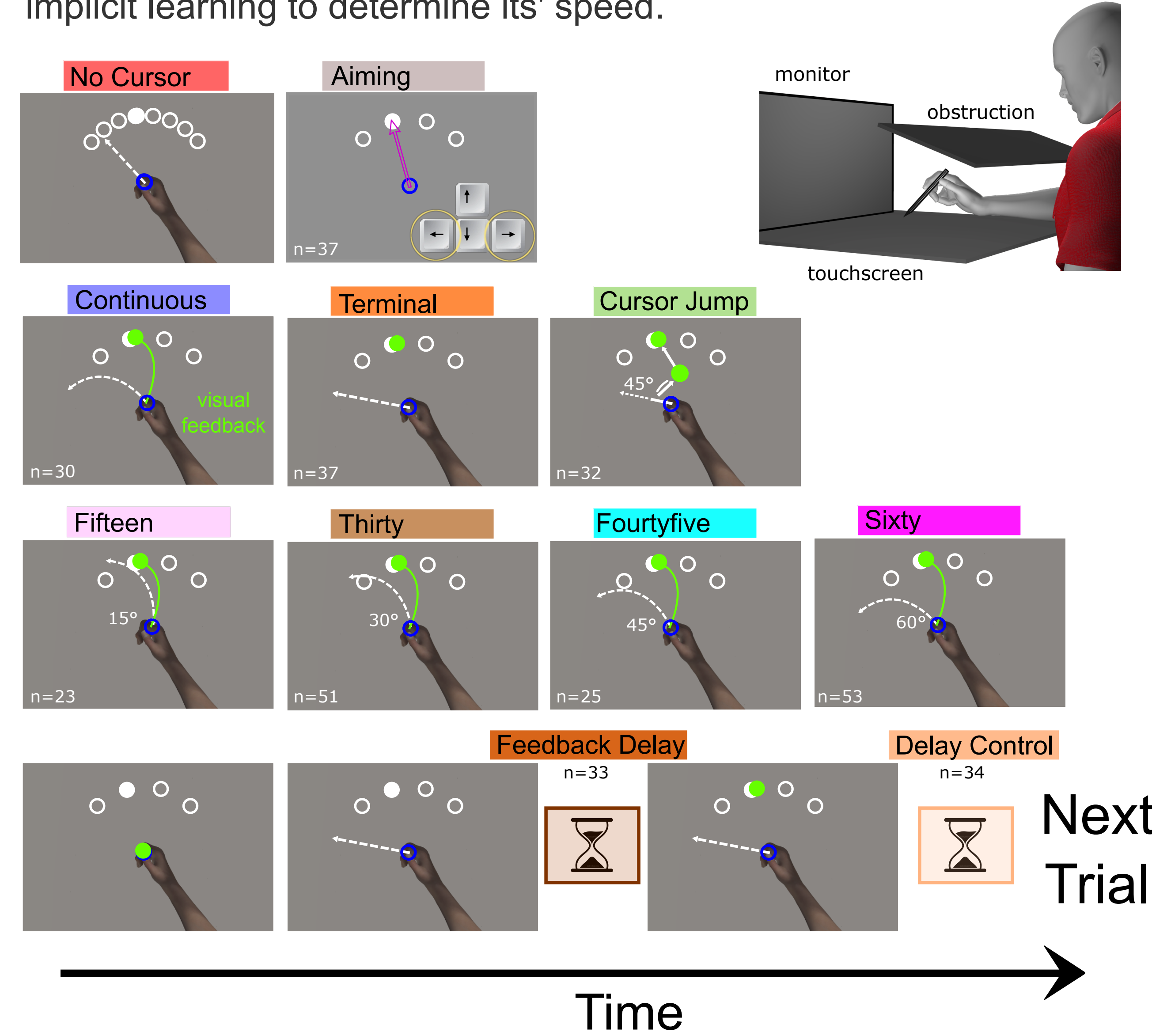


Fast Implicit Motor Adaptation: No Influence of Rotation Size, Aiming Strategy, or Delayed Feedback

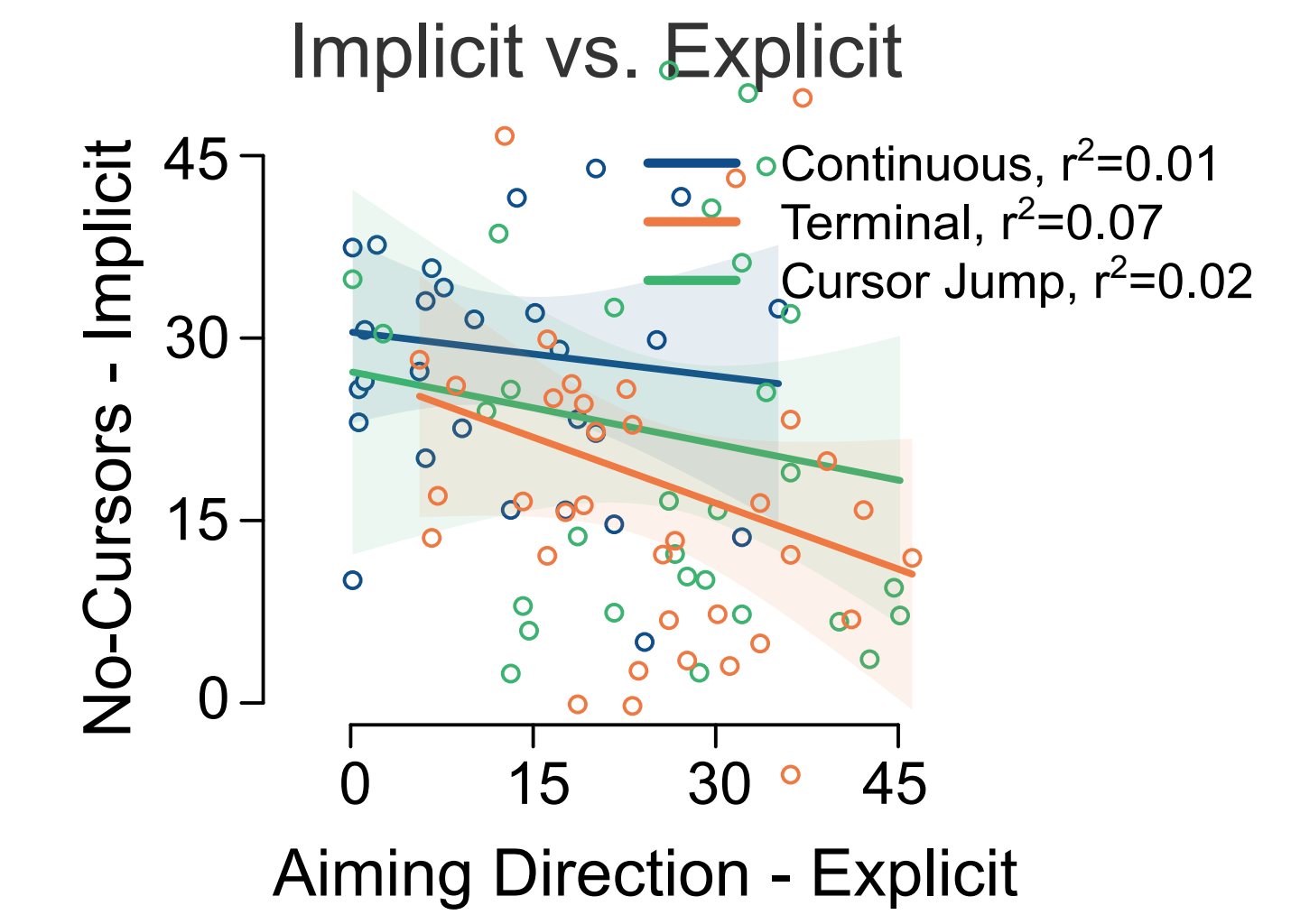
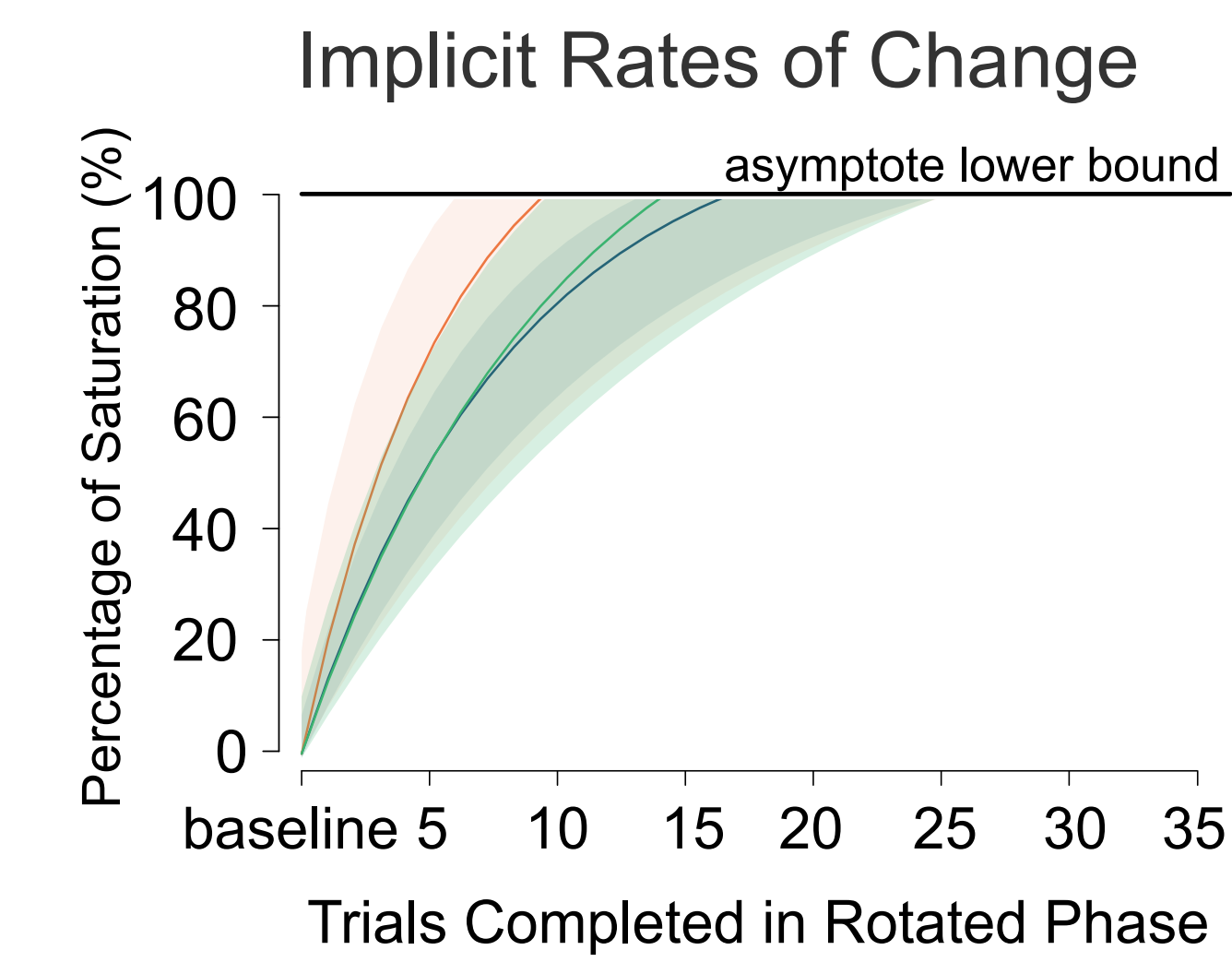
