

**The Effect of Executive Cognitive Distraction on Sustaining a Volitional Preemptive Abdominal Contraction During a Unipodal Functional Movement in Healthy Subjects.** Cooper K, Garcia L, Kunkel B, Hooper T, Drusch A, Kublawi M, Brismee J, Sargent E, Wilhelm M, Yang H, Gan J, Sizer P.

**Context:** Daily distractions can affect the muscle performance during a functional task. Rehabilitation professionals should demonstrate a better understanding of cognitive distraction on trunk and lower extremity (LE) muscle activation patterns.

on the ability to maintain a volitional preemptive abdominal contraction (V) subjects while performing a unipodal functional task. Subjects used an abdominal maneuver (ABM), or No-VPAC, with and without ECD, while performing the (YBT).

**Design:** Within-subjects, repeated measure cohort design.

**Setting:** Clinical laboratory setting. Subjects recruited from local community.

**Participants:** Convenience sample of 30 healthy individuals, ranging 20-41 years (x= 27.2 yrs).

**Intervention:** Surface electromyography data was recorded on subjects' moving and stance internal obliques (IO) and external obliques (EO) while performing the YBT in the anterior (ANT), posteromedial (PM), and posterolateral (PL) directions. The auditory Stroop program consisted of masculine and feminine terms, requiring subjects to respond by moving the appropriate 5th finger.

**Results:** The 2 (VPAC) x001 T2P 0.06c3o ( )4E(e)-1(AC)4D(h)-4 ()4 AT2P 0NinO(e)3 (V)-2AT2P 0 [rf-2 (v)3 (e)