

Sleep
at St Aloysius' Catholic College

What happens when we sleep?

- ❖ Brain is more active when you're asleep, than when you're awake
- ❖ We cement what we learn during the day
- ❖ Reduces likelihood of: cancer, diabetes, dementia, Alzheimer's, weight-gain, flu, anxiety, depression, heart disease and even chances of being in a car accident

What should sleep look like?

- ❖ Adults should be getting a minimum of 7 hours a night
- ❖ Sleep is regulated by a chemical called 'melatonin'

What happens when we don't sleep?

- ❖ Less than 7 hours of sleep a night is as harmful of smoking and drinking
- ❖ WHO classify sleep deprivation as a cacogenic
- ❖ After one week of sleep deprivation your blood sugar levels will be disrupted to a point where a doctor would classify you as pre-diabetic

Importance of sleep for teenagers

Learning

- ❖ We learn when we are asleep, not when we are awake

Decision-making

- ❖ During sleep is the only time when the pre-frontal lobe develops

Development of rational thinking

"Thinking about Thinking"

Higher Reasoning

Executive Function

Prefrontal Cortex

9 Functions of the Prefrontal Cortex

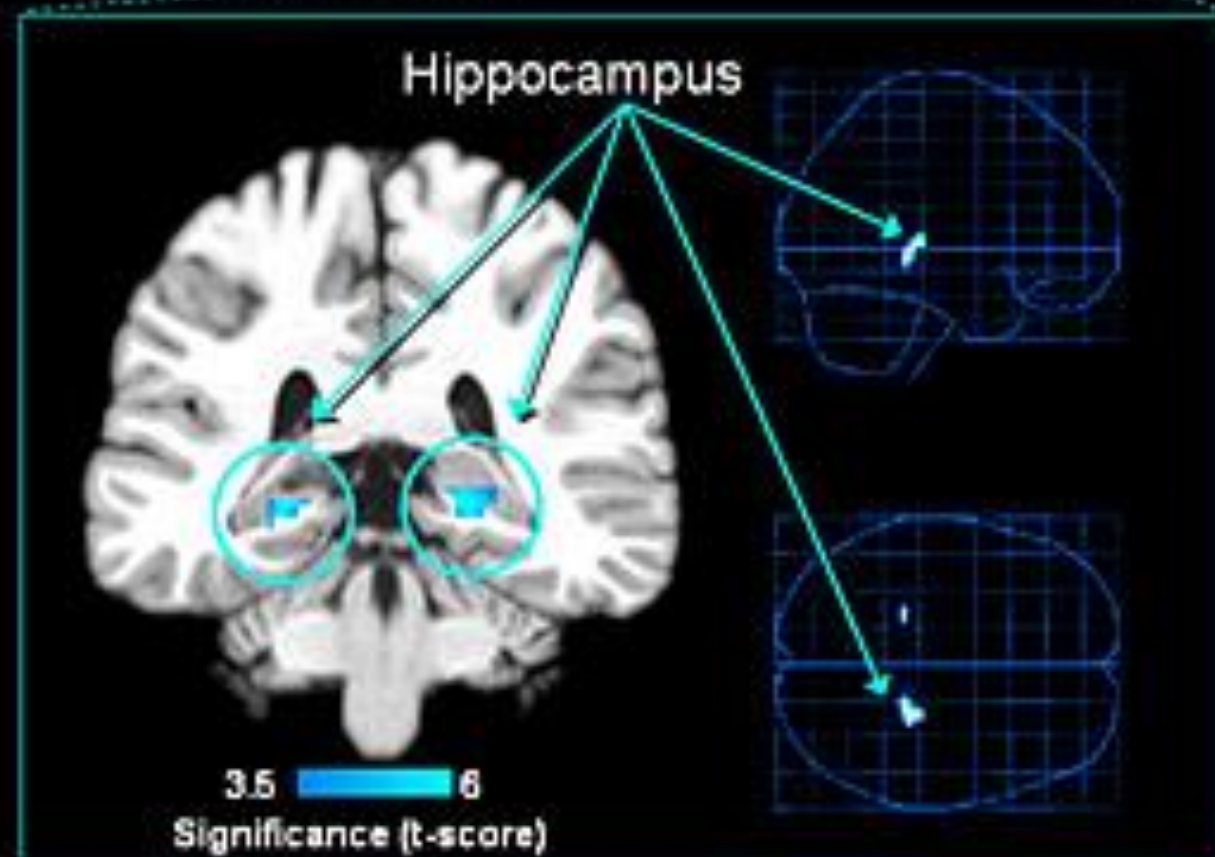
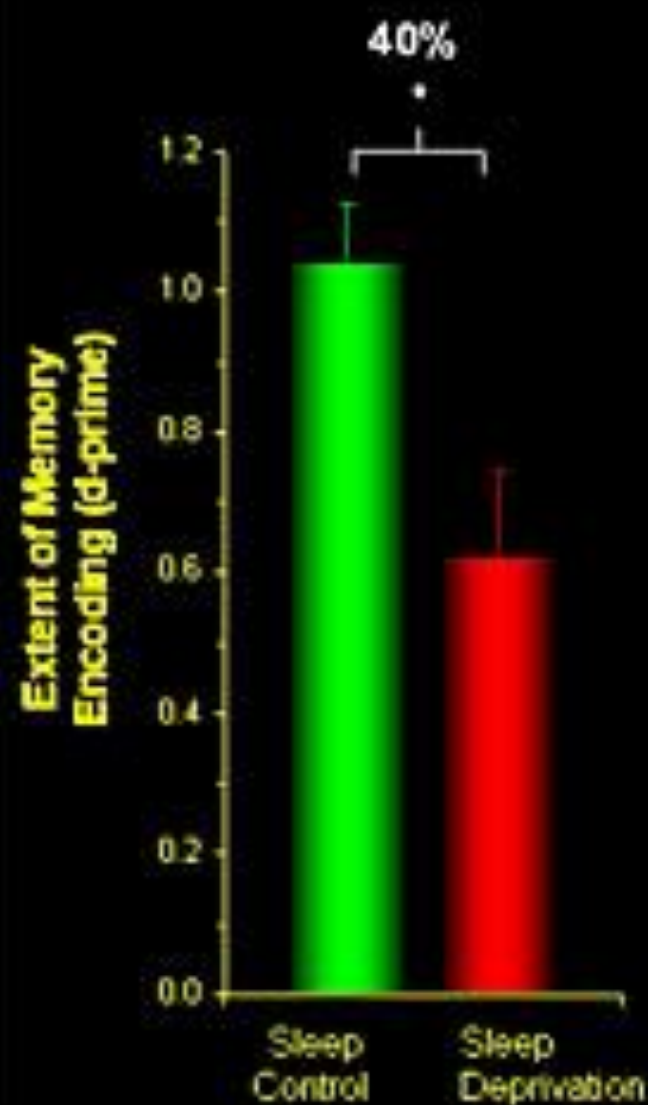
1. Empathy
2. Insight
3. Response Flexibility
4. Emotion Regulation
5. Body Regulation
6. Morality
7. Intuition
8. Attuned Communication
9. Fear Modulation



