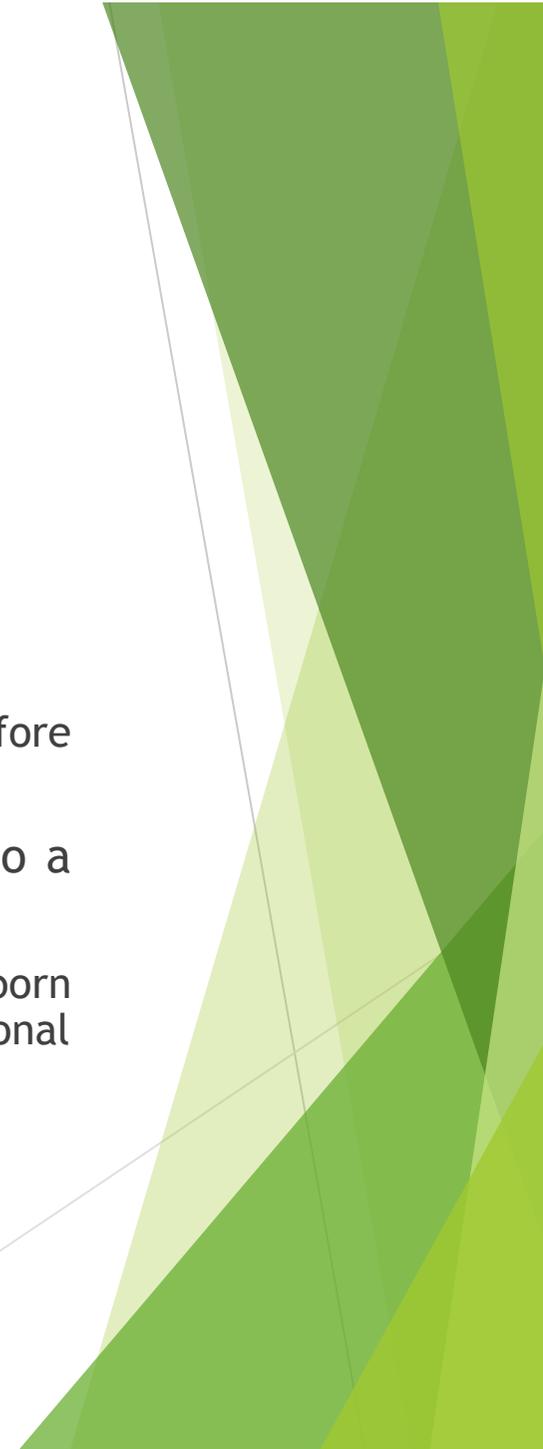


Language and Cross cultural issues



Significant factors to consider

- ▶ Language - including the potential use of interpreters
- ▶ History taking - what information to collect?
- ▶ Which tests you may or may not be able to use ?
 - ▶ Available normative data
 - ▶ How to administer?
 - ▶ Might culture / language / ethnicity influence test performance and therefore interpretation of results?
- ▶ Level of Acculturation - How familiar, and well integrated someone is into a culture / society?
 - ▶ There may be important differences between newly arrived v's British born individuals in terms of their attitudes, access to health care, use of traditional medicine, treatment compliance and language issues.



The effect of culture on neuropsychological tests - some facts

- ▶ Ethnic minorities perform worse than whites, even when matched for other demographics such as chronological age, years of formal education, sex and income (Manly et al, 2002)
- ▶ Asian groups score lower than Europeans on timed tests (Nell, 2000)
- ▶ South Americans scored significantly lower than North Americans on mean digit span (Nell, 2000)
- ▶ Black south African's university educated scored significantly below the US and UK standardisation samples on WAIS-R - FSIQ, info, comp, arith, BD (Nell, 2000)
- ▶ WAIS factor structures for the American and Argentine samples were very similar, but discrepancies between the Argentines and USA performance remained on the Vocabulary, Arithmetic, Digit Symbol and Similarities subtests (Helms, 1992)
- ▶ French WAIS-III: the arithmetic subtest did not align with the Working Memory factor (Insa, 1983)