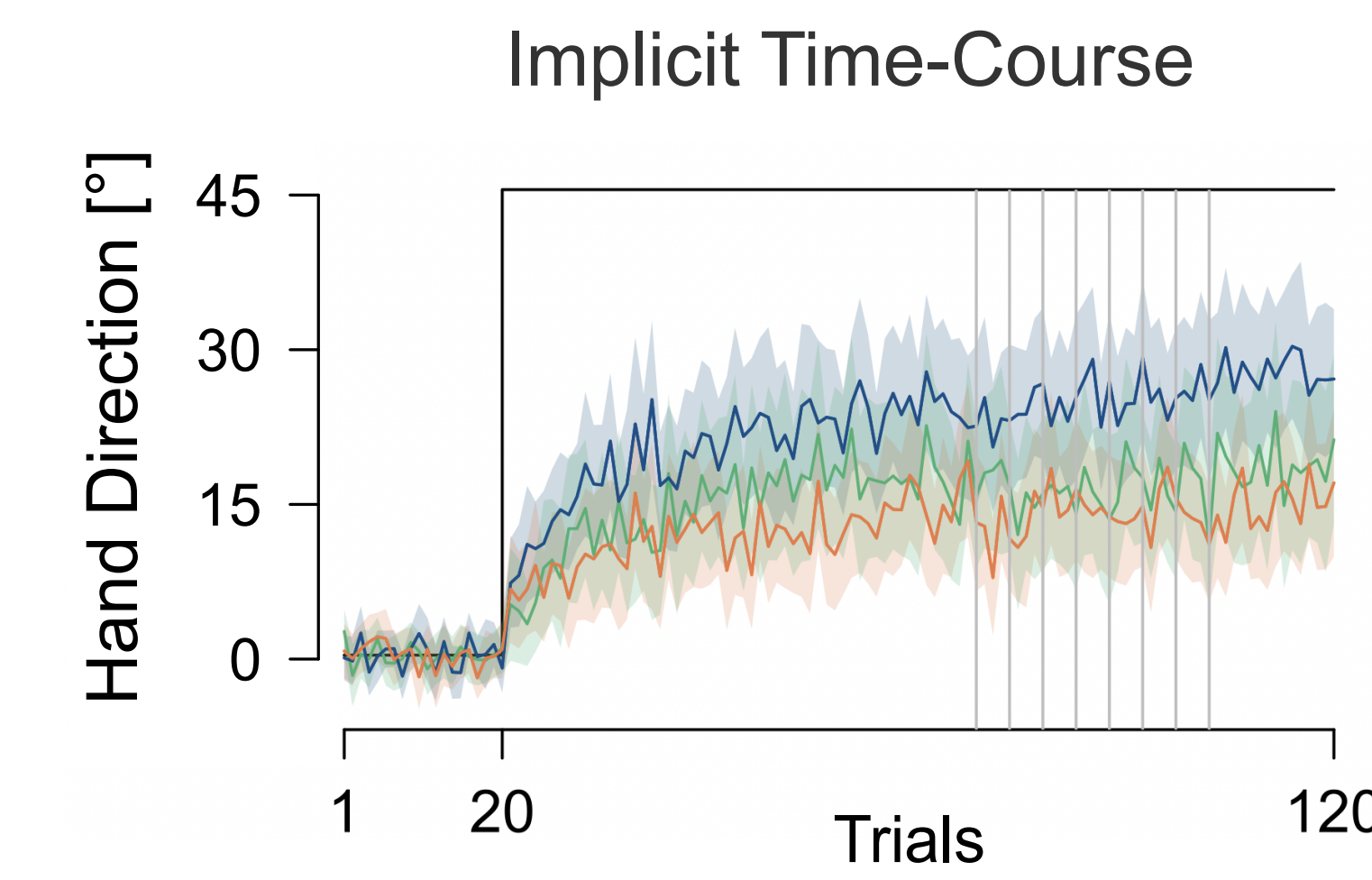
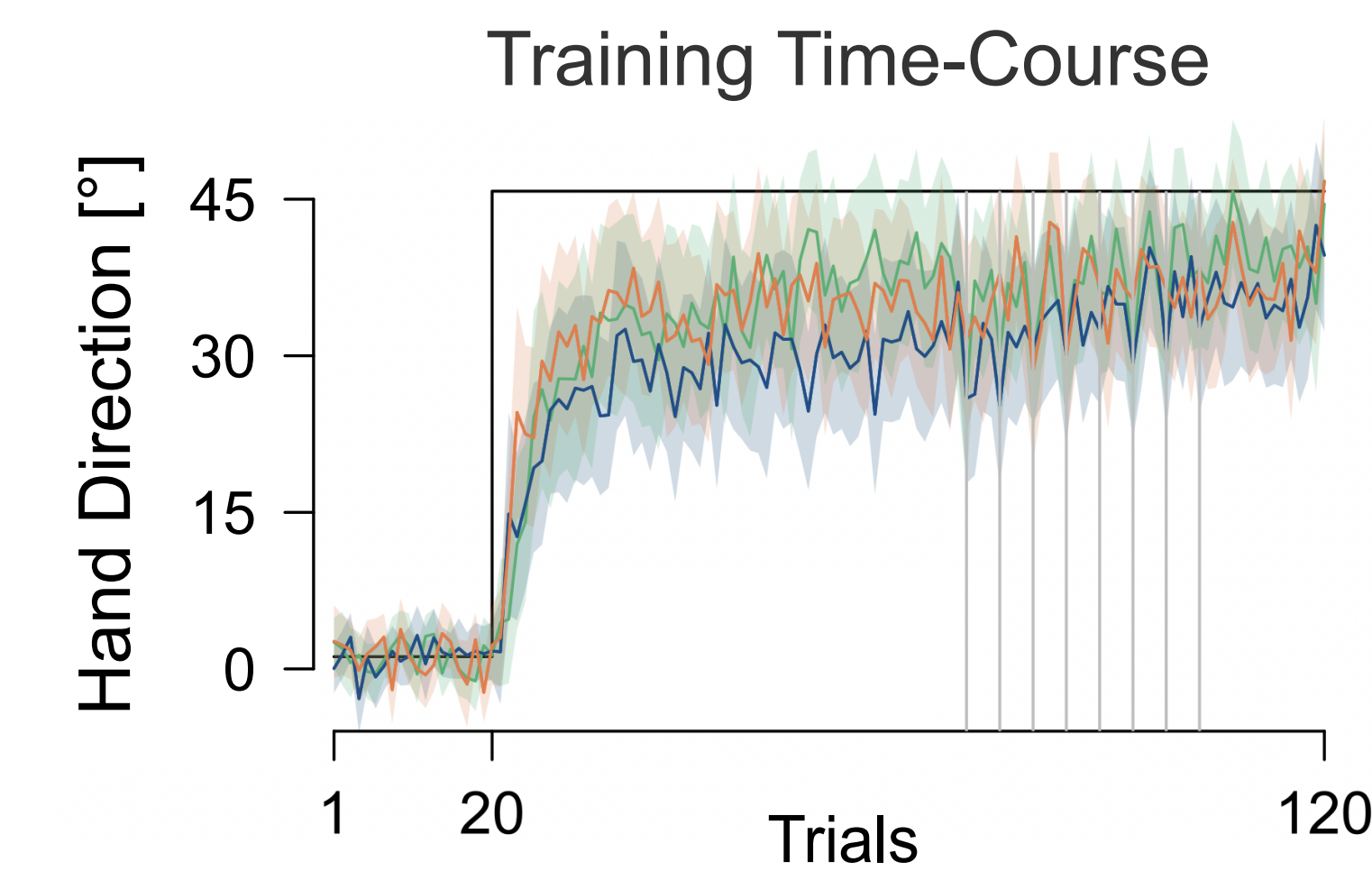
Sebastian D'Amario, Bernard Marius 't Hart, Denise Y. P. Henriques

How does varying feedback impact implicit adaptation?

