of Sleep

1. Non -REM
(1, 2, 3, & 4)
2. REM (Rapid-Eye Movement)

Sleep stages

Stage 3 and 4

Slow

- pulse
- breathing
- brain activity (synchronized)
- eyes are inactive

Sleep walking and talking

REM: Paradoxical sleep

- Short high-frequency beta waves
*(like when we are awake;
unsynchronized neural activity)*
- Large muscles are very relaxed
(deep sleep)

REM Functions

- If deprived:
 - anxiety
 - irritability
 - impaired concentration
 - REM rebound
- Improves memory storage

Sleep Deprivation

Peter Tripp (1959) - awake for 200
hr. or 8 days

Theories on Dreams:

The Psychoanalytic view:

- expression of our impulses & desires

Mental housekeeping: sort information

Activation-synthesis theory:

- dreams are a product of brain activity

Dreams are influenced by:

- Concerns of daily life
- External stimuli
- Ourselves: lucid dreaming

Lucid dreaming:

work by Stephan LaBerge

1. Living out fantasies unavailable in real life
2. Overcome nightmares
 - nothing can harm you in a dream
 - relax & go with experience, “let it happen”
3. Psychological wellbeing

Hypnosis

involves willing participant



Theories explaining hypnosis

1. Role-playing theory (Barber, 1979)
 - hypnosis is normal mental state
 - person knows/ believes in what is expected & plays that role

2. Neodissociation theory

(Hilgard, 1977)

- split in consciousness (altered state)
- hidden observer: part of self which is aware of what is happening during hypnosis

Hypnosis: Effects

1. Perceptual effects
 - Effective in pain relief
 - Cannot promote healing

2. Cognitive Effects

- improve memory (controversial)
- fabrication of memory

3. Behavioral effects

- helped people to overcome phobias
- performance anxiety reduction
- weight lose
- sexual responsively
- night terrors
- change bad habits (tobacco use,
nail-biting)

Drugs and Their Effects

- History of drug use
- Effects on brain
- Social factors (war)