Outcome Measure	The Hinting Task
Sensitivity to Change	Not known
Population	Adult
How to obtain	Author Rhiannon.Corcoran@liverpool.ac.uk
Domain	Social Cognition
Type of Measure	Objective test: Available from first author upon request.
	Revised scoring criteria from Dr. A. Pinkham (amy.pinkham@utdallas.edu)
Time to administer	6 minutes
Description	The hinting task (Corcoran, Mercer, & Frith, 1995) comprises 10 short stories describing an interaction between two characters, all of which end with one of the characters making a hint. At the end of each passage, the participant is asked what the hint meant. If they give a correct response (score 2), they move onto the next item. If they fail, they are provided with extra information to help interpret the hint. A correct recognition of the hint at this stage scores 1. An example is below:
	Paul has to go to an interview and he is running late, while he is cleaning his shoes he says to his wife Jane, "I want to wear that blue shirt but it is very creased"
	Question: What does Paul really mean when he says this? (2 points if answered correctly)
	Extra information: Paul goes on to say: "It's in the ironing basket"
	Q What does Paul want Jane to do? (1 point if answered correctly)
	Total score can be 0-20.
	Administration time: 5-7 minutes
Properties	Internal consistency: Cronbach's alpha has been estimated as .56 (N= 104 healthy adults)(Pinkham, Penn, Green, & Harvey, 2016) and .57 (Campos et al., 2019). Its estimate is higher in patients with schizophrenia (alpha .73: n= 179). (Pinkham et al., 2016).  Inter-rater reliability: Not reported in Corcoran et al (2005), Pinkham (2016) or Campos
	(2018).
	Test-retest reliability: $r$ = .42 (healthy adults) and .64 (patients) over a 2-4-week period (Pinkham et al., 2016). With stricter scoring criteria, $r$ = .51 (controls) and $r$ = .70 (patients) (Pinkham, Harvey, & Penn, 2018).
	Construct validity: The Hinting Task correlates with first order ToM on a novel virtual reality test of TOM (Canty, Neumann, Fleming, & Shum, 2017) and with an analogue task using self-reference (Wastler & Lenzenweger, 2019). Others have found a modest correlation between hinting and emotion recognition (Froyhaug, Andersson, Andreassen, Ueland, & Vaskinn, 2019; Mallawaarachchi, Cotton, Anderson, Killackey, & Allott, 2019) attesting to the two-measuring related but also separable facets of social cognition. Indeed, factor analyses have revealed that the Hinting Task loads with other ToM tests such as the Faux Pas test (Fernandez-Modamio et al., 2019) and TASIT (Morrison et al., 2019) on a single factor, separate to both emotion recognition and general cognition. The hinting task is a verbal task and may be expected to be associated with cognitive skills. To some extent this is borne out be significant correlations between Hinting and cognition in normal adults (Morrison et al., 2019) and people with Parkinson's Disease (Kosutzka et al., 2019). This is not, however, reported in people with ASD (Morrison et al., 2019) or schizophrenia (Park, 2018)/psychosis (Mallawaarachchi et al., 2019) Concurrent validity: The Hinting task is associated with <i>in vivo</i> social skills assessment and functional outcomes in people with schizophrenia in some studies (Canty et al., 2017; Pinkham et al., 2018; Pinkham et al., 2016) but not all (Mallawaarachchi et al., 2019).

	<u>Discriminative validity:</u> The Hinting task was designed to assess people with schizophrenia. To this end most of the studies using the hinting task have been with this population, where it has been shown to discriminate between people with schizophrenia (Park, 2018; Pinkham et al., 2018; Pinkham et al., 2016) and people with OCD (Tulaci et al., 2018) and healthy adults. It is also one of the most sensitive of a range of social cognitive measures for discriminating adults with ASD (Morrison et al., 2019)
	Normative data: There are a number of sources of normative data for adults for the Hinting task including (Morrison et al., 2019), N =95; (Pinkham et al., 2018), N =154: (Pinkham et al., 2016), N = 104; (Corcoran et al., 1995), N = 30; (Sanvicente-Vieira, Kluwe-Schiavon, Corcoran, & Grassi-Oliveira, 2017); N= 30; (Park, 2018), N = 32. There are also some normative data for children N=20 10-15 years (Saban-Bezalel, Dolfin, Laor, & Mashal, 2019). According to Pinkham et al, (2018) <i>Healthy M=15.38 (2.68)</i> .
Advantages	<ul><li>Simple and quick to administer</li><li>Freely available</li></ul>
Disadvantages	<ul> <li>Does not have a control condition to determine what other non-social difficulties may be contributing.</li> </ul>

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