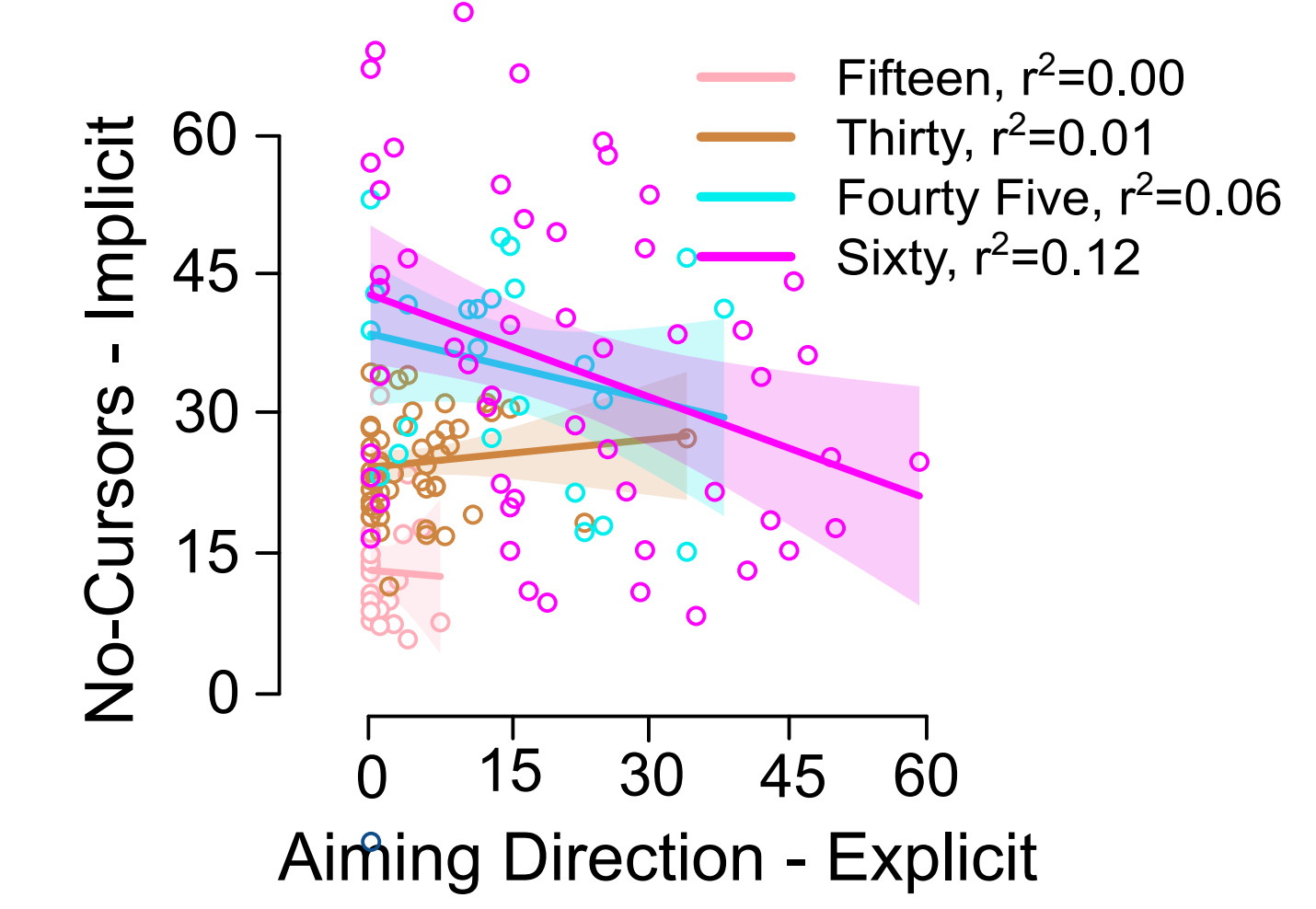
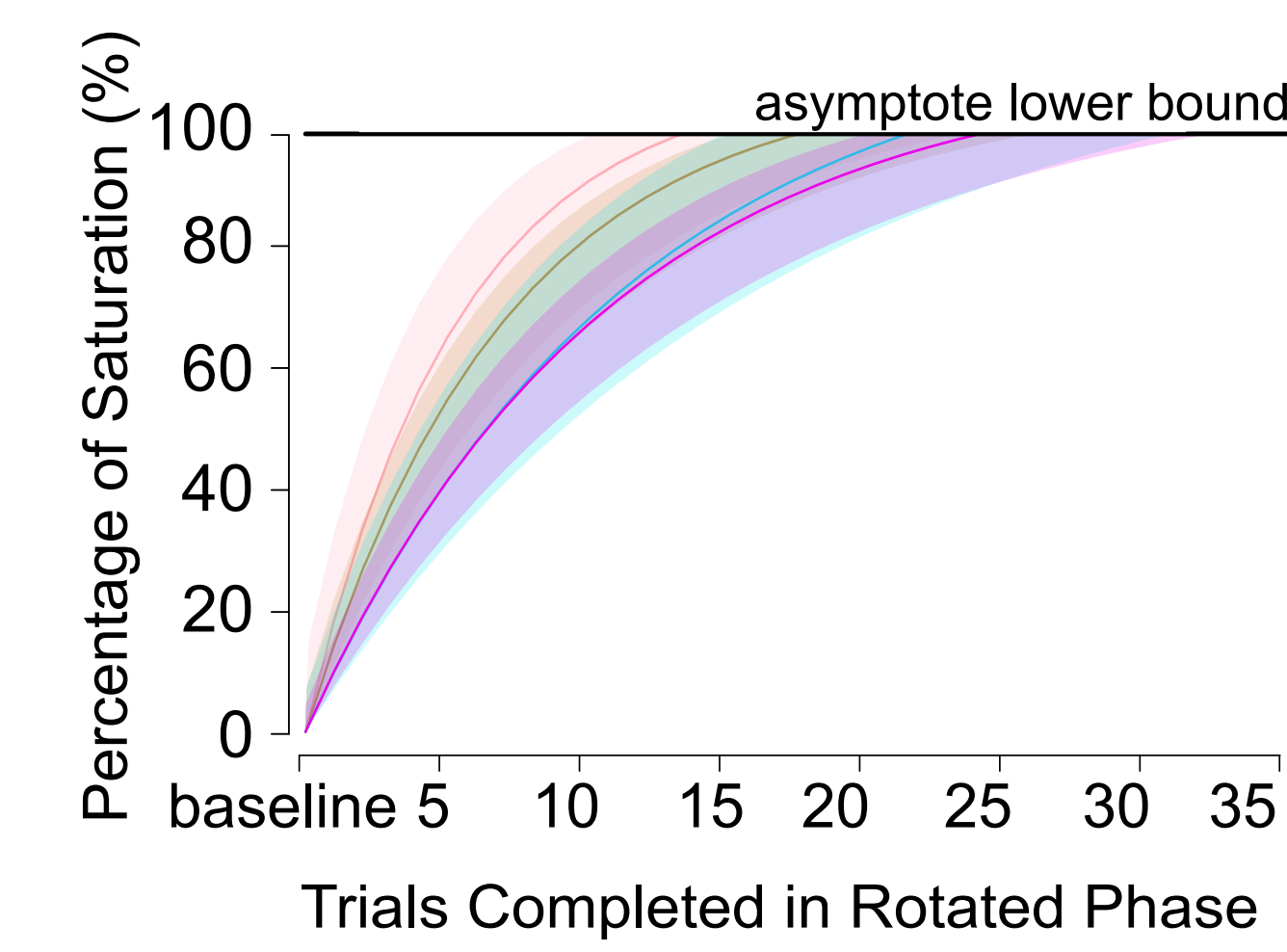
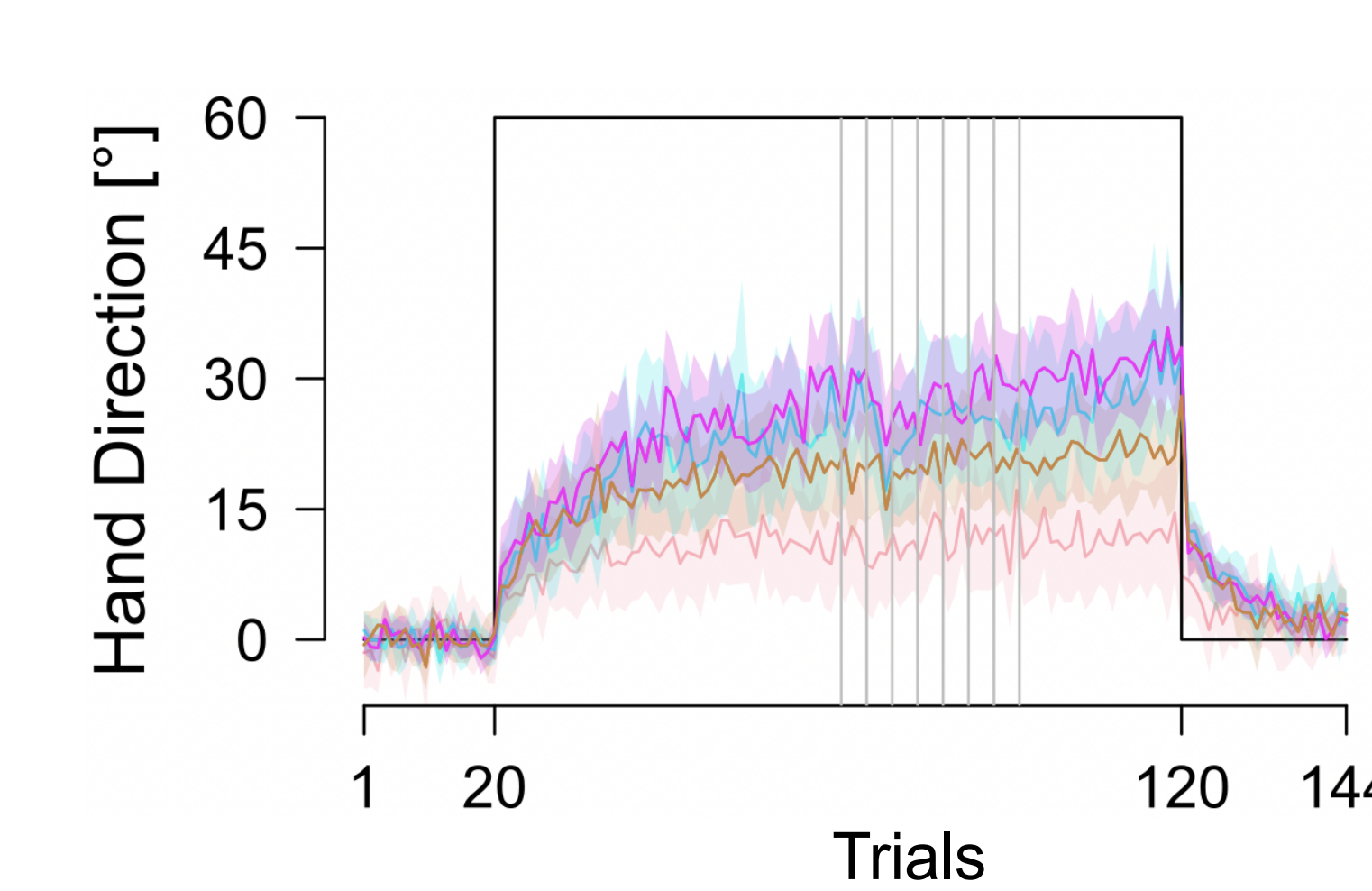
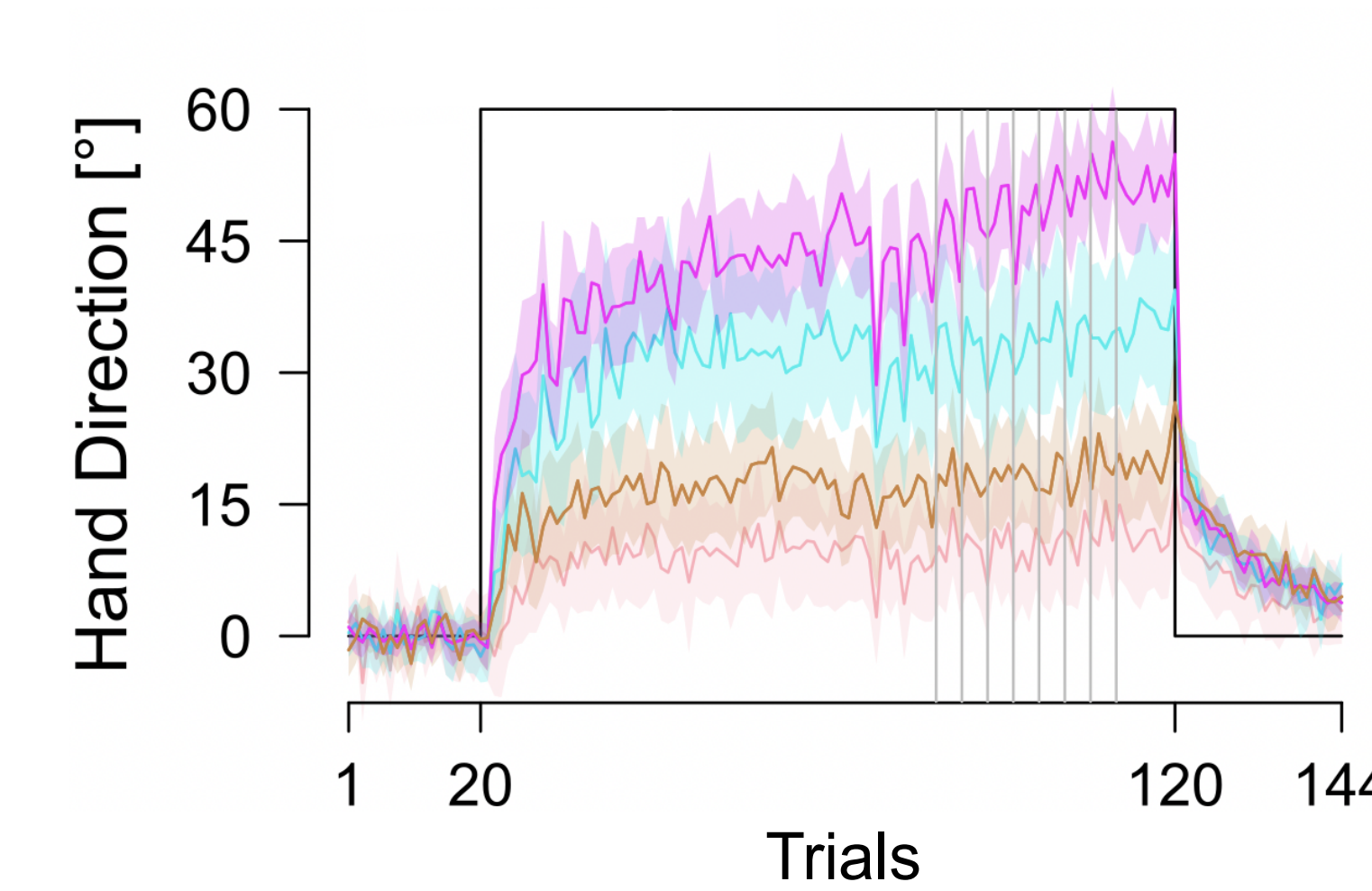
Recent research from our lab challenges the traditional belief that unconscious motor learning develops slowly. Our study investigates how quickly implicit learning emerges across different visuomotor adaptation conditions. Alternating between classical visuomotor rotation training and testing trials, we precisely measure implicit learning speed with high temporal resolution. This enables us to measure the full time course of implicit learning to determine its' speed.



