

# Depressive thoughts may have a negative effect on working memory

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A new study in the journal *Cognition and Emotion* illustrates the link between reduced working memory capacity and dysphoria, a significant and prolonged depressed mood related to clinical depression.

Building on the knowledge that dysphoric individuals (DIs) and clinically depressed people maintain their attention on 'mood-congruent' information longer than people without [depressed mood](#), Nicholas A. Hubbard and his colleagues carried out three studies to test both [working memory](#) and processing speed.

The first was a recall task with 'neutral' interference, the second a variation of the first with 'depressive' interference in the form of negative statements about mood, and the third a replication of the first two studies with a focus on processing speed and recall.

When the researchers analysed their results, they found that there was no real difference between DI and non-DI [working-memory capacity](#) in the first study, but with the introduction of 'depressive' interference, the picture changed. The inability of DIs to move away from the negative thoughts included in the second study appeared to reduce the amount of working memory they had available for the recall task.

"Results from these studies imply that mood-congruent information evokes controlled attention deficits in individuals with depressed mood," the authors conclude. "If mood-congruent information is not able to be efficiently removed from the focus of attention, we would expect this to

result in a relative decrease in working-memory capacity for individuals with depressed mood compared to those without depressed mood."

With day-to-day memory and concentration difficulties a defining feature of both [clinical depression](#) and dysphoria, understanding the link between the two is of vital importance to improving the wellbeing of those who experience either condition.

The researchers note: "Such deficits take a personal toll on these individuals with depressed mood and have societal consequences via loss of productivity and an increased rate of disability. It is likely that persistent thinking about affectively negative, mood congruent information ... can impair real-world functioning for those with depressed mood."

The observations contained in this article hint at future areas of research that could improve the wellbeing of those with depressed mood, including further examination of the impact that reduced working memory has on individuals' daily lives. It also provides important insight into a relatively unknown, but certainly distressing, effect of the condition.

**More information:** Nicholas A. Hubbard, Joanna L. Hutchison, Monroe Turner, Janelle Montroy, Ryan P. Bowles & Bart Rypma, "Depressive thoughts limit working memory capacity in dysphoria," *Cognition & Emotion*, [DOI: 10.1080/02699931.2014.991694](https://doi.org/10.1080/02699931.2014.991694)

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