

Outcome Measure	Edinburgh Social Cognition Test (ESCoT)
Sensitivity to Change	Unknown
Population	Adult
How to obtain	Available from the authors
Domain	Social Cognition (Theory of Mind and understanding of social norms)
Type of Measure	Performative measure
Time to administer	30 minutes
Description	<p>The Edinburgh Test of Social Cognition (ESCoT) (Baksh et al., 2018) is an animation-based measure of social cognition. It comprises eleven social interactions (each approximately 30 seconds long): one practice interaction, five interactions involving social norm violations and five interactions without social norm violations. Participants watch an animated interaction on a computer screen and then are presented with a static storyboard depicting a summarized version of the interaction. The storyboard remains on the screen during the subsequent social cognition questions for each interaction. Participants are asked five questions after viewing each animation relating to: (1) general story comprehension; (2) cognitive theory of mind (ToM); (3) affective ToM; (4) interpersonal understanding of social norms; and (5) intrapersonal understanding of social norms. To allow participants to give their optimal interpretation of each interaction and capture the quality of their response, they are prompted if they give a limited response or their response lacks important information from the interaction. The ESCoT takes approximately 20–25 minutes to administer.</p> <p>The general comprehension question is not scored but the other social cognition questions are. Each question is awarded a maximum of 3 points, with a maximum score of 30 points for each social cognitive ability. Scoring can be classified into a total score correct (out of 120) and subscores for cognitive ToM, affective ToM, interpersonal understanding of social norms and intrapersonal understanding of social norms (each subscore is out of 30).</p> <p>The ESCoT can be obtained by contacting the corresponding author (Asaad Baksh).</p>
Properties	<p><u>Psychometric properties</u></p> <p><u>Reliability</u>: Guttman’s Lambda 4 = .70 for the ESCoT total score in healthy adults (Baksh et al., 2018) and Cronbach’s α = 0.80 for affective ToM , 0.70 for cognitive ToM, 0.70 for interpersonal social norm understanding and 0.80 for intrapersonal social norm understanding in acquired brain injury (Poveda et al., 2021).</p> <p><u>Inter-rater reliability</u>: ESCoT total score (ICC = .90) (Baksh et al., 2018), and ESCoT cognitive ToM (ICC = 0.80), affective ToM (ICC = 0.97), interpersonal understanding of social norms (ICC = 0.96), intrapersonal understanding of social norms (ICC = 0.98) and the ESCoT total score (ICC = 0.97) (Baksh et al., 2021).</p> <p><u>Convergent validity</u>: The ESCoT total score correlates with Reading the Mind in the Eyes ($r = 0.48$), Reading the Mind in the Films ($r = 0.42$) and the Social Norms Questionnaire ($r = 0.34$) in autistic and non-autistic adults (Baksh et al., 2021) and with the Faux Pas test ($r = 0.34$), Reading the Mind in the Eyes ($\rho = .33$) and the Social Norms Questionnaire ($\rho = .36$) in acquired brain injury (Poveda et al., 2021).</p> <p><u>Discriminant validity</u>: All ESCoT measures have been shown to differentiate between autistic and non-autistic adults (Baksh et al., 2021), as well as adults with acquired brain injury and controls (Poveda et al., in press). Performance on the ESCoT measures does not significant correlate with executive functions (Baksh et al., 2020) or measures of IQ (Baksh et al., 2018) in older adults, unlike traditional measures of social cognition.</p>

	Normative data: ESCoT cut-off scores for the subtests and total scores based on the lowest 5th percentile are available in Baksh et al. (2021).
Advantages	Provides an ecologically valid assessment of social cognition in a dynamic cartoon format. Designed to assess different aspects of social cognition within the same test. Freely available from the authors. Validated for use in ageing populations, adults with autism and patients with traumatic brain injury.
Disadvantages	Scoring requires some training. The social interactions may not be appropriate for administration in all cultures. Currently no data on change in performance over time.

References

- Baksh, R.A, Abrahams, S., Auyeung, B. & MacPherson, S.E. (2018). The Edinburgh Social Cognition Test (ESCoT): Examining the effects of age on a new measure of theory of mind and social norm understanding. *PLOS-ONE*, 13(4), e0195818. <https://doi.org/10.1371/journal.pone.0195818>.
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- Poveda, B., Abrahams, S., Baksh, R.A., MacPherson, S.E., & Evans, J.E. (in press). An investigation of the validity of the Edinburgh Social Cognition Test (ESCoT) in acquired brain injury (ABI). *Journal of the International Neuropsychological Society*. <https://doi.org/10.1017/S1355617721001223>