

Restoration Theories of Sleep



This activity will help you to:

- Understand and recall the restoration approach to sleep
- Search for psychological studies that are relevant to this theory
- Assess whether research evidence supports or challenges theories of sleep
- Make effective notes on psychological research

The Restoration Theory of Sleep

Restoration theories suggest that the function of sleep is to repair and restore the brain and body. If this did not happen, then the functioning of the brain and body would gradually break down. Within this general area, two theorists have made important theoretical contributions.

Oswald (1980) suggests that different types of sleep are necessary for restoring different biological functions. Rapid Eye Movement (REM) sleep is necessary for brain growth, repair and reorganisation. During REM sleep patterns of brain activity change to allow this to happen. Slow Wave Sleep (SWS) is necessary for bodily growth and repair. During SWS, growth hormone is released, which is important for protein synthesis.

Horne (1988) extends Oswald's theory. He suggests that sleep is divided into core sleep (REM and SWS) and optional sleep. He suggests that brain restoration and repair take place during core sleep. Bodily restoration occurs during optional sleep, but can also occur at other times (e.g. during periods of relaxed wakefulness).

The restoration theory makes the following predictions:

- During periods when the brain is growing or undergoing reorganisation, there will be an increase in the amount of REM sleep a person has.
- Sleep will increase when the body is growing or undergoing repair.
- If a person is deprived of sleep for a significant period, they will attempt to catch up on the sleep they have lost.
- Sleep deprivation will cause deficits in psychological functioning and have a negative effect on bodily processes.

What you need to do...

Using the resources available, find some research evidence that will allow you to test each of these predictions. From these studies, make a set of notes, using each of the hypotheses as a heading. For each hypothesis, make a brief note of one or more relevant research studies. In your notes, make sure you include the following:

- A reference
- A brief outline of the finding
- Whether it supports or challenges the relevant hypothesis

Draw a brief conclusion about whether each hypothesis is supported or challenged by the evidence you have used. Once you have finished, review all the evidence you have selected, and write a brief paragraph explaining whether the evidence as a whole supports or challenges the theory as a whole, and to what extent.