

Cognitive Task Overview: TestMyBrain Multiracial Emotion Recognition

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TMB Test Name: TestMyBrain Multiracial Emotion Recognition

Test Demo: [standard version](#)

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The Many Brains Project

[The Many Brains Project](#), is a 501(c)(3) non-profit that supports TestMyBrain (TMB) in collaboration with the [Laboratory for Brain and Cognitive Health Technology at McLean Hospital](#) and Harvard Medical School. We currently support many different types of research studies through our infrastructure for cognitive assessment - these range in size from small lab-based pilot studies to large longitudinal, multisite clinical research studies with tens of thousands of participants. As TestMyBrain has been continuously in operation since 2008, we provide a stable and secure platform for hosting and delivering mobile and web-based cognitive assessment protocols. Through TestMyBrain.org, data have been collected from over 3.7 million participants in a *citizen science* framework that includes structured return of research results toward the development, validation, and normative characterization of cognitive measures. We currently support research and education at over 2,000 sites worldwide engaged in digital neuropsychological assessment.

CITATION

Please credit The Many Brains Project and TestMyBrain in any papers, posters, or publications related to the TMB tests or data collected by TMB tests.

- Example:
 - All tasks were selected from and hosted on The Many Brains Project's web-based cognitive testing platform, TestMyBrain (Germine et al., 2012; The Many Brains Project).
 - Germine, L., Nakayama, K., Duchaine, B. C., Chabris, C. F., Chatterjee, G., & Wilmer, J. B. (2012). Is the Web as good as the lab? Comparable performance from Web and lab in cognitive/perceptual experiments. *Psychonomic Bulletin & Review*, 19(5), 847-857.
 - The Many Brains Project. *TestMyBrain Cognitive Tests*. URL: www.manybrains.net

Test Overview

Background:

TestMyBrain Multiracial Emotion Identification (Deveney et al., 2018, 2022; Dodell-Feder et al., 2020; Germine et al., 2022; Pinkham et al., 2016) is a four-alternative forced choice emotion identification paradigm that assesses basic emotion recognition performance.

Task Parameters:

On each trial, participants view a photograph of an actor expressing one of the following four emotions: happiness, sadness, fear, or anger. Participants are asked to identify which of the four emotions is displayed by selecting one of the following four response options: happy, sad, fearful, or angry. Participants complete 48 test trials; there are no practice trials for this test. On each trial, after 10 seconds the image is replaced by a black rectangle.

Primary Outcome:

The suggested primary outcome for the test is the proportion of test trials answered correctly (accuracy).

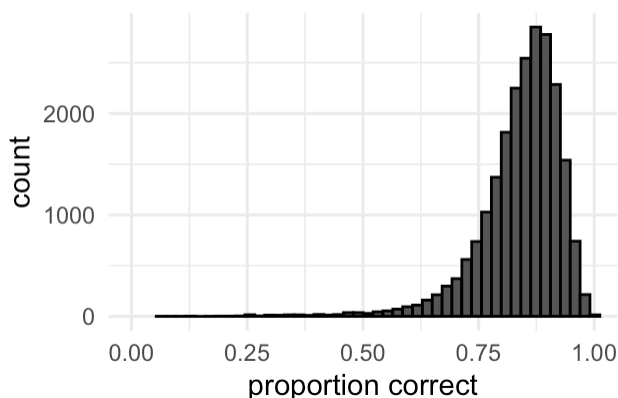
User Input:

Participants respond either by touching (touch-compatible devices) or clicking their selections.

Alternate Task Versions: Alternate forms of this test are not available.

Psychometrics:

- **Reliability:** In single-session testing, variation in accuracy between participants has a split-half reliability of .73.
- **Score distribution:**



References:

- Deveney, C. M., Chavez, G., & Mejia, L. (2022). Trait irritability in adults is unrelated to face emotion identification. *Personality and Individual Differences*, 185, 111290.
- Deveney, C. M., Chen, S. H., Wilmer, J. B., Zhao, V., Schmidt, H. B., & Germine, L. (2018). How generalizable is the inverse relationship between social class and emotion perception?. *PloS One*, 13(10), e0205949.
- Dodell-Feder, D., Ressler, K. J., & Germine, L. T. (2020). Social cognition or social class and culture? On the interpretation of differences in social cognitive performance. *Psychological Medicine*, 50(1), 133-145.
- Germine, L. T., Joormann, J., Passell, E., Rutter, L. A., Scheuer, L., Martini, P., ... & Kessler, R. C. (2022). Neurocognition after motor vehicle collision and adverse post-traumatic neuropsychiatric sequelae within 8 weeks: Initial findings from the AURORA study. *Journal of Affective Disorders*, 298, 57-67.
- Pinkham, A. E., Penn, D. L., Green, M. F., & Harvey, P. D. (2016). Social cognition psychometric evaluation: Results of the initial psychometric study. *Schizophrenia Bulletin*, 42(2), 494-504.