

N100 and Academic Achievement in Juvenile Delinquents in Response to Reading Intervention

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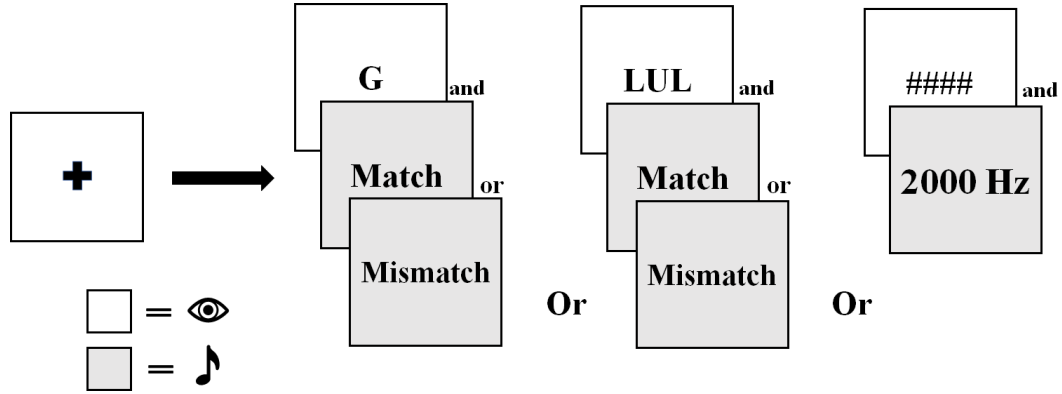


Figure 1. Cross-modal auditory and visual paradigm with four conditions: consonant match, consonant mismatch, consonant-vowel-consonant match and consonant-vowel-consonant mismatch were presented randomly to juveniles. An attention stimulus was included that required the pressing of the spacebar.

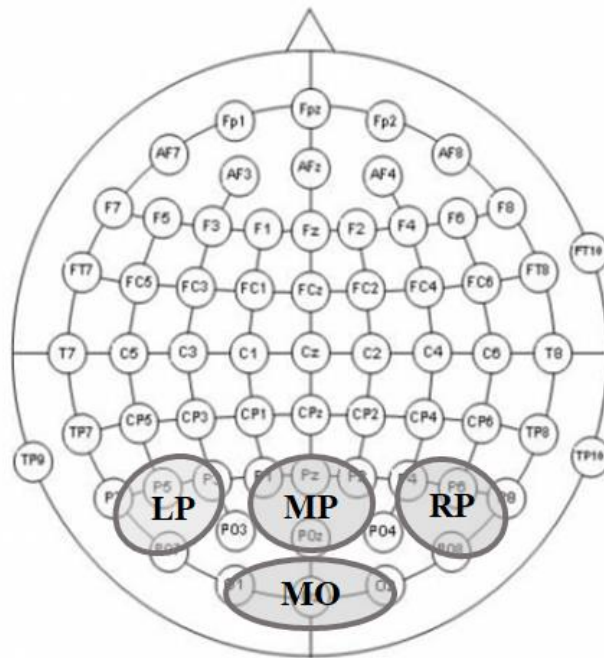


Figure 2. N100 was analyzed in four electrode clusters: LP, RP, MO and MP.

