

Unique Distractors Set

MOXO Ecologically Validate Distractors System

Standard CPT tests which evaluate ADHD symptoms and specifically the patients' attention abilities are performed in laboratory conditions in a quiet room, secluded from distractions. However, researchers believe that such results don't fully reflect the patient's conduct and day-to-day behavior in which they are faced with a constant stream of diversions and disturbances to their environment (e.g., Barkley, 1991).

The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) defines the diagnostic criteria for ADHD and mentions external stimuli distractibility ("Is often easily distracted by extraneous stimuli") as a measure of one of ADHD symptoms of inattentiveness.



MOXO test contains a set of distractors that aims to simulate a real-life environment and thus improve the validity of the assessment in relation to everyday life.

The effect of distractors was tested on ADHD and control participants in numerous clinical studies (1-Berger et al., 2015; 2-Berger et al., 2014; 3-Berger et al., 2013).

MOXO's distractors set was designed to fit specific age groups in each test version: MOXO Kids and MOXO Teens & Adults contain short animated videos and audio distractors sections that are irrelevant to the task being performed. They can be visual only, auditory only, or a combination of the two. The test is divided into eight levels and various types of distractors appear throughout the separate stages of the test, as described here:

Basic 1 – Baseline level, no distractors

Level 2 – Low load of visual distractors

Level 3 – High load of visual distractors

Level 4 – Low load auditory distractors

Level 5 – High load auditory distractors

Level 6 – Combination of Low load visual and auditory distractors

Level 7 – Combination of High load visual and auditory distractors

Basic 2 – No distractors (identical to Basic-1)

References:

1. Age-Related Changes in Distractibility: Developmental Trajectory of Sustained Attention in ADHD, Ortal Slobodin, Hanoch Cassuto, and Itai Berger, *Journal of Attention Disorders*, 1-11, 2015 SAGE Publications
2. The Effect of Environmental Distractors Incorporation into a CPT on Sustained Attention and ADHD Diagnosis Among Adolescents, Itai Berger, Hanoch Cassuto, *Journal of Neuroscience Methods* 222 (2014) 62– 68
3. Using Environmental Distractors in the Diagnosis of ADHD, Hanoch Cassuto, Anat Ben-Simon, Itai Berger, *Frontiers in Human Neuroscience*, Volume 7, Article 805 November 2013