Titolo / Title:
The Jansari assessment of Executive Functions (JEF©):
A new ecologically-valid tool for assessing EFs using virtual reality

Quando / When:
13 Aprile 2022, ore 13:00 / 13th April 2022 at 13:00 CET

Dove / Where:
Aula Galileo, ITAB and online - Microsoft Teams
https://teams.microsoft.com/l/meetup-join/19%3a0b724a844f004f47bbf9e6bfc4ccc1b8%40thread.tacv2/1649319812373?context=%7b%22Tid%22%3a%2241f8b7d0-9a21-415c-9c69-a67984f3d0de%22%2c%22Oid%22%3a%22aebf9932-2c06-4b91-862f-ae81e43ca747%22%7d

Relatore / Speaker:
Dr Ashok Jansari, Department of Psychology, Goldsmiths, University of London

Abstract: Due to their ubiquitous involvement in cognition, difficulties in executive functions (EFs) can significantly impact behaviour. While some neuropsychological assessments are able to assess these impairments, increasingly, clinicians are seeing patients who pass them whilst still exhibiting difficulties in day-to-day living. Calls have therefore been made to develop tools that are more sensitive and ecologically-valid. The Jansari assessment of Executive Functions (JEF©) is a new tool run on a standard laptop developed to address this need using virtual reality.

JEF© is a set within a business office which mimics aspects of the Multiple Errands Task. Performance is evaluated on subtasks designed to test eight EF constructs: Planning, Prioritisation, Selective-Thinking, Creative-Thinking, Adaptive-Thinking, Action-Based Prospective Memory (PM), Event-Based PM and Time-Based PM. The sensitivity of JEF© for assessing EFs in adults with Acquired Brain Injury (ABI) has been evaluated finding that that it is more sensitive than current clinical tests. Further studies have investigated its utility with patients with focal frontal lesions, adults with bipolar disorder, adults with schizophrenia, adults receiving treatment for substance addictions, elderly men taking medication for prostate cancer, young adults taking recreational drugs, athletes who may suffer Chronic Traumatic Encephalopathy (CTE) through contact sports and ex-criminals who may have suffered closed head injuries.

Results consistently show that JEF© is able to identify differences in EFs between healthy controls and each of the experimental or clinical groups. Further, in a study with patients with ABI, it shows higher correlations with two subjective self-report measures (DEX and PCRS) than measures from the DKEFS, BADS, WCST and MIST.

JEF© is safe ecologically-valid task that has potential for becoming a standard assessment of EFs. With performance being evaluated across eight constructs, it also offers a post-assessment tool for targeting specific rehabilitation. As well as the adult task, there are versions for adolescents (JEF-A©) and children (JEF-C©). Currently, clinicians in a number of countries are using JEF© or translated versions in their work to explore appropriateness for their cultures.

The Speaker: Dr Jansari is a cognitive neuropsychologist with over 30 years of experience in the field having trained at King's College Cambridge, Sussex University and the University of Iowa Hospitals & Clinics. In his research he studies everyday mental functions such as memory, executive functions and face-recognition by studying individuals who have profound difficulties in these abilities that we take for granted resulting in a variety of disorders such as amnesia, dementia or prosopagnosia (inability to recognise familiar faces). In addition to his research expertise, Dr Jansari has also developed an expertise in being able to 'translate' general issues in psychology and science to the lay-person to make them more accessible having appeared on TV in the UK, Germany, Norway and Japan. For this work, he has been nominated for a British Academy Charles Darwin Award for communicating science to non-specialist audiences.