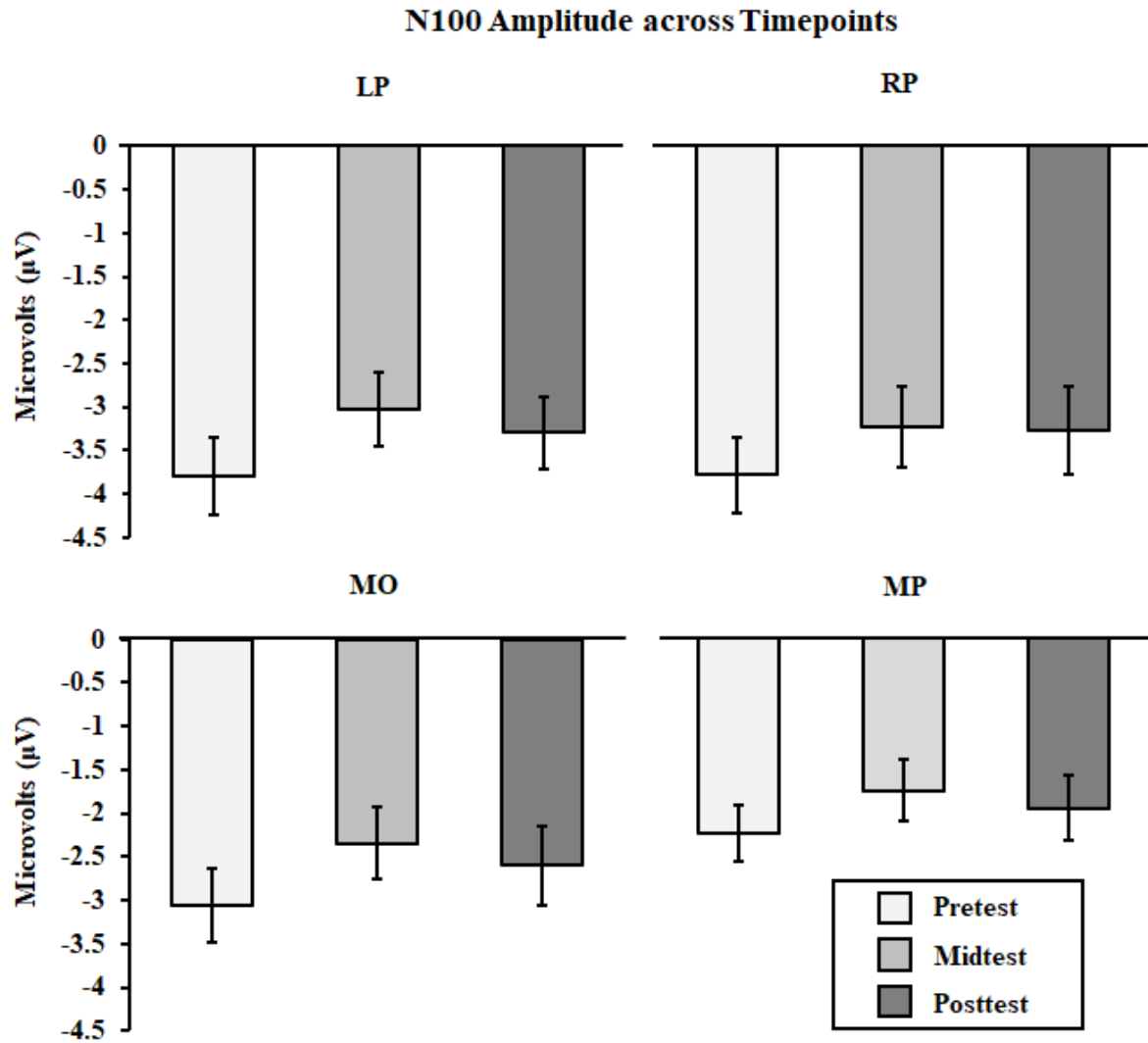


Figure 3. N100 amplitude did not significantly change across time. However, there was a slight decrease in N100 amplitude from Pretest to Midtest in all four electrode clusters, which was contrary to the direction of our hypothesis.

