

NDAU Task Information

Visuospatial Working Memory

What is visuospatial working memory?

Visuospatial working memory refers to the capacity to store and manipulate images and information about locations for brief periods of time.

Why is visuospatial working memory important?

Working memory provides a mental workspace that is important to many activities in day-to-day life. Working memory is not strongly influenced by the child's prior experiences (e.g. pre-school education) and an indicator of a child's learning potential.

How does the NDAU measure visuospatial working memory?

We measure visuospatial working memory using the Mister X task from the Automated Working Memory Assessment (AWMA). In the Mister X task, the child views a picture of two Mister X figures (see Figure 1 below). The child is asked to identify whether the two Mister X's are holding the ball in the 'same' or 'different' hand. They are then asked to recall the location of the ball that Mister X with the blue hat was holding. The number of Mister X pairs increases throughout the task, increasing the demand on visuospatial working memory.

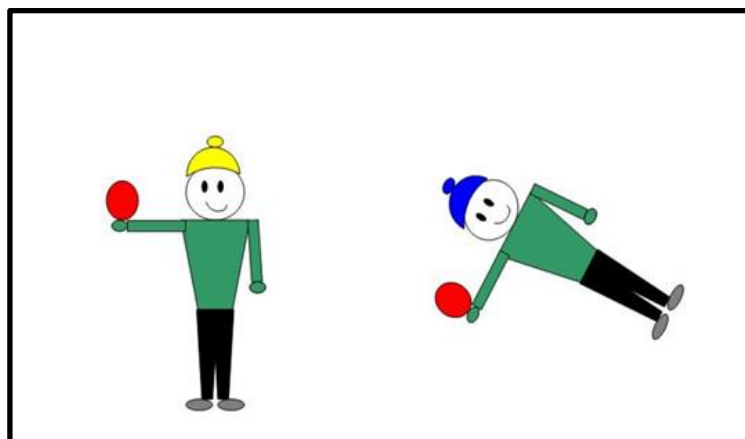


Figure 1. Mister X task