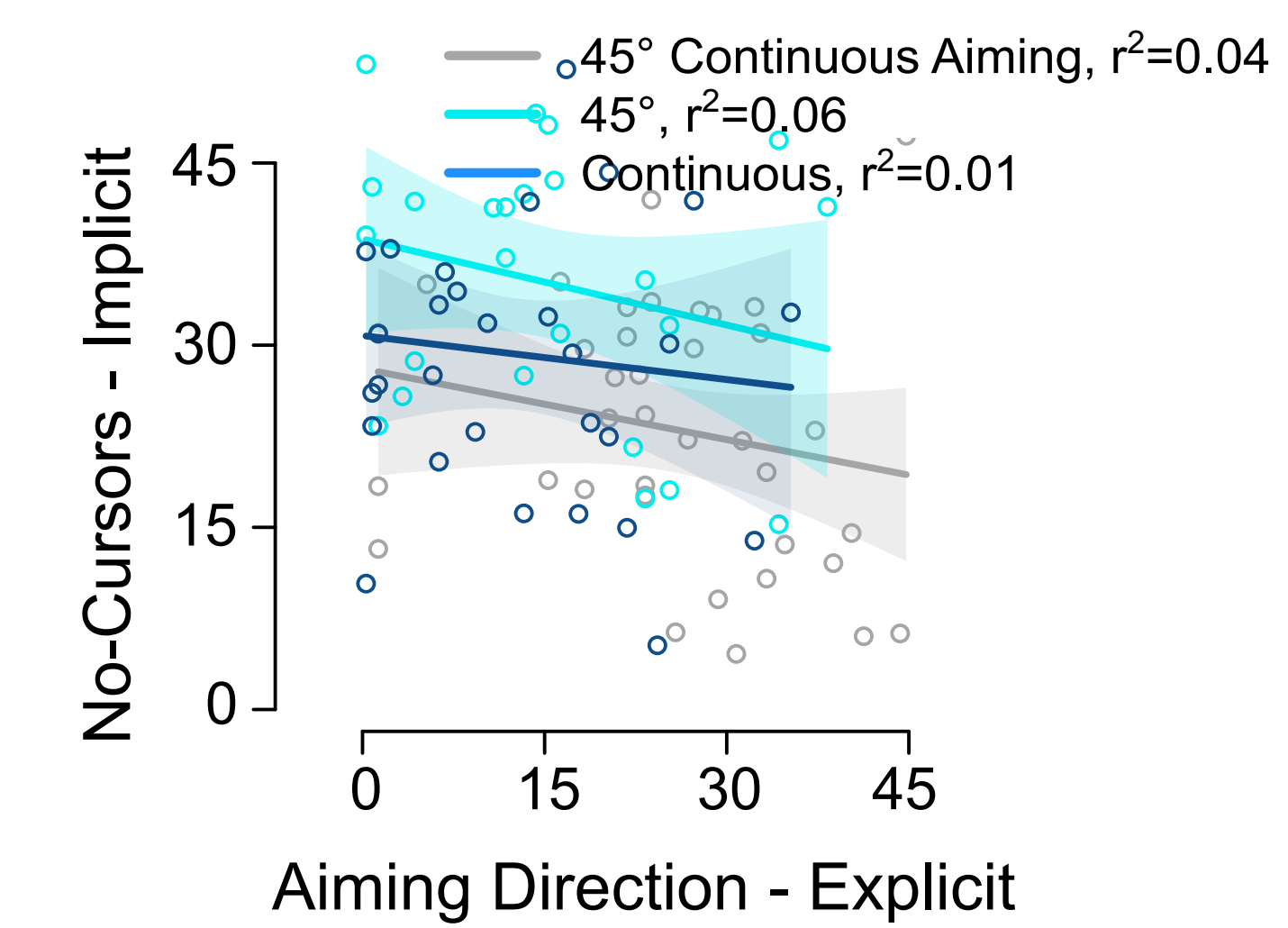
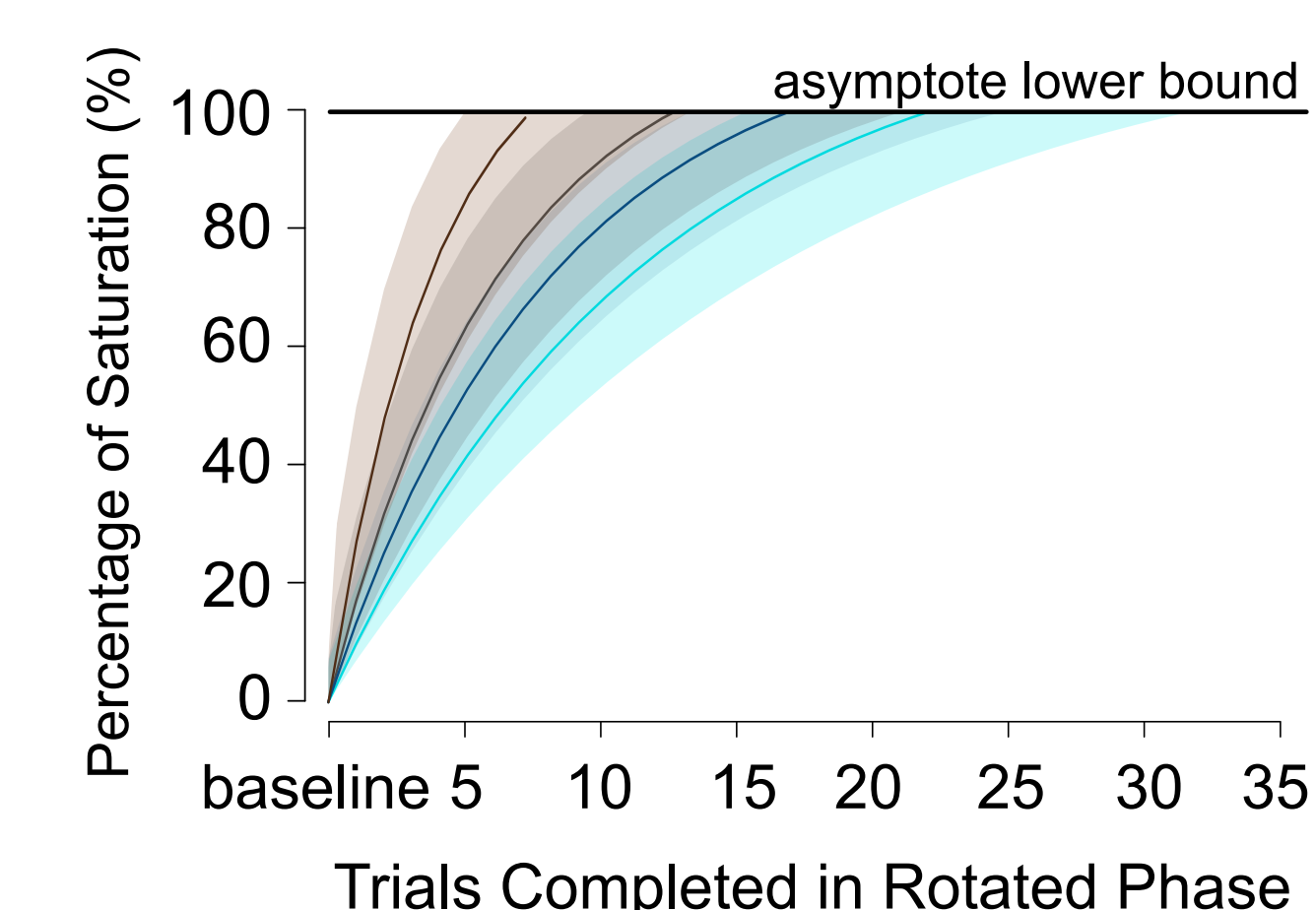
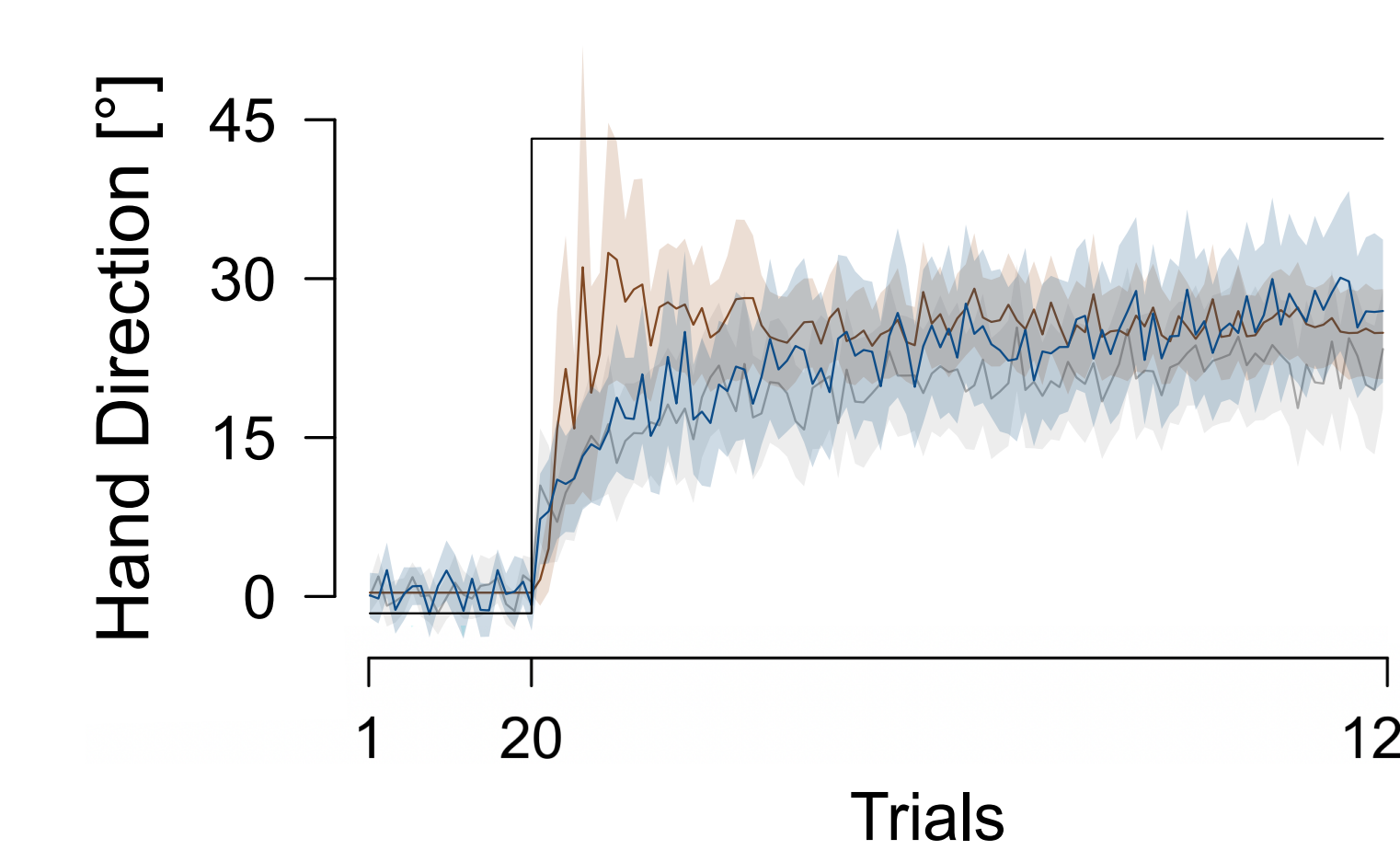
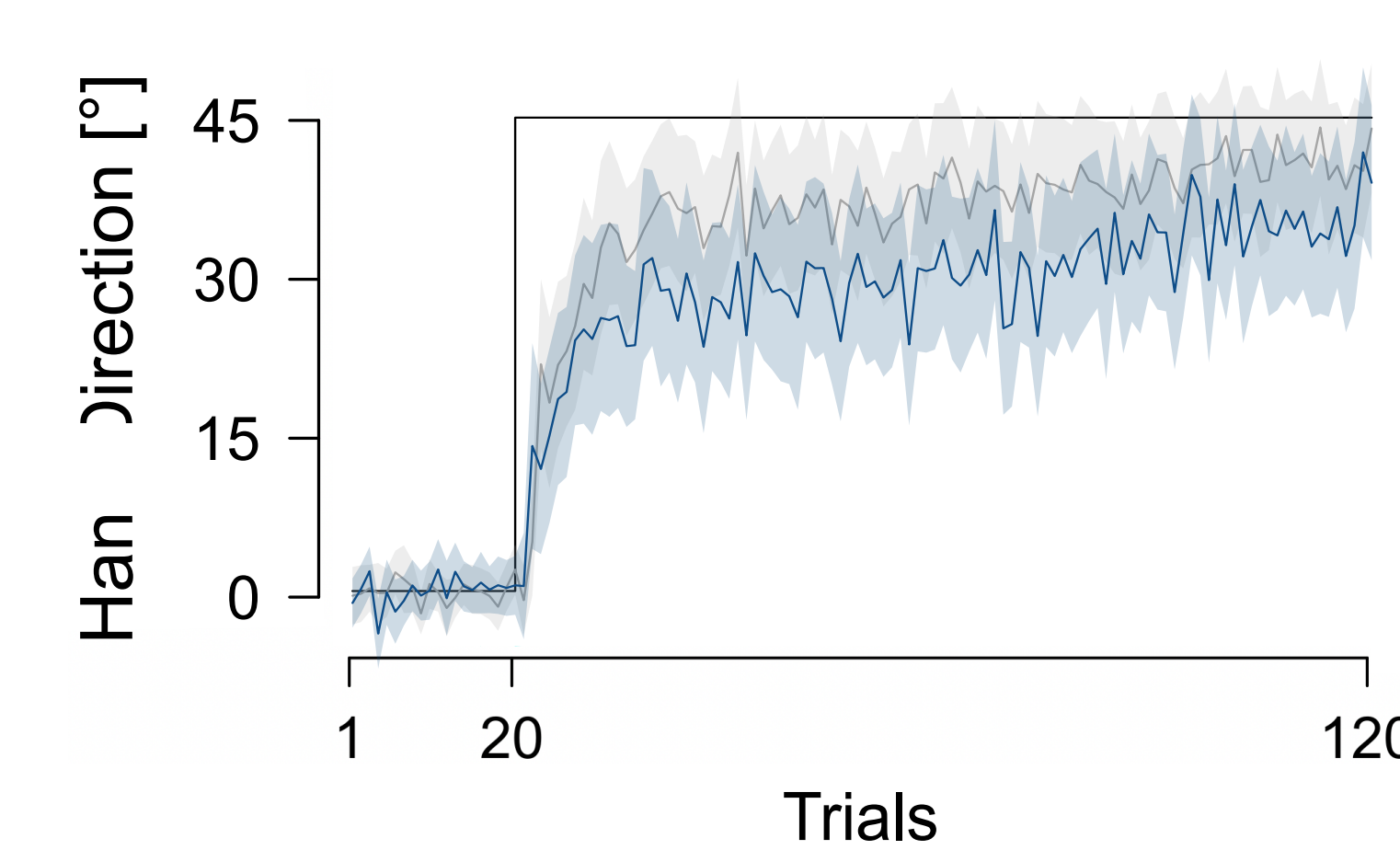
