



# Stop-Signal Task

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The Stop-Signal Task (SST) is a psychological experiment designed to study response inhibition, a key aspect of cognitive control. In this task, participants are asked to respond quickly to a "go" signal, by pressing a button when they see an arrow pointing left or right. However, on some trials, a "stop" signal (a red round circle underneath the arrow) appears shortly after the go signal. In these trials the participant must withhold their response.

The primary measure in the SST is the stop-signal reaction time (SSRT), which reflects how quickly a participant can inhibit their prepotent response. The task evaluates the ability to suppress an already initiated action, making it useful for studying impulse control. The SST is commonly used in research on attention, executive function, and disorders such as ADHD, OCD, and substance abuse, where impaired response inhibition may play a role.