

Remembering so as not to forget

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Verbal distractions are a primary cause of poor memory, according to scientific tests, which prove that the key to preventing ourselves from forgetting is to rehearse and ‘refresh’ our thoughts.

Psychologists from the University of Bristol conducted a series of tests with 117 six year old [children](#) and 104 eight year old children to assess why we forget and how we preserve material in working memory, which governs our ability to process information in order to complete everyday tasks such as problem solving and arithmetic.

The findings - based on the first tests of their kind in children and revealed in the *Journal of Experimental Child Psychology* - indicate that the ability to preserve information in working memory begins at a much younger age than had previously been thought. The results could have

important implications for improving educational development.

Both age groups were subjected to the same series of tests in which children were presented with sets of words to remember. Some of these tests required children to delay their response and wait before recalling these words, and in some cases this delay involved an additional task, constituting a [distraction](#). These distraction tests either involved verbal or nonverbal distraction, allowing researchers to assess how these would affect recall.

Any type of distraction adversely affected children's recall, suggesting that without a distraction task the children 'refreshed' their memories of the original items during the delays. However, verbal distraction was particularly damaging to recall, indicating that this prevented children from carrying out "phonological rehearsal" - verbally repeating the names of the items to themselves.

Professor Chris Jarrold, an expert in [cognitive development](#) from the University of Bristol's Department of [Experimental Psychology](#), who led the research, said: "Our results confirm that we forget information from memory because we are distracted by other activities, but they also show that it is the type and not the amount of that distraction that really determines how much we forget.

"Instead, when we are trying to remember verbal information such as a list of names or numbers, verbal distraction leads to greater forgetting than non-verbal distraction. This is the case even when different distraction tasks require an equal amount of time as the original task in hand. This suggests that one way in which we try to remember information is by verbally rehearsing it, and the findings from our studies with children show that the ability to rehearse in this way develops considerably between the ages of six and eight.

“We know that children’s [working memory](#) skills are closely related to their academic abilities in subjects like reading and maths. One reason for this might be because these tasks require children to rehearse information in the face of potential distraction.”

More information: Tam, H., Jarrold, C., Baddeley, A. D., & Sabatos-DeVito, M. (in press). The development of memory maintenance: Six- and 8-year-olds' use of phonological rehearsal and attentional refreshment in working memory tasks, published in the Journal of Experimental Child Psychology. Access the paper online via the following link: [dx.doi.org/10.1016/j.jecp.2010.05.00](https://doi.org/10.1016/j.jecp.2010.05.00)

Provided by University of Bristol

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