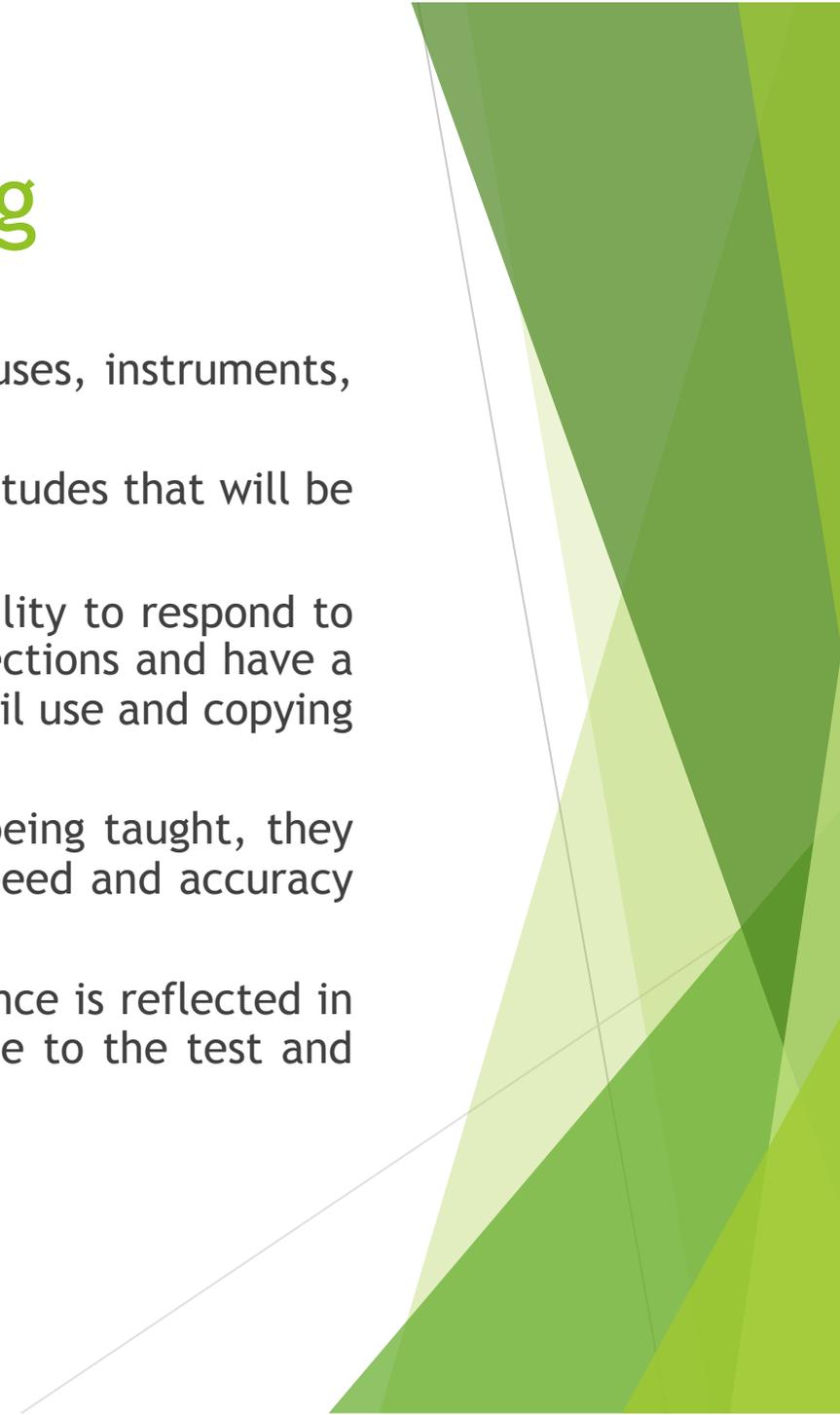
Reasons for differences in test performance

- ▶ Specific neuropsychological tests measure different cognitive constructs in different ethnic groups.
- ▶ The clinicians' experiences with different ethnic or racial groups systematically impacts the specific group's performance on the tests.
- ▶ Clinicians cultural or language competency.
- ▶ Social and political factors affecting test performance include:
 - ▶ Quality of education
 - ▶ Acculturation
 - ▶ Test-wiseness
 - ▶ Racial socialisation