The Effect of Feedback Type



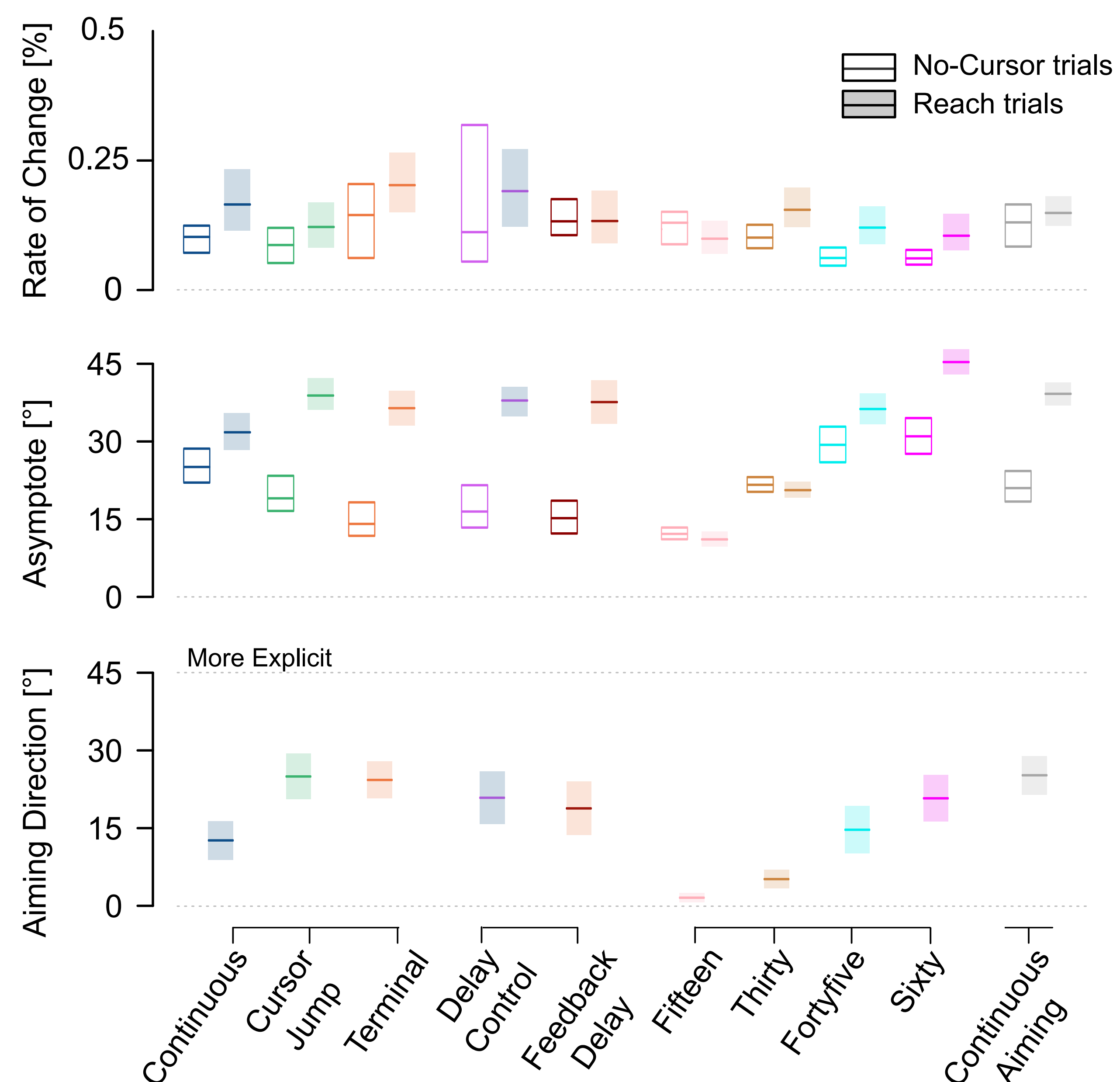
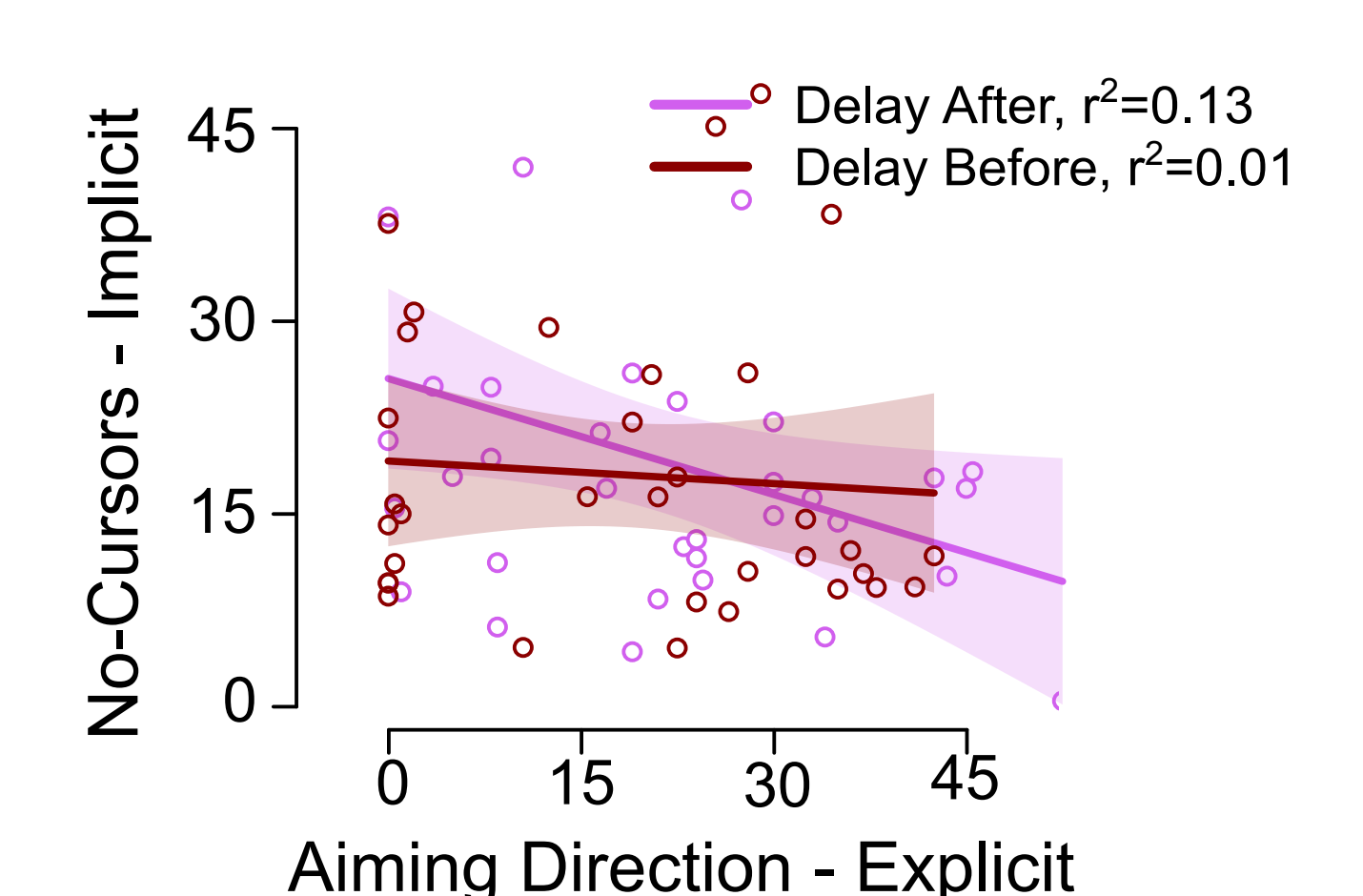
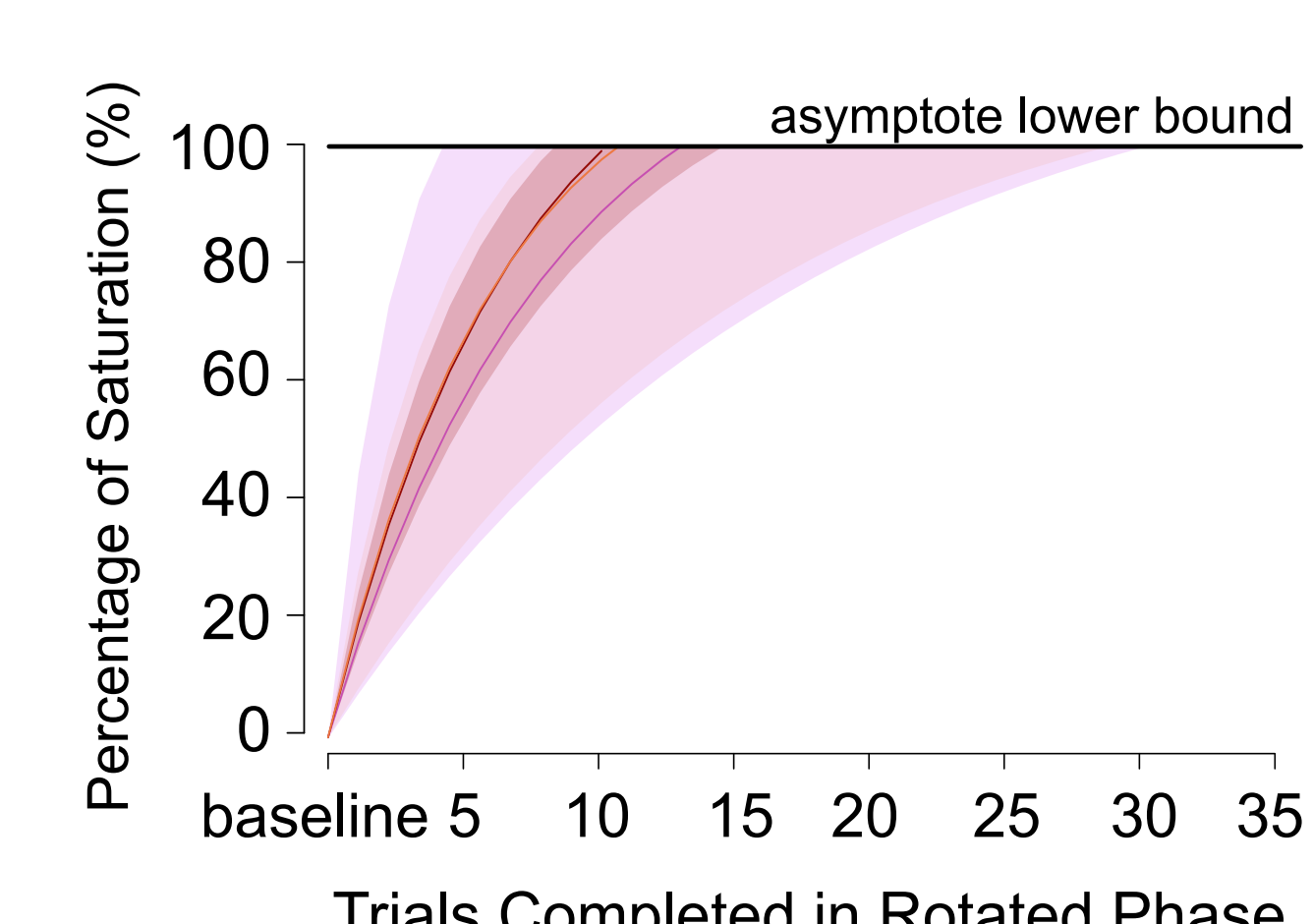
