

Outcome Measure	Social and Emotional Assessment (SEA and miniSEA)
Sensitivity to Change	Not known
Population	Adult
How to obtain	Available from the authors
Domain	Social Cognition
Type of Measure	Objective performance-based test
Time to administer	SEA- one hour; mini SEA - 30 minutes.
Description	<p>The Social and Emotional Assessment (SEA) is designed to provide an overview of social cognitive abilities in people with frontotemporal dementia (Funkiewiez, Bertoux, Cruz de Souza, Levy, & Dubois, 2012). It comprises five subtests (Max total score = 55) and takes approximately one hour to administer.</p> <ol style="list-style-type: none"> 1. <u>Emotion Perception (Maximum score of 15 = % correct for 35 items)</u>: Examinees choose label from seven to match emotional face displayed on computer screen: 5 x 7 expressions: happy, surprised, sad, angry, fearful, disgusted and neutral taken from Ekman and Freisen. 2. <u>Reward sensitivity/emotional reversal learning (Max score = 5)</u>: Phase 1: Participants learned through successive trials to choose one from two visual coloured images to gain a point (rewarded by words “you won” and pleasant noise; wrong choice followed by “you lost” and unpleasant noise); Phase 2 (after 9/10 trials yielded correct responses), the contingencies reversed. Phase 3 (Extinction), points could only be won by refraining from choosing both of the stimuli. 3. <u>Behavioural control: 2 Square (Max score = 5)</u> Examinees shown two identical squares on a computer screen and told “You have to choose one square each time. You can and you must win each time.” The rule is learned on the basis of reinforcement from the computer. 50 virtual euros given for each correct response and lost for each mistake. The total winnings calculated and presented on the screen between each test. Participants had to reach the criterion of 6 correct consecutive responses for 3 simple rules: alternation (alternately choose between the two squares); nonalternation (choose the same square each time) and reversal (choose the other square). (If unable to reach criterion within 30 trials, the correct rule was provided). A score of up to 5 was calculated. 4. <u>Faux Pas test (Max score = 15)</u> (10 stories: five of which contain a Faux Pas). Examinees listen to each story and then answer questions as to (1) whether faux pas was present and its nature, (2) other details of the story (Total score max = 15) 5. <u>Apathy Scale (Carer version) (Max score =15, transformed from total of 42)</u> Scale taken from Starkstein et al., 1992) composed of 14 items Each item is answered on 3-point scale. For Items 1-8: 3 = “not at all,” to 0 = “a lot.”, For items 9-12 scale was reversed. <p>A MiniSEA is also recommended by the authors which comprises Subtests 1 and 4 only (Bertoux et al., 2012) and takes 30 minutes to administer.</p>
Properties	<p><u>Internal consistency</u>: N/A</p> <p><u>Test-retest reliability</u>- N/A</p> <p><u>Divergent validity</u>: None of the SEA subtests correlate with measure from the Frontal Assessment Battery within an FTD sample. Within an AD sample, only a word recall list was associated with the SEA, specifically higher apathy scores (Funkiewiez et al., 2012).</p> <p><u>Discriminative validity</u>: All subtests of the SEA discriminate people with frontotemporal dementia (early to moderate) from healthy controls (Bertoux et al., 2012; Funkiewiez et al., 2012). Subtests, other than behavioural control (and possibly reversal learning) also</p>

	<p>discriminate people with FTD from people with AD (Funkiewiez et al., 2012). People with AD perform worse than controls on Emotion perception, Apathy and SEA total scores (Funkiewiez et al., 2012). People with MDD also perform more poorly than healthy controls on Total scores for both the SEA and the miniSea and Apathy ratings (Bertoux et al., 2012). Both the SEA and the miniSea are similarly able to discriminate people with depression from people with FTD (Bertoux et al., 2012).</p> <p><u>Concurrent Validity: N/A</u></p> <p><u>Normative data: N/A</u> However, based on their initial study (22 AD, 22 FTD and 30 Healthy controls), Funkiewiez et al recommended a cut-off of 39.4 as indicative of pathology. In a comparison between 19 people with MDD and 17 patients with FTD cut-offs for differentiating between these conditions are recommended at 35.28 and 22.05, respectively for the SEA and the miniSEA.</p>
Advantages	<ul style="list-style-type: none"> • Provides a comprehensive assessment of social cognition and inhibition in people with dementia filling a current gap
Disadvantages	<ul style="list-style-type: none"> • Needs further research to establish psychometric properties and normative data • Requires computer program to administer several subtests

References

- Bertoux, M., Delavest, M., de Souza, L. C., Funkiewiez, A., Lépine, J. P., Fossati, P., . . . Sarazin, M. (2012). Social Cognition and Emotional Assessment differentiates frontotemporal dementia from depression. *J Neurol Neurosurg Psychiatry, 83*(4), 411-416. doi:10.1136/jnnp-2011-301849
- Funkiewiez, A., Bertoux, M., Cruz de Souza, L., Levy, R., & Dubois, B. (2012). The SEA (Social Cognition and emotion assessment): A clinical neuropsychological tool for early diagnosis of frontal variant to frontotemporal lobar degeneration. *Neuropsychology, 26*(1), 81-90.