Exploring the Rate of Implicit and Explicit Learning in Motor Adaptation: Effects of Rotation Size, Aiming Strategy, and Delayed Feedback

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The Time-Course of Implicit Adaptation Appears Robust to Various Forms of Feedback

The prevailing belief has been that unconscious motor learning develops at a later stage. However, recent findings from our research team challenge this notion. In our study, we investigate the speed at which implicit adaptation occurs by instructing participants to reach for targets while using a cursor that deviates from their actual hand motion. Following each training trial, we introduce a no-cursor trial to assess implicit adaptation. Through this alternating approach between training and testing trials, we can precisely gauge the rate of implicit learning with high temporal precision.