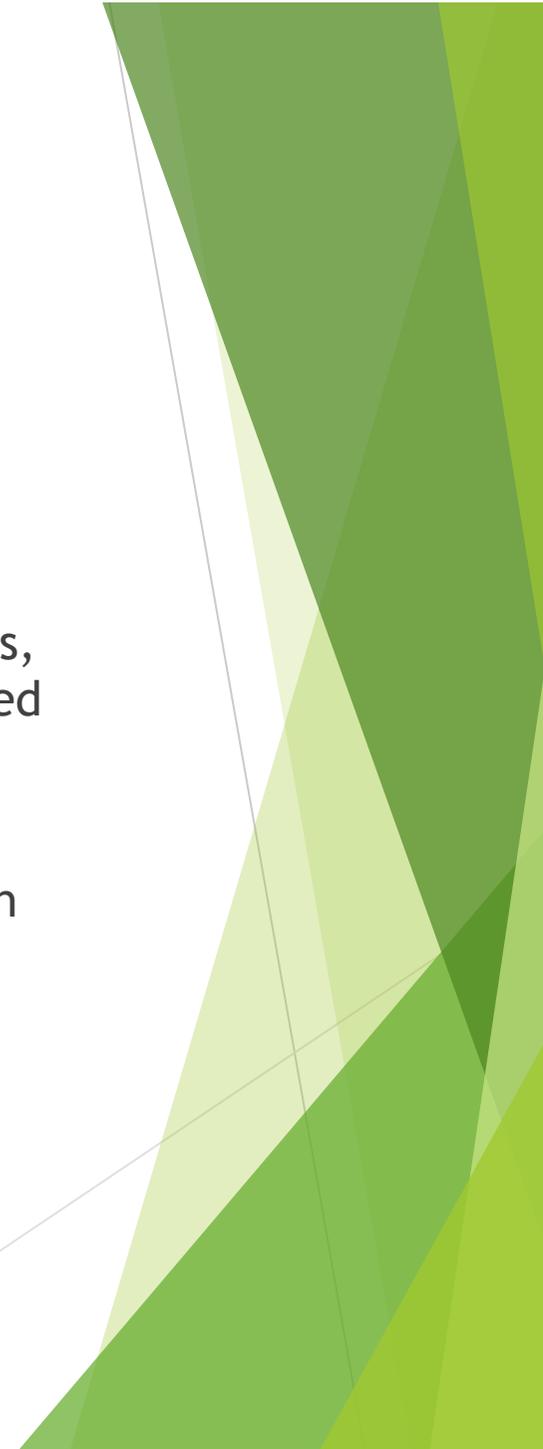
The effect of culture on learning

- ▶ Familiarity with objects (e.g. elements, clothes, ornaments, houses, instruments, etc)
- ▶ School not only teaches, but also helps in developing certain attitudes that will be useful for future new learnings (Ardilla et al., 2000)
- ▶ Western schooling systems facilitate the development of the ability to respond to the test items by paying attention, concentrating, following directions and have a higher level of confidence, as well as specific skills, such as pencil use and copying (Nell, 1999)
- ▶ In Western schools test taking skills are ‘absorbed’ instead of being taught, they result in the testee managing to balance the contradiction of speed and accuracy when responding to test items (Nell, 2000)
- ▶ Individuals from non-western cultures may believe that intelligence is reflected in cautious, careful work, which will impact on his or her response to the test and consequently the test result.



The effect of culture of test taking approach

- ▶ Russians may answer 'don't know' more frequently - independent thinking and making mistakes are 'dangerous' (Nell, 2000)
- ▶ In many sub-Saharan cultures, intelligence is associated with thoughtfulness, and taking time to make decisions. Therefore, they may struggle with timed tests.
- ▶ Razini et al (2007) found that language proficiency of ethnic groups did not alone predict performance, but included other factors of acculturation such as test-taking approach, attitude, comfort of lengthy sessions, etc



Practicalities - Assessment Process

- ▶ A wide range of considerations for the assessment / history taking (Judd & Beggs, 2005):
 - ▶ The need for a thorough review of medical, mental health, educational, employment, criminal and other records
 - ▶ Interviews with multiple informants
 - ▶ Education - including level / quality and familiarity with assessment processes
 - ▶ Religious Beliefs
 - ▶ Family Structures
 - ▶ Social Roles
 - ▶ Attitudes and Beliefs regarding health, illness, mental health, assessment and medication
 - ▶ Cultural norms and conventions regarding personal disclosure and nonverbal conventions
 - ▶ Home setting: isolated country, village, city?

