

Group work can harm memory

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A new study by psychologists from the University of Liverpool and the University of Ontario Institute of Technology (UOIT) reveals that collaborating in a group to remember information is harmful.

The research, conducted by Dr Craig Thorley, the University's Department of Psychological Sciences, and Dr Stéphanie Marion, from UOIT's Faculty of Social Science and Humanities, statistically analysed 64 earlier collaborative remembering studies and found that groups

recall less than their individual members would if working alone.

The same study also found that collaborative remembering boosts later individual learning: people who previously recall in a [group](#) remember more than those who do not.

The research provides the first systematic investigation into the costs and benefits of collaborative remembering.

Collaborative inhibition

Collaborative remembering is important as it is used in a number of different everyday settings. In the workplace, interview panels jointly recall candidates' answers before deciding who to employ. In the courtroom, jurors work together to recall trial evidence prior to reaching a verdict. In schools and universities, students work together to revise course content prior to exams.

The study, published in *Psychological Bulletin* this week, first compared the recall of collaborative groups to the pooled recall of an equivalent number of individuals. For example, if a collaborative group consisted of four people, their recall was compared to that of four individuals who worked alone but whose recall was combined. Collaborative group recall was consistently lower than pooled individual recall. This effect is known as collaborative inhibition.

The study suggests collaborative inhibition occurs as group members disrupt each other's retrieval strategies when recalling together.

Retrieval strategies

Dr Craig Thorley, said: "Collaborative group members develop their own

preferred retrieval strategies for recalling information. For example, Person A may prefer to recall information in the order it was learned but Person B may prefer to recall it in the reverse order. Importantly, recall is greatest when people can use their own preferred retrieval strategies.

"During collaboration, members hear each other recall information using competing retrieval strategies and their preferred strategies become disrupted. This results in each group member underperforming and the group as a whole suffers. Individuals who work alone can use their preferred retrieval strategies without this disruption so recall more."

Several factors were also found to influence the extent to which collaborative inhibition occurs. One of these findings was collaboration is more harmful to larger groups than smaller groups. Another was that friends and family members are more effective at working together than strangers.

Dr Thorley adds: "Smaller groups perform better than larger groups as they contain fewer competing (disruptive) retrieval strategies. Friends and family members perform better than strangers as they tend to develop complementary (and not competing) retrieval strategies".

Collaboration Boosts Later Memory

The study also compared the recall of people who had previously collaborated in a group to the recall of people who had previously worked alone. It was found that collaborating in a group boosted later individual [recall](#).

Dr Stéphanie Marion, states: "We believe that this occurs as working in a group means people are re-exposed to things they may have forgotten and this boosts their [memory](#) later on. One of the important consequences of this is that it suggests getting people to work together to

remember something (e.g., students revising together) is beneficial for individual learning."

More information: Stéphanie B. Marion et al, A Meta-Analytic Review of Collaborative Inhibition and Postcollaborative Memory: Testing the Predictions of the Retrieval Strategy Disruption Hypothesis., *Psychological Bulletin* (2016). [DOI: 10.1037/bul0000071](https://doi.org/10.1037/bul0000071)

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