**The influence of stress**

The effects of stress on memory include interference with a person's capacity to encode memory and the ability to retrieve information. During times of stress, the body reacts by secreting stress hormones into the bloodstream.  One class of stress hormone responsible for negatively affecting long-term, delayed recall memory is the GCs, the most notable of which is cortisol. Glucocorticoids facilitate and impair the actions of stress in the brain memory process.And an excess of cortisol can impair the ability of the hippocampus to both encode and recall memories.

 One study used rats to show the effects of chronic stress on memory by exposing them to a cat for five weeks and being randomly assigned to a different group each day.[[18]](https://en.wikipedia.org/wiki/Effects_of_stress_on_memory#cite_note-parkhad-18) Their stress was measured in a naturalistic setting by observing their open field behaviour, and the effect on memory was estimated using the [radial arm water maze](https://en.wikipedia.org/wiki/Radial_arm_maze) (RAWM). In the RAWM, rats are taught the place of a platform that is placed below the surface of the water. They must recall this later to discover the platform to exit the water. It was found that the rats exposed to chronic psychosocial stress could not learn to adapt to new situations and environments, and had impaired memory on the RAWM.