

Anticipating performance can hinder memory

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Anticipating your own performance at work or school may hinder your ability to remember what happened before your presentation, a study from the University of Waterloo has found.

The study's findings also suggest that the presence of an audience may

be an important factor that contributes to this pre-performance [memory deficit](#).

"Performance anticipation could weaken memory because people tend to focus on the details of their upcoming presentation instead of paying attention to information that occurs before their performance," says lead author Noah Forrin, a postdoctoral fellow in Psychology at Waterloo.

"People who experience [performance anxiety](#) may be particularly likely to experience this phenomenon."

Building on what previous research called the next-in-line effect, Forrin and his co-authors explored how different ways of preparing for a [presentation](#) impact the pre-performance memory deficit.

They experimented with a variety of techniques that enhance memory, including the production effect, which is the simple yet powerful idea that we can remember something best if we say it aloud.

One of the study's co-authors, Psychology professor Colin MacLeod, coined the term production effect from previous research which identified that reading aloud involves at least three distinct processes that help to encode memory: articulation, audition, and self-reference. Research by Forrin and MacLeod has demonstrated that reading aloud is better for memory than reading silently, writing, or hearing another person speak aloud.

In the new study, however, the findings suggest that the production effect has a downside: When people anticipate reading out loud, they may have worse memory for information that they encounter before reading aloud. The researchers conducted four experiments with 400 [undergraduate students](#) and found that students have worse memory for words that they read silently when they anticipate having to read upcoming words aloud (compared to when they anticipate having to read

upcoming words silently).

"Our results show that performance anticipation may be detrimental to effective memory encoding strategies," said Forrin. "Students frequently have upcoming performances—whether for class presentations or the expectation of class participation."

"We are currently examining whether the anticipation of those future performances reduces students' learning and memory in the classroom."

One strategy to avoid pre-performance memory deficits, says Forrin, is "try to get your performance over with by being the first student in class (or employee in a meeting) to present. After that, you can focus on others' presentations without anticipating your own."

The paper, "Wait for it... performance anticipation reduces recognition memory," by Forrin, Brandon C.W. Ralph, Navi K. Dhaliwal, Daniel Smilek, and MacLeod, is published in the *Journal of Memory and Language*.

More information: Noah D. Forrin et al. Wait for it...performance anticipation reduces recognition memory, *Journal of Memory and Language* (2019). [DOI: 10.1016/j.jml.2019.104050](https://doi.org/10.1016/j.jml.2019.104050)

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