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**Relationship between reading and language ability and auditory  
temporal processing measured with the precedence effect**

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Processing of timing information by the auditory system contributes to numerous abilities, including spatial hearing and higher-order language and reading skills. However, relationships among these abilities are poorly understood. The present study was aimed at investigating potential common mechanisms that involve timing. Auditory timing was measured by click stimuli presented via two loudspeakers at a rate of 1.5/sec. Fourteen-ms clicks were presented from one (single-source condition) or two (dual-source condition) loudspeakers. In the latter condition, the onset of one loudspeaker was delayed relative to the other by 5, 10, 20, 50, 100, 200, or 400 ms. Seventy-five naïve adults (mean age 21.23 years) listened to the auditory stimuli and were asked to identify the source of the leading sound. Additionally, all participants completed a battery of language and reading measures. Results on the auditory task revealed that performance was significantly above chance on single-source trials, dropped at short delays, and improved with increasing delay. The mean threshold for correctly identifying the source of the sound was 43.48 ms. A significant correlation ( $p < .05$ ) found between this threshold and a measure of word identification suggests a relationship between timing required for auditory localization and timing required for reading ability.