

Hindsight bias is a systematic distorted recollection of former judgments. Hindsight bias is a very robust cognitive illusion, that is explained very unsatisfactory up to now. In this work a detailed cognitive model (SARA) will be presented. The fundamental process is a cyclical probabilistic sampling of information from long term memory into working memory, leading to a higher recall probability for this information. This process is qualified as selective activation in the model. Hindsight bias could therefore be explained by changed recall probability of selective activated information during the encoding of the solution.

The concept of selective activation was tested in five experiments. Participants had to judge the development of facts and later recall their former judgment. Additionally arguments favoring the increase or decrease of the facts to be judged were presented. Arguments selective activated by the solution should lead to an improved recall.

In three recognition-experiments selective activation failed to be confirmed. Yet hindsight bias didn't occur neither. Two experiments with free recall successfully confirmed the expected effect. A first evidence for selective activation.