

<b>Outcome Measure</b>	<b>CANTAB Social</b>
<b>Sensitivity to Change</b>	No evidence
<b>How to obtain</b>	<a href="https://www.cambridgecognition.com/cantab/">https://www.cambridgecognition.com/cantab/</a>
<b>Population</b>	Adult
<b>Domain</b>	Social Cognition – Emotion recognition
<b>Type of Measure</b>	Performance task
<b>Description</b>	<p>Two subtests of CANTAB</p> <p>1. Emotion Recognition Test – presents morphed images (blended prototype of 12-15 individuals of same age and gender- 4 identities representing a child male and female and an adult male and female). Each image is shown with (1) an ambiguous expression (morph of all possible) and then increasing intensity (8 levels) to maximum representing the six basic emotions, i.e. 4 (identities) x 6 emotions x 8 (intensities) = 192 images. Each image is presented very briefly for 200ms and then the participant is asked to select the correct label from 6 displayed. Outcome is the percent correct and latency. (6-10 minutes)</p> <p>2. Emotion Bias test (developed by (Penton-Voak, Bate, Lewis, &amp; Munafo, 2012; Penton-Voak et al., 2014): Prototypical images (morphed from 20 male adult faces taken from the Karolinska faces set) transition in 15 steps between happy and (a) sad, (b) angry and (c) disgust. Each face is presented for 150ms and participant is asked to choose between happy and other emotion. Key outcome is the bias point, i.e. the point on the continuum that the participant selects Happy. (4 minutes)</p>
<b>Properties</b>	<p>There is very little publicly available information on the psychometrics of these social cognition subtests.</p> <p><u>Reliability</u>: None available</p> <p><u>Construct validity</u>: Two studies of patients at high risk of psychosis (Glenthøj et al., 2019; Glenthøj et al., 2016) found the ERT discriminated them from controls while another found that children with ASD performed more poorly than controls on the ERT although this was no longer the case when vocabulary skills, Ravens Progressive Matrices performance and gender was taken into account (Griffiths et al., 2019). Both ASD and typically developing children found the low intensity emotions very difficult. In a manipulation of anxiety levels in normal adults, increased anxiety was associated with poorer ERT scores as was a bias on the EBT towards perceiving anger in ambiguous faces (Attwood et al., 2017). People with depression also demonstrated a bias towards seeing ambiguous faces as angry (Stoddard et al., 2016).</p> <p><u>Concurrent validity</u>: One study of patients at high risk of psychosis found that latency on the ERT (but not accuracy) predicted functional outcome (Glenthøj et</p>

	<p>al., 2019) while another found that different emotional categories had different relationships to outcomes in the same patient population (Glenthøj et al., 2016). A study of patients with schizophrenia found the ERT predicted global assessment of function (Gica, Poyraz, &amp; Gulec, 2019).</p> <p><u>Normative data</u> is possibly available from CANTAB. Some published data is available for the ERT (Glenthøj et al., 2019; Glenthøj et al., 2016) (N= 60 and 30 respectively).</p>
<b>Advantages</b>	Probably useful for experimental studies and detecting individual differences
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>• May be difficult for many patient populations</li> <li>• No reliability data available</li> <li>• Construct validity needs further research</li> <li>• Little normative data available</li> <li>• Access to normative data is via CANTAB</li> </ul>

### References

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