N100 Amplitude within Conditions

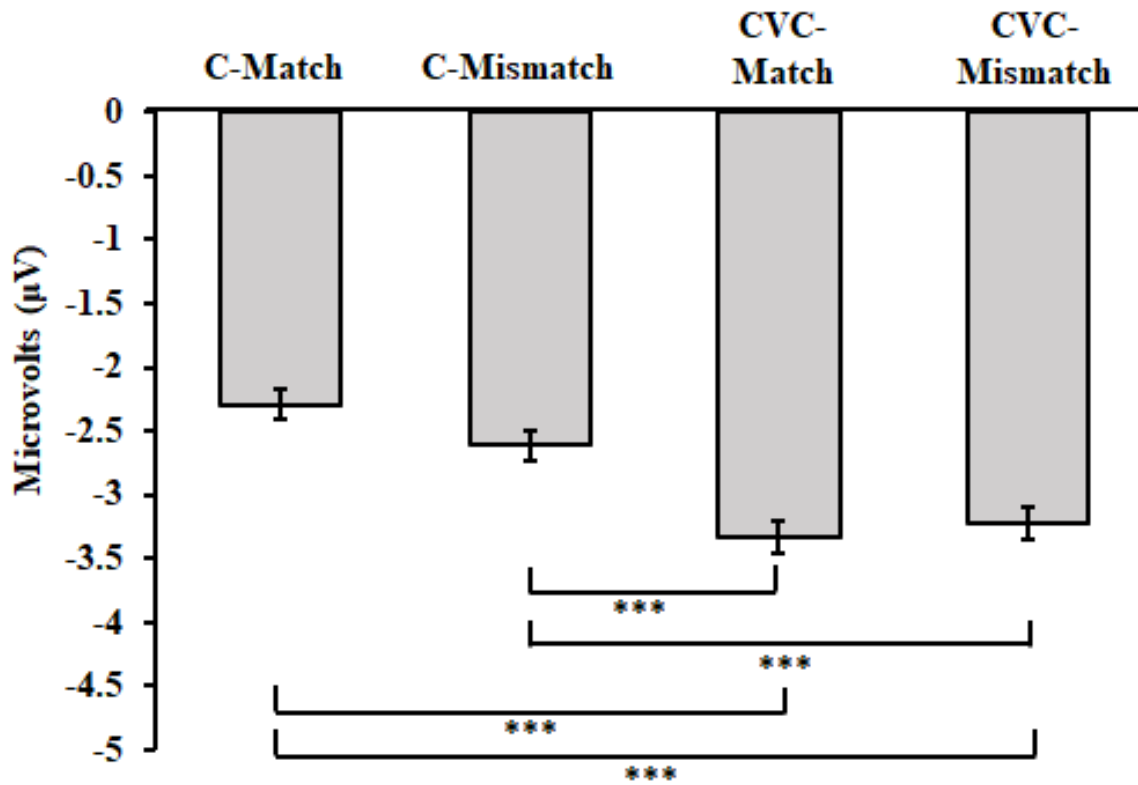


Figure 4. N100 amplitudes for CVC conditions were statistically more negative than C conditions ($p < 0.001$). There were no statistical differences between match or mismatch conditions with the same letter length.

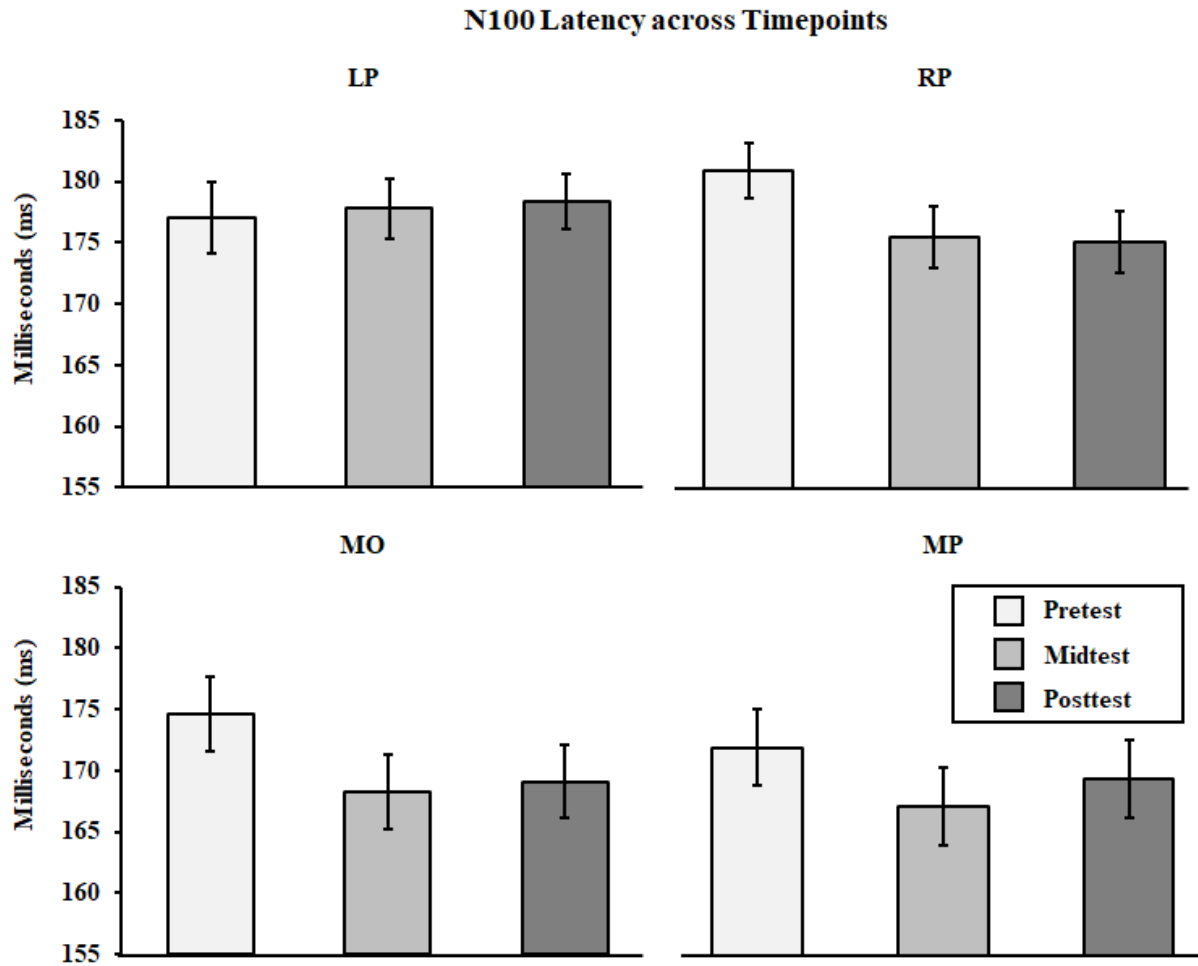


Figure 5. There was no statistical difference in N100 latency across time. Three electrode clusters (RP, MO, MP) showed slight N100 latency shortening from Pretest to Midtest. Significant lateralization effect was not present, however, a slight increase in N100 latency in the LP cluster and a slight decrease in N100 latency in the RP cluster was seen.