

**NINDS CDE Notice of Copyright
Emotional Recognition**

Availability:	<p>Please visit this website for more information about the instrument: https://face.paulekman.com/face/productdetail.aspx?pid=1 http://hdresearch.ucl.ac.uk/completed-studies/track-hd/</p>
Classification:	Supplemental.
Short Description of Instrument:	<p>Summary/Overview of Instrument: Patients are asked to view a subset of 70 Ekman and Friesen faces on a computer display. For each trial, a photograph of a face depicting an emotional or neutral expression is displayed and seven emotion labels (anger, disgust, fear, happiness, neutral, sadness, surprise) are presented simultaneously beneath the stimulus. Seven practice trials (one for each emotion) are completed and 70 total test trials are then completed. Patients are instructed to decide which emotion the person was feeling based on his/her facial expression and to respond by touching the selected emotion with the dominant index finger.</p> <p>Construct measured: Emotion recognition.</p> <p>Generic vs. disease specific: Generic.</p> <p>Intended use of instrument/purpose of tool: (cross-sectional, longitudinal, diagnostic, etc): Assessment of cognitive function in HD cross-sectional and longitudinal studies.</p> <p>Means of administration: (paper and pencil, computerized): Computerized and pencil and paper versions of the task are available.</p> <p>Location of administration: Clinic.</p> <p>Intended respondent: Patient.</p> <p># of items: N/A.</p> <p># of subscales and names of sub-scales: N/A.</p> <p>Strengths: This task is engaging for participants.</p> <p>Weaknesses: The recommended score (number of negative emotions correctly identified) typically meets assumptions for ANOVA. Subjects tend to score at the maximum number correct on some of the individual emotions.</p> <p>Special Requirements for administration: A touch computer with a LCD stylus-sensitive screen (e.g., Lenovo ThinkPad X61 tablet PC) and a stylus.</p> <p>Administration Time: Approximately 9 minutes.</p> <p>Translations available: (e.g. Spanish, French, Other languages): French, Dutch and English.</p>

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<p>Psychometric Properties:</p>	<p>Sensitivity to Change/ Ability to Detect Change (over time or in response to an intervention): These results are for the number of correct for negative emotions. In TRACK-HD, cross sectional differences from controls were found for both pre-manifest and early HD (Tabrizi et al, 2009); Longitudinal rate of change (annualized over 24 months) differed from change in controls for early HD but not pre-manifest HD (Tabrizi et al., 2011; Stout et al., in submission). PREDICT-HD detected both cross-sectional differences from controls and longitudinal changes over time (7 years) in pre-manifest HD. The TRACK-HD pre-manifest participants may be less likely to show cognitive effects than the PREDICT-HD pre-manifest participants because 1) they are further from estimated onset based on CAG repeat length and age (Langbehn et al., 2004) and 2) they are potentially less progressed in actuality because the TRACK-HD study excluded pre-manifest subjects based on UHDRS motor scores ≥ 5. Generally speaking, cognitive tests will be more effective metrics in studies of pre-manifest HD when the focus is on subjects that are close to onset.</p> <p>Known Relationships to Other Variables: (e.g. gender, education, age, etc): Performance related to age but not to gender and education; change in performance not related to age, gender or education. Medication (i.e., neuroleptic) has shown to modulate emotion recognition abilities in early HD (Labuschagne et al., in submission).</p>
<p>Scoring:</p>	<p>The score most supported by the evidence is the number of correct responses summing across the negative emotions (fear, sad, angry and disgust). The number correct for each individual emotion can also be analyzed.</p>
<p>References:</p>	<p>Key Reference:</p> <p>Johnson SA, et al. Beyond disgust: impaired recognition of negative emotions prior to diagnosis in Huntington’s disease. <i>Brain</i> 2007. 130:732-744.</p> <p>Other References:</p> <p>Ekman P, Friesen WV. <i>Pictures of facial affect</i>. Palo Alto, CA: Consulting Psychological Press; 1976.</p> <p>Tabrizi SJ, et al. Biological and clinical manifestations of Huntington’s disease in the longitudinal TRACK-HD study: cross-sectional analysis of baseline data. <i>Lancet Neurology</i> 2009; 8: 791-801</p> <p>Tabrizi SJ, et al. Biological and clinical changes in pre-manifest and early stage Huntington’s disease in the TRACK-HD study: the 12-month longitudinal analysis. <i>Lancet Neurology</i> 2011; 10: 31-42.</p> <p>Stout JC et al. Evaluation of longitudinal 12- and 24-month cognitive outcomes in pre-manifest and early Huntington’s disease. In submission 2011.</p> <p>Labuschagne I, et al. Emotional face recognition deficits in pre-manifest through stage-II Huntington’s disease. In submission 2011.</p>