

Public Abstract

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Title:Can the focus of attention accommodate multiple, separate items?

In our environment, it is clear that we can only maintain a few things in short-term memory at a time. For example, when one drives a car, there are many signals (e.g., car horns, stop signs), that compete for attention. Only the information that is most relevant to a task, like the upcoming stop sign where one must make a left turn, will be maintained in memory. While it is clear that there are limits to what we remember over short periods of time, it is unclear how many things can be held in memory at once. Although some researchers believe that a person can hold up to four items in memory at a time, others believe that only a single item can be maintained. In the current experiments, we asked participants to update 0, 1, or 2 visual objects in a short-term memory task, and we examined how quickly participants made a response. Our results showed that a person can maintain more than one item in short-term memory at a time.