

Metamemory refers to a host of processes involved in assessing and regulating the workings of our memory processes. It is generally assumed to be inferential—not dependent on direct access to memory processes it is supposed to govern, and cue dependent—basing those inferences on information available in the form of one's beliefs and experiences regarding memory. Thus, metamemory relies on inferring on the basis of available cues what we know and what we do not know, and uses this information to govern our memory-related behaviours such as learning or retrieving information.

To date, metamemory research has been mostly focused on how internally generated cues influence metamemory processing. These cues can be based on the properties of the materials we learn, the conditions in which we learn, or by-products of processing certain information in memory during learning or retrieving. This leaves another important area almost completely untouched. After all, sometimes what and how we learn is determined by external information as well, drawing on cues available in the environment. Students may adapt how they learn based on information from other students regarding the difficulty (estimated, for example, as the pass rate) of a particular exam. Witnesses may determine how long they search for information on a particular aspect of the witnessed crime depending on the feedback—explicit or implicit—from the investigator. Thus, it is key to learn how those external influences affect the way in which metamemory operates.

The present project will investigate how information about task difficulty influences metamemory—and, by extension, also memory—across the whole spectrum of memory processing. It will look at how external cues determine monitoring of what we know and what we do not know, as well as when and how they enter into an interplay with our internal cues, 1) when we learn new information, 2) when we decide whether some information is available in our memory, and 3) when we try to retrieve information from memory. Across three research themes, it will try to determine what types of external cues affect our assessments of what we know and what we do not know. Finally, it will aim to apply the newly gained information about the role of external cues in the service of mending metamemory illusions—incorrect applications of metamemory to memory processing that lead to inaccurate assessments of one's memory and maladaptive behaviours in memory tasks.