
FAGAN TEST OF INFANT INTELLIGENCE

The Fagan Test of Infant Intelligence (FTII, published by Infantest Corporation) purports to index infant intelligence by assessing infants' information processing capacities. The degree to which continuity exists between infant cognitive capacities and later intelligence has interested researchers since the 1930s. Until the early 1980s, intelligence in infancy was thought to be unrelated to intellectual functioning in childhood and adulthood. This sentiment was based on the lack of association between researchers' indices of infant intelligence, which assessed sensory-motor functioning, and adult measures of intelligence.

The FTII was developed in the early 1980s by Joseph F. Fagan, III, to assess infant information processing capacities such as visual recognition memory, habituation, and discrimination and relate them to intellectual functioning later in life. The FTII and other tests tapping infant information processing have led researchers to believe today that there is a relation between infant intellectual capacities and later intellectual functioning.

The FTII procedure is conducted on infants between 3 and 12 months of age and rests on the well-known tendency of infants to gaze more at novel stimuli than at familiar stimuli. The standard procedure involves two phases; the timing of each phase varies according to the age of the infant. In the "familiarization phase," the infant sitting in the parent's lap is presented with two identical stimuli, such as faces or geometric patterns, until the infant gazes at them for a predetermined amount of time. In the "test phase," one of the familiar stimuli is then paired with a novel stimulus. This procedure is repeated approximately 10 times during one sitting. The proportion of total looking time during which the infant gazes at the novel

stimulus is used to derive a novelty preference score thought to reflect some of the cognitive capacities of the infant.

There is mixed evidence as to whether the FTII predicts later intellectual functioning. A quantitative review of several empirical investigations suggests that the FTII and other similar measures of infant cognitive functioning positively correlate with later intellectual performance. There is also evidence that the FTII is a valid screening device in infancy that predicts mild to severe mental retardation with up to 80% accuracy. Nevertheless, the FTII has been criticized for its low predictive validity and lack of reliability. As a whole, the FTII assesses infant cognitive capacities, but some controversy surrounds the degree to which the procedure accurately predicts later intelligence.

—*Matthew J. Hertenstein and Lauren E. Auld*

See also Culture Fair Intelligence Test; Gf-Gc Theory of Intelligence; Intelligence Quotient; Intelligence Tests

Further Reading

Fagan, J. F., & Detterman, D. K. (1992). The Fagan Test of Infant Intelligence: A technical summary. *Journal of Applied Developmental Psychology, 13*, 173–193.

FTII description and other measures of infant cognitive assessment: <http://ehp.niehs.nih.gov/members/2003/6205/6205.html#comp>