Use of Interpreters

- ▶ Use of family members as interpreters poses a problem as they may be inclined to aid the client in their responses or answer questions on their behalf.
- ▶ Professional interpreters may be fluent in both languages but they are unlikely to be familiar with assessment measures.
 - ▶ It is impossible for the monolingual clinician to assess the level of the fluency in the interpreter and verify the accuracy of the translated information.
 - ▶ Hiring interpreters can be expensive.
- ▶ Practicalities and recommendations
 - ▶ Meet with an interpreter to discuss the process of the assessment prior to its completion.
 - ▶ May need interpreter when meeting with significant others.
 - ▶ If the assessment may take several sessions, see if you can have the same interpreter for each session.
 - ▶ Children's proficiency is often better than parents. Avoid children being used as interpreters and be aware of the different levels of proficiency.

Which tests / norms to use?

Not an easy answer to this! Many tests lack norms for different cultural groups

Some of the screening tests have been translated into multiple languages, e.g. The MOCA

It is a common misconception that tests are equivalent across groups as long as they are administered in the native language of the individual.

Some argue use of visual based tasks reduces any confound due to language skills. However, literacy impacts on performance across all aspects of cognitive assessment.

Ardila et al (2010) - there is significant risk of misdiagnosis of cognitive impairment following poor performance on screening tests. Normal scores for illiterates on the MMSE were 15-20 which is typically indicates cognitive impairment.

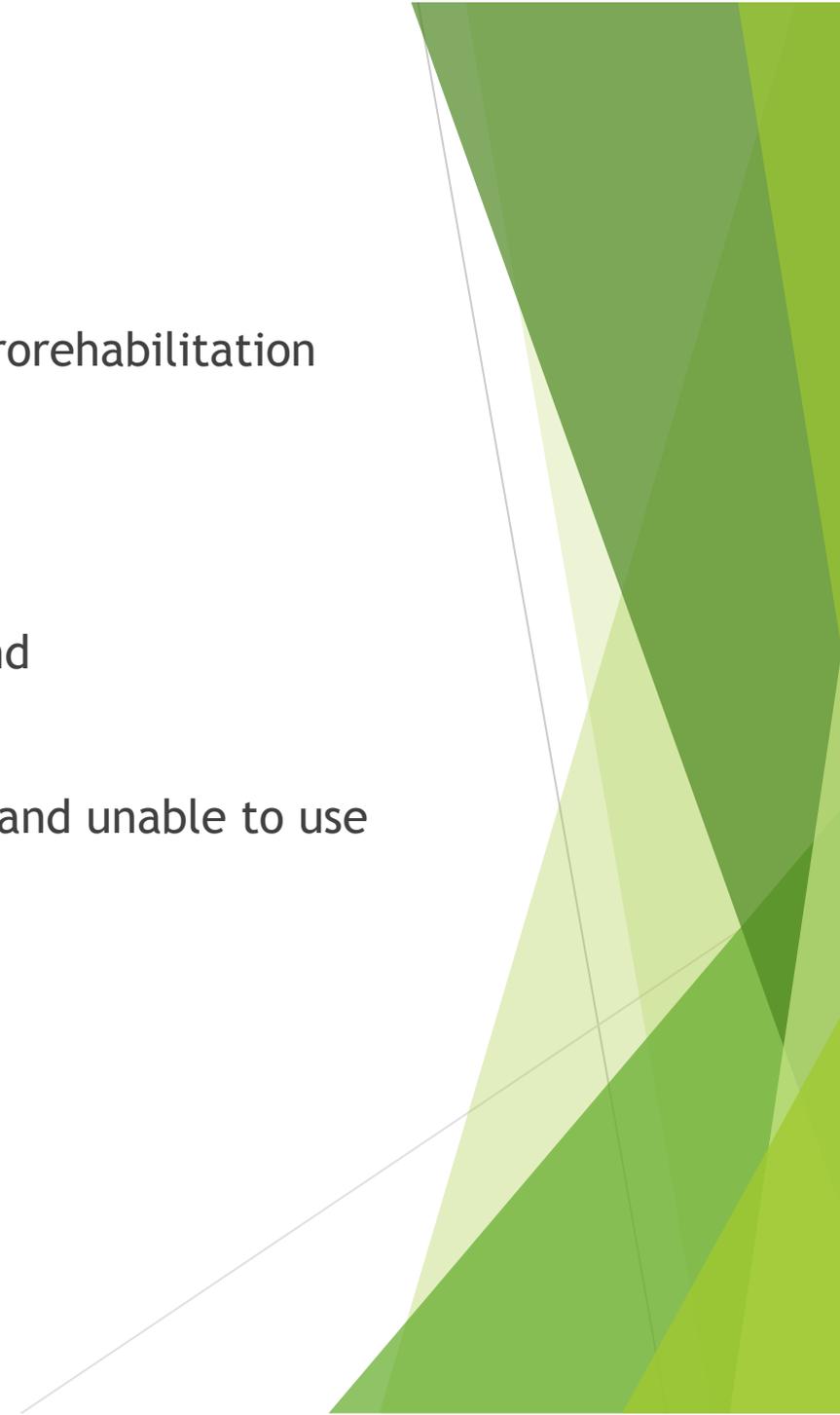
- ▶ The use of screening tests for illiterates is cautioned.
- ▶ Rosselli et al (1990) recommend extensive neuropsychological testing is completed with illiterate people to determine a cognitive and behavioural profile with cautious use of norms.
- ▶ As psychometric intellect is highly correlated with education, measured intelligence may be less important than between-skill discrepancies considered with functional assessments.

