

Assessing Social Cognition in Clinical Practice

Jagger, R,¹ Gaber, T,² Siddique, A¹, Carson, J¹.

The 'social brain'

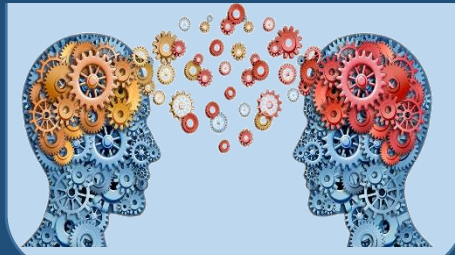


Is a set of brain regions dedicated to social abilities and situations, including empathy, mentalisation, simulation, and emotional regulation

Traumatic Brain Injury

Traumatic Brain Injury occurs when there is trauma to the head, such as a severe fall or car accident, which results in damage to the brain. Depending on the location there is a likelihood that the injury will disturb processing in the social brain networks.

Social Cognition



Is a range of cognitive processes that are involved in our social interactions and how we are able to perceive and attend to information regarding others.

What is the relationship between TBI and social cognition?

TBI can lead to a variety of deficits in social cognition including the ability to communicate, interpret emotional states understand the intentions and points of views of others, as well as understand the meaning behind pragmatic actions.

Current assessments of social cognition

Author	Year	Participants	Assessment Tools	Findings
McDonald + Hagan	2004	24 adults (TBI) 24 Matched controls	Judge speakers emotions (Friesen and Ekman) What speakers intended (Baron-Cohen and Golan) What the speaker was actually saying (Baron-Cohen and Golan)	Could only recognise when emotion information was provided
Kidders, Pucka + Crawford	2003	17 Mild to severe TBI 17 Healthy controls	Recognising facial expressions (Ekman 1992) Eye test (Baron-Cohen, 1997) Eye test (Baron-Cohen, 1997) Eye test (Baron-Cohen, 1997)	Patients with TBI had more problems in emotional and social behaviour than controls
Kidders, Listerwell, Crawford, Curran	2006	23 mild to severe TBI 24 Dextrous controls	Reading the Mind in the Eyes Test (Baron-Cohen, 2002)	Patients with TBI were impaired in emotion recognition, TBI a negative flexibility impairment in controls
Nijmeh, Humphrey & Pugh	2014	40 Neurologically damaged patients (DSM) 50 Neurologically intact controls	Reading the Mind in the Eyes Test (Baron-Cohen, 2002)	Patients as a whole did worse than controls
Allen, Bulluck, Pothary & Moore	2001	12 Mild to severe TBI 12 Controls	Reading the Mind in the Eyes Test (Baron-Cohen, 2002)	Patients with TBI were impaired in emotion recognition, TBI a negative flexibility impairment in controls
Sherry, Yancy, Van, Ellensby & Alvarado	2006	22 ABI 22 HC	Reading the Mind in the Eyes Test (Baron-Cohen, 2002)	Patients with damage exhibit specific impairments in affective TMI compared to executive TMI

From the 21 studies collected so far, we noted at least 10 different assessment tools used. It was apparent that modifications were made to the tools, tailoring them to the needs of the researchers. This limits the reliability and validity of the original tests.

Although not being an issue in itself, it does pose a problem to clinicians struggling to understand which tool is better suited for their patients.

The need for a standardised and reliable method of measurement is clear.

Social Behaviour



If there are deficits present, a range of social problems will be visible such as; 'social impulsivity', problematic social conduct, inappropriate language and low emotional understanding.

What problems are we investigating?

- Clinicians are unaware of what social cognition is and the battery tests available for them to use.
- The tools available are more prevalent in research rather than the clinical setting.
- There is a gap in the implementation of these tools and recommendations.

Further details

1. University of Bolton.
r.jagger@bolton.ac.uk
AS7EPS@bolton.ac.uk
j.carson@bolton.ac.uk

2. NHS Foundation Trust: Wrighton, Wigan and Leigh.
tarek.gaber@wwl.nhs.uk

How could it be resolved?

- Our project entails collating mass amounts of previous data to analyse the more well-used battery tests and process their reliability and validity over a variety of factors, such as; the cost of performing them, timings and cross cultural factors as a few examples.
- We will attempt to incorporate the tools into clinical settings by developing a model and/or flow chart which will help clinicians decide which battery test is better suited for their patients.