Limbic Brain

1. Fight, flight, freeze stress response
2. Thinks, "Am I safe? Do people want me?"
3. Emotions live here

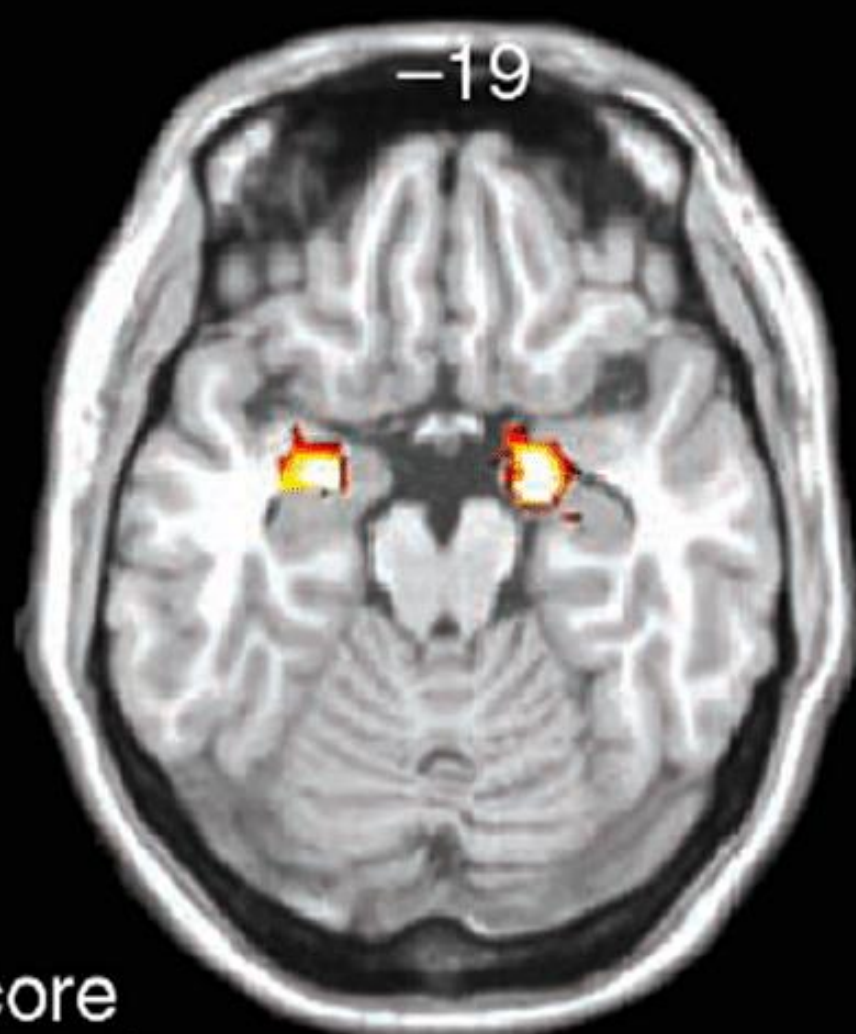
Memory Encoding Deficit



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Sleep control

Sleep deprivation



t-score
0 6

Sleep Cycle

- ❖ Since 1993 scientists have recorded a delay in the release of melatonin by several hours caused by the onset of puberty (McGeorge, 2012)
- ❖ This is an entirely natural process that can be recorded across cultures and around the world
- ❖ National sleep foundation actually recommends 8-10 hours sleep in teenagers