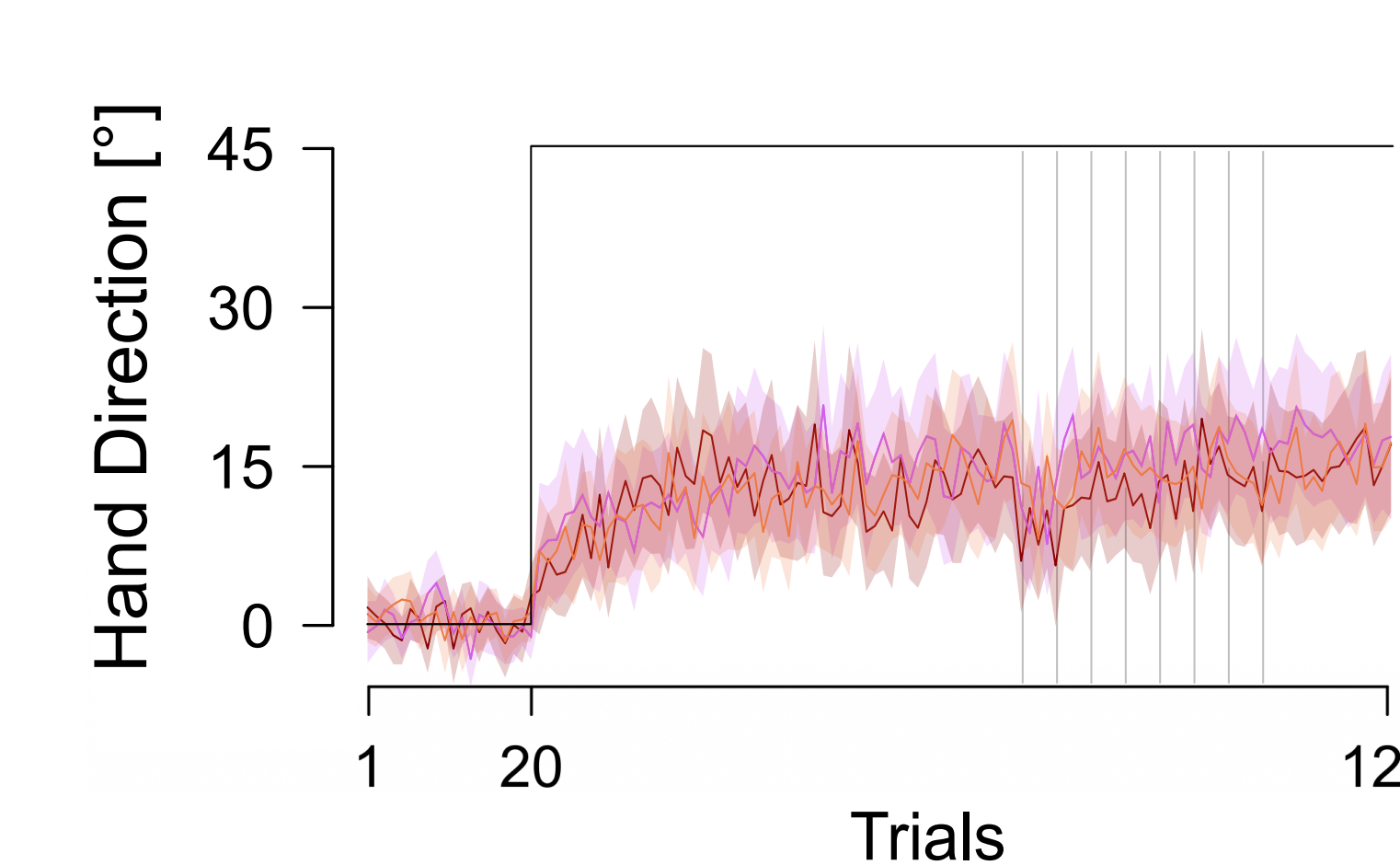
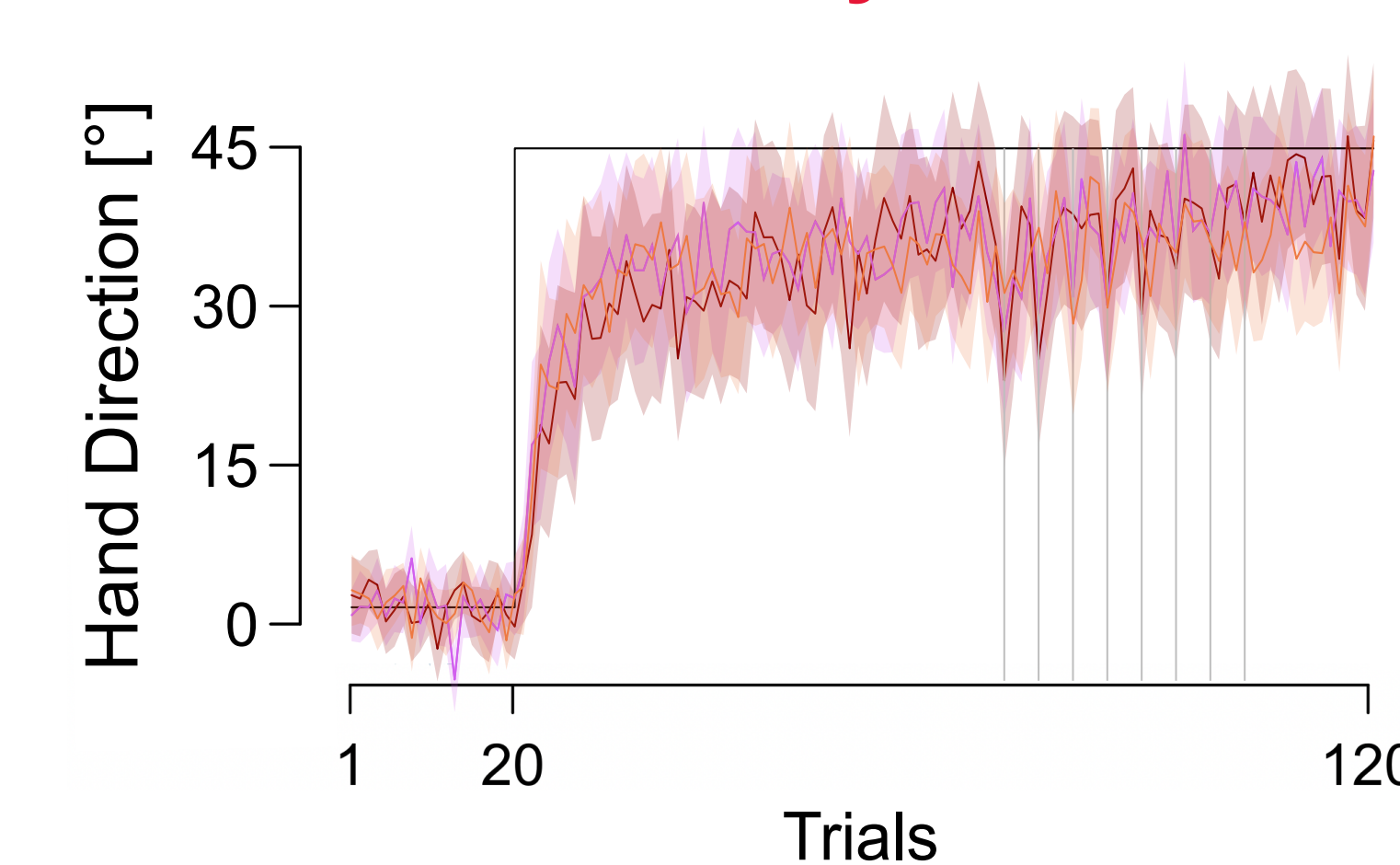
The Effect of Rotation Size



The Effect of Continuous Aiming



The Effect of Delayed Feedback



In all conditions, implicit adaptation emerges and saturates quite fast

Implicit and explicit measures are at best weakly correlated