Summary of Cross-cultural considerations

- ▶ Most neuropsychological tests are based on neuropsychological theories developed in western cultures, where the population are privy to a particular duration and format to the educational system, and where testing is a normal part of society.
- ▶ Some cultures lack a tradition of formal testing, or they differ in their attitude and approach to testing.
- ▶ Many tests have timed components, with slowed processing indicative of intellectual impairment. However, in some cultures taking ones time is considered to equate to showing wisdom and thoughtfulness.
- ▶ Specific neuropsychological tests measure different cognitive constructs in different ethnics groups.

Case example

- ▶ Mid 40's male of Polish decent admitted to an inpatient neurorehabilitation unit, following a right sided stroke.
- ▶ He speaks 'conversational' English
- ▶ Has lived and worked in the UK for 6 years
- ▶ Educated and much more notable vocational history in Poland
- ▶ Partner speaks no English.
- ▶ Other testing limitations/consideration - dense hemiparesis and unable to use dominant hand. Wheelchair bound.



Approach

- ▶ All assessment sessions completed with a Polish interpreter, and able to book the same interpreter for all sessions.
- ▶ First session - approximately 30 minutes spent just with the interpreter, reviewing the test materials and discussing assessment protocol, confidentiality & discussion of Polish culture
- ▶ Second session - history taking with client and interpreter
- ▶ Third session - interview with partner and interpreter
- ▶ Thorough details of education, work history in Poland, and UK confirmed. Pre-morbid personality, work ethic and lifestyle discussed.
- ▶ Interpreter available for testing sessions and feedback session/case conferences.



Important details from interview

- ▶ Completed national service in Poland, helicopter pilot
- ▶ Worked as an engineer in Poland
- ▶ Able to play the piano and performed for friends
- ▶ Pre-morbidly had a very strong work ethic, and a 'proud' man
- ▶ Heavy smoker (60-80 cigarettes per day), and poor diet
- ▶ Since moving to the UK has worked as a builder, high earner, but all work 'cash in hand'
- ▶ Partner struggling to find work due to limited language skills and very concerned about finances and risk of deportation to Poland (no rehabilitation, community support or care packages)



Useful observations

- ▶ Staff query whether he is depressed
- ▶ Appears indifferent, apathetic, lacking in initiation.
- ▶ No longer cares about personal hygiene or incontinence
- ▶ Very passive, and care staff report he does not assist with care routines despite being physically able to assist.

- ▶ My initial impression - fully orientated, no obvious signs of memory or attention difficulties.