4. Findings from the school



Clear staggering from year to year in declining sleep acquisition



Year 9, 10 and 11 are demonstrating extremely destructive sleeping patterns

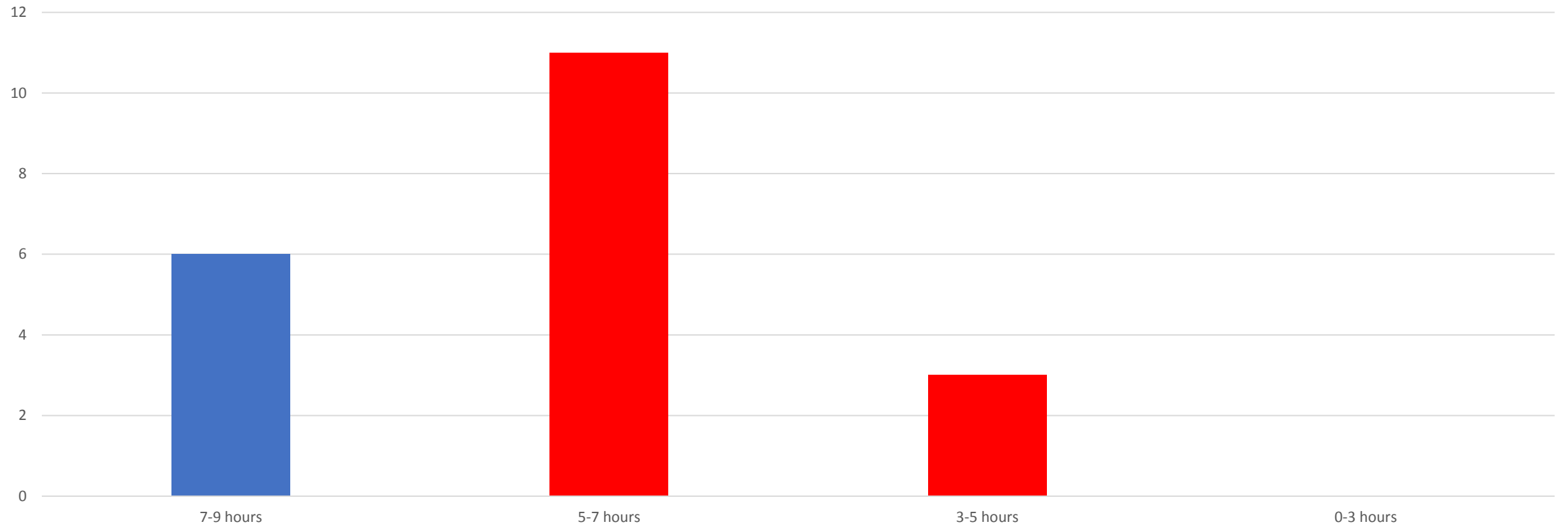


Students using phones and other electrical equipment before sleep

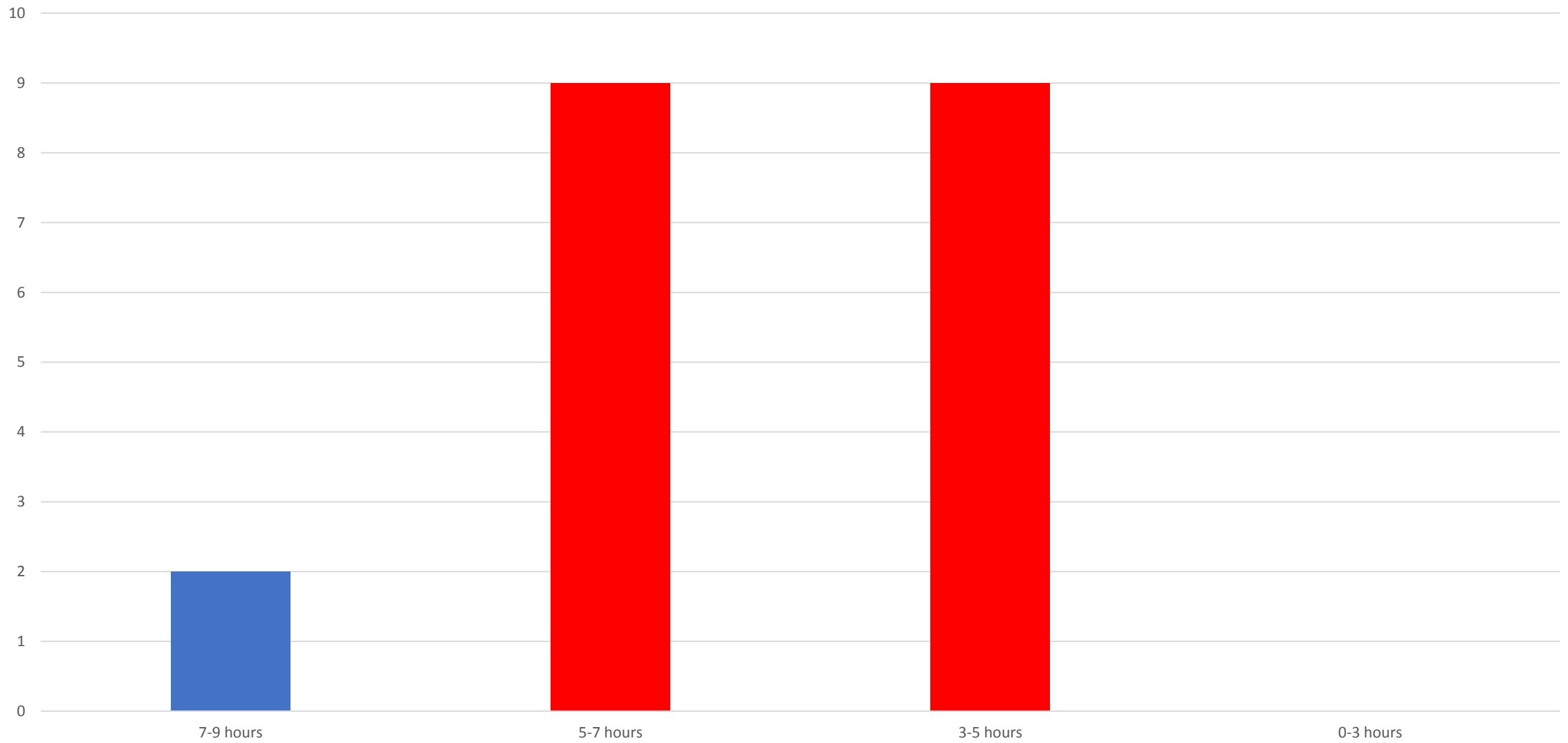


Almost all students reporting problems with waking in the morning

Year 10



Year 11



Solutions

1. Understanding the importance of sleep
2. Educating your son on the importance of sleep
3. Setting times for your son to sleep, so as to ensure they have a full 8 hours sleep
4. Ensuring they have no distractions in their room