## CLINICAL MANIFESTATIONS



### POSTER PRESENTATIONS

Neuropsychology/Multicultural issues in assessment of dementia

# The impact of culture on neuropsychological performance: A global social cognition study across 12 countries

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### Abstract

Background: Decades of researches aiming to unveil truths about human neuropsychology may have instead unveil facts appropriate to only a fraction of the world's population: those living in western educated rich democratic nations (Muthukrishna et al., 2020 Psych Sci). So far, most studies were conducted as if education and cultural assumptions on which neuropsychology is based were universals and applied everywhere in the world. The importance given to sociological or cultural factors is thus still relatively ignored. With the growth of international clinical studies on dementia, we believe that documenting the potential inter-cultural differences at stake in a common neuropsychological assessment is an essential topic. This study thus aimed to explore these potential variations in two classical tasks used in neuropsychology that are composing the mini-SEA (Bertoux et al., 2012 JNNP), i.e. a reduced version of the well-known Ekman faces (FER), where one has to recognize facial emotions, and a modified version of the Faux Pas test (mFP), where one has to detect and explain social faux.

Method: The data of 573 control participants were collected through the Social Cognition & FTLD Network, an international consortium investigating social cognitive changes in dementia covering 3 continents (18 research centres in 12 countries). Impact of demographic factors and the effect of countries on performance (mini-SEA, FER, mFP) were explored through linear mixed-effects models.

**Result:** Age, education and gender were found to significantly impact the performance of the mini-SEA subtests. Significant and important variations across the countries were also retrieved, with England having the highest performance for all scores. When controlling for demographical factors, differences within countries explained between

14% (mFP) and 24% (FER) of the variance at the mini-SEA. These variations were not explained by any economical or sociological metrics.

**Conclusion:** Important variations of performance were observed across the 12 countries of the consortium, showing how cultural differences may critically impact neuropsychological performance in international studies.

# **Global Social Cognition Study**