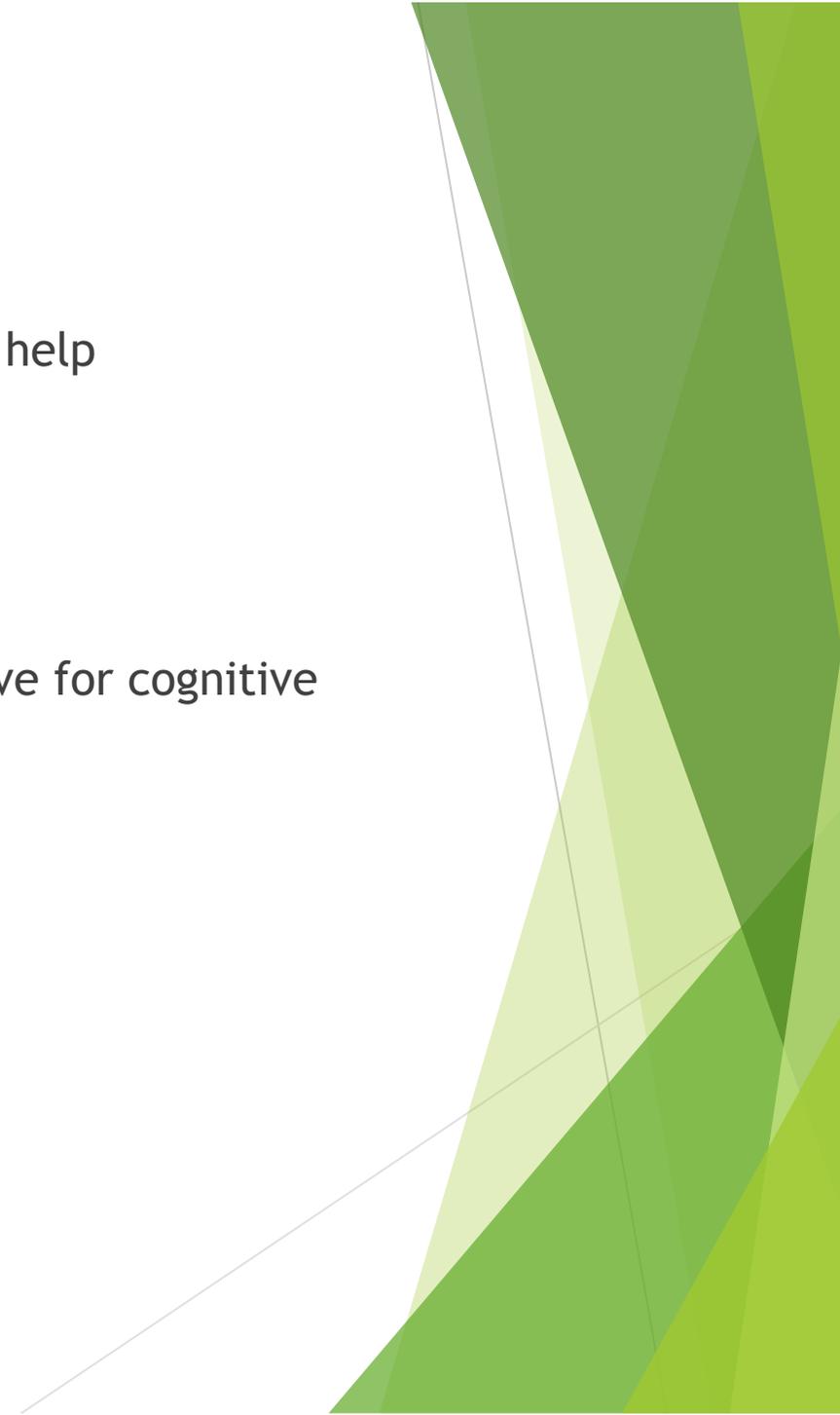
- ▶ BUT - may be depressed and there are also notable signs of dysexecutive syndrome (emotional blunting/apathy, lack of drive/initiation),



Testing

- ▶ Polish version of the ACE administered with the interpreters help
- ▶ Subtests of the BADS used - action program, zoo map
- ▶ Further testing not completed.

- ▶ In addition to testing, joint OT/psychology sessions to observe for cognitive difficulties in functional tasks, such as kitchen skills.



Formulation / Interpretation

- ▶ Testing played a part in the assessment but it was very important to utilise details from the interviews and observations.
- ▶ Very useful to have the same interpreter for all sessions.
- ▶ Behavioural and functional presentation was markedly different to the 'proud' / 'strong work ethic' that was reported premorbidly.
 - ▶ Cognitive limitations related to dysexecutive syndrome
 - ▶ Impact of relationship change
 - ▶ Loss of work role / potential concerns about having to return to Poland.

