Your notes

GCSE Psychology: revision notes

Sleep and dreaming

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Why we sleep

- Sleep keeps the brain healthy, lets the body repair itself and helps us stay emotionally stable.
- Sleep comes in cycles of about 90 minutes. The first stages are light sleep, deep sleep follows, and then comes REM (rapid eye movement) sleep.
- Most dreaming happens in **REM sleep**. The brain is very active, but the body's muscles are nearly paralysed.

What controls sleep

- **Endogenous pacemakers** are the body's internal clocks. They produce bodily rhythms: **circadian rhythms** last about 24 hours, like sleeping and waking, and **ultradian rhythms** last less than a day, like the sleep cycle.
- **Exogenous zeitgebers** are outside cues that reset the clock. Light is the main one.
- As it gets dark, the pineal gland releases the hormone **melatonin**, which makes us sleepy.
- (Edexcel) Siffre (1975) spent six months alone in a cave with no natural light or clocks. His sleep and waking drifted into a cycle longer than 24 hours, which shows there is an internal clock, and that light normally resets it. It was only one person, so it's hard to generalise.
- (OCR) Damage to the hypothalamus, which contains the body's main clock, can seriously disturb sleep.

Sleep problems

- **Insomnia** is trouble falling asleep (sleep onset **insomnia**) or staying asleep (sleep maintenance **insomnia**). It can be caused by stress, worry, or a poor sleep routine.

- It can be managed with relaxation techniques and better sleep hygiene: a regular bedtime, a dark, quiet room and no screens or caffeine before bed.
- (Edexcel) Narcolepsy means falling asleep suddenly during the day. It can come with cataplexy, a sudden loss of muscle control. It's linked to a problem with the chemicals in the brain that keep us awake.

Freud's theory of dreaming

- Freud said that dreams are a way into the unconscious mind. Unacceptable wishes are repressed, and dreams let them out in disguise: this is wish fulfilment.
- The **manifest content** is what the dream seems to be about, and the **latent content** is its hidden meaning. Dreamwork is the process of turning one into the other.
- A strength is that it shows dreams might have meaning. A weakness is that it's subjective: an interpretation can't be proved right or wrong, so it's unscientific.
- (Edexcel) Freud (1909), Little Hans: a five-year-old boy with a fear of horses. Freud said that the horses stood for his father and came from the Oedipus complex. It was mostly done through letters from the boy's father, so it could be biased.
- (OCR) Freud (1918), the Wolfman: a man's childhood dream of white wolves in a tree. Freud linked it to a frightening experience in early childhood. It's one person's case, so it's hard to generalise.

Activation synthesis theory

- Hobson and McCarley (1977) said that dreams come from the brain trying to make sense of random activity in **REM sleep**.
- Neurons in the pons fire at random (random activation). The senses are shut off (sensory blockade), and so are the muscles (movement inhibition).
- The cerebral cortex pulls the signals together into a story: this is synthesis. The limbic system adds the emotion.
- A strength is that it's based on real brain activity, and explains why dreams are often so strange. A weakness is that it's reductionist: it doesn't explain why dreams can seem meaningful.
- (OCR) Williams et al (1992) compared reports of dreams and of daydreams. Dreams were much more bizarre, which supports the theory.

Key terms

REM sleep	Rapid eye movement sleep, when most dreaming happens.
Circadian rhythm	A bodily rhythm of about 24 hours, like the sleep-wake cycle.
Ultradian rhythm	A bodily rhythm of less than a day, like the 90-minute sleep cycle.

Your notes

Endogenous pacemaker	An internal body clock.
Exogenous zeitgeber	An outside cue that resets the body clock, such as light.
Melatonin	A hormone from the pineal gland that makes us sleepy.
Insomnia	Trouble falling asleep or staying asleep.
Manifest content	What a dream seems to be about.
Latent content	The hidden meaning of a dream, according to Freud.
Activation synthesis	The theory that dreams are the brain making sense of random activity.

Your notes

Quick questions

Cover the answers and test yourself: remembering is what makes it stick.

1. In which stage of sleep does most dreaming happen?
2. About how long is one sleep cycle?
3. What is a circadian rhythm?
4. What is the main exogenous zeitgeber?
5. Which gland releases melatonin?
6. What is sleep onset insomnia?
7. Which of these is good sleep hygiene?
8. What did Freud call the hidden meaning of a dream?

Answers

1. REM sleep
2. 90 minutes
3. A bodily rhythm of about 24 hours
4. Light
5. The pineal gland
6. Trouble falling asleep
7. Going to bed at a regular time
8. Latent content

What to do next

Practise 15 questions on this topic

Try 4 exam questions, with mark schemes

Read the lesson, one step at a time

Free revision for GCSE and KS3 at lycolearn.co.uk. Some notes are for one exam board only, and say so in brackets.