

Human Intelligence

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HUMAN intelligence, in the simplest term, is the ability of a person to think, learn, reason and solve problems. It is related to cognitive abilities, abstract thought, communication, social and emotional intelligence. In 1905, Binet and Simon defined intelligence as “the ability to judge well, to understand well and to reason well”. Wechsler defined it as “the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with the environment”. Howard Gardner defines it as “the ability or skill to solve problems or to fashion products which are valued within one or more cultural settings”. He advocated 8 types of intelligence, viz. linguistic, logical-mathematical, spatial, musical, bodily kinesthetic, interpersonal, intrapersonal and naturalistic.

In 1912, German psychologist William Stern defined the parameter Intelligence Quotient (IQ) to measure human intelligence:

$$IQ = \frac{\text{Mental age}}{\text{Chronological}} \times 100$$

IQ is measured through standardised tests such as:

1. Stanford-Binet intelligence scale.
2. Wechsler Adult intelligence scale.
3. Woodcock-Johnson tests, etc.

Table 1 indicates the classification of intelligence level based on score.

Apart from IQ, other abilities are also needed to survive in a given environment. These abilities are not measured by IQ tests. Accordingly, psychologists have included three more parameters to supplement overall intelligence. These are following:

1. Emotional Quotient (EQ)
2. Social Quotient (SQ)
3. Adversity Quotient (AQ)

Table 1: Interpretation of IQ scores

Sr. No.	Intelligence Interval	Cognitive Designation
1.	40-54	Severely challenged
2	55-69	Challenged
3	70-84	Below average
4	85-114	Average
5	115-129	Above average
6	130-144	Gifted
7	145-159	Genius
8	160-175	Extraordinary genius

75% of population lies in the range of 85-120.

Some psychologists tend to add a few more, but the majority agree on these four quotients as a measure of overall human intelligence (integrated intelligence).

The term Emotional Intelligence (EQ) was coined by Peter Salovey and John D Mayer in 1990. It is defined as a person's ability to identify, understand and manage emotions of their own and of others. Some EQ traits are — positive attitude, punctuality, honesty, genuine respect for others, stress and anger management, tolerance to change, assertiveness, etc. This quotient is needed for social interactions. It may be noted here that a high IQ is crucial for certain fields such as science and engineering, but without EQ, one can't survive in an environment.

EQ is measured through standardised tests such as:

1. Mayor-Salovey-Carus EQ test
2. The EQ inventory
3. The situational test of emotional understanding
4. The diagnostic analysis of nonverbal accuracy

The EQ assessment tests categorise scores into below average, above average and excellent.