

MeSA Assist Executive Control

The Executive Control Quotient (ECQ) scale score is a global scale based on the total time that it takes to complete both Test A and Test B. There are nine specific cognitive skills that are required to perform well on the MeSA-AE Assist test. These nine cognitive skills include selective attention, visuospatial sequencing, fine motor control, response inhibition, sustained attention, central processing speed, alternating attention, visuospatial classification and working memory. On both Test A and Test B the test takers are required to identify the correct targets based on a rule and will need to utilize their selective attention, visuospatial sequencing, alternating attention, visuospatial classification and working memory in order to make correct choices. They must also apply their response inhibition skills in order selecting an incorrect target and violating the target rule order. An individual's ability to complete the two tests quickly will also depend on their ability to sustain their attention and their overall central processing speed. Impairments in either selective attention and/or working memory in combination with visuospatial sequencing or response inhibition deficits will typically result in sequential errors.

The ECQ scale is a composite measure of executive control based on the Attention Control Quotient (ACQ) and the Cognitive Flexibility Quotient (CFQ). The ACQ and CFQ scale interpretations provide the necessary detail to help examiners in ascertaining an individual's strengths or weaknesses that result in either low or high test scale scores. In addition, the differences between these two scales can be used by the examiner to help identify specific skills that need to be remediated when deficits are identified. Thus, the ECQ is a composite measure that takes into account a person's basic attentional functioning when initially faced with having to quickly complete a novel task and combines it with their performance on a significantly more challenging test that specifically requires working memory, alternating attention and visuospatial classification. In the interpretation of the ECQ examiners will need to keep in mind that, in some cases, a very slow reaction time on both Test A and Test B may indicate underlying neurological problems.