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## Do Auditory Temporal Discrimination Tasks Measure Temporal Resolution of the CNS?

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### ABSTRACT

Rammseyer & Brandler (2002) have proposed that auditory temporal discrimination tasks provide a measure of temporal resolution of the CNS which is argued to be partly responsible for higher order cognitive functioning. We report on two studies designed to elicit the nature of the functions underpinning these auditory tasks. Study 1 assessed whether temporal generalisation (TG) might be better considered as a measure of working memory rather than of temporal resolution of the CNS. In N = 66 undergraduates TG did not predict speed of processing tasks; however, there was evidence of a relationship between TG and working memory. Study 2 reanalyzed previously published data on temporal discrimination tasks and showed that the relationship between auditory temporal tasks and intelligence reflects memory functions and processing speed. Auditory temporal discrimination tasks are confounded by speed and memory and should not be considered as measures of temporal resolution of the CNS.

### KEYWORDS

Temporal Discrimination, Working Memory, Intelligence, Auditory Reaction Time

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