INDIVIDUAL DIFFERENCES

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Humans Are Largely Similar in their:

- Anatomical features
- Social Behavior
- Needs
- Abilities
- Vulnerabilities

Humans Are Different In Aspects of their:

- **Anatomical features**
- **Social Behavior**
- **Needs**
- **Abilities**
- **Vulnerabilities**

Origins of Similarity

- Genetic make-up
- Similar Environment
- Nature Vs Nurture
- Differences: beneficial or Not

Intelligence

Definition

- Difficult to define .
- The capacity to learn…
- The ability to carry abstract thinking..
- Problem solving skills
- The capacity to act purposefully ,think rationally and deal effectively with the environment .
- The ability to undertake activities , characterized by: difficulty , complexity , abstractness , economy, adaptivness to a goal, social values, and emergence of originals .
- All definitions refer to capacity and ability of the person and not to what a person does .

The most commonly agreed upon aspects

- Verbal ability as reflected by verbal skills .
- Problem solving skills as reflected by the search of scientists to find cure for cancer .
- The ability to learn from and adapt to every day life , as reflected in adaptation of handicapped child to his /her inability to walk .

Assessment of intelligence

- Began in 1904 by Alfred Binet .
- Devised scales of what an average 2,3,4,5,..years old Can do and named it mental age . Which can be different from chronological age .
- These two ages were combined in one index of brightness , the intelligence quotient (I.Q.)
- I.Q. = MA divided on CA multiplied by 100

Multiple intelligences

H. Gardner 1991

- Linguistic, use language effectively, read ,write
- Mathematical, reasoning, calculation, puzzles
- Spatial, environment, drawing, orientation
- Kinesthetic, use body, dance, football
- Musical, sensitive to sound, rhythm, love music
- Interpersonal, friendly, good communication
- Intrapersonal, know own goals, motivated
- Naturalistic / spiritual, nature lover,dreamer

Visual-Spatial - think in terms of physical space, as do architects and sailors. Very aware of their environments. They like to draw, do jigsaw puzzles, read maps, daydream. They can be taught through drawings, verbal and physical imagery. Tools include models, graphics, charts, photographs, drawings, 3-D modeling, video, videoconferencing, television, multimedia, texts with pictures/charts/graphs.

Bodily-kinesthetic - use the body effectively, like a dancer or a surgeon. Keen sense of body awareness. They like movement, making things, touching. They communicate well through body language and be taught through physical activity, hands-on learning, acting out, role playing. Tools include equipment and real objects.

Musical - show sensitivity to rhythm and sound. They love music, but they are also sensitive to sounds in their environments. They may study better with music in the background. They can be taught by turning lessons into lyrics, speaking rhythmically, tapping out time. Tools include musical instruments, music, radio, stereo, CD-ROM, multimedia.

Interpersonal - understanding, interacting with others. These students learn through interaction. They have many friends, empathy for others, street smarts. They can be taught through group activities, seminars, dialogues. Tools include the telephone, audio conferencing, time and attention from the instructor, video conferencing, writing, computer conferencing, E-mail.

Intrapersonal - understanding one's own interests, goals. These learners tend to shy away from others. They're in tune with their inner feelings; they have wisdom, intuition and motivation, as well as a strong will, confidence and opinions. They can be taught through independent study and introspection. Tools include books, creative materials, diaries, privacy and time. They are the most independent of the learners.

Linguistic - using words effectively. These learners have highly developed auditory skills and often think in words. They like reading, playing word games, making up poetry or stories. They can be taught by encouraging them to say and see words, read books together. Tools include computers, games, multimedia, books, tape recorders, and lecture.

Logical -Mathematical - reasoning, calculating. Think conceptually, abstractly and are able to see and explore patterns and relationships. They like to experiment, solve puzzles, ask cosmic questions. They can be taught through logic games, investigations, mysteries. They need to learn and form concepts before they can deal with details.

IQ Range

- 150 +
- 130-149
- 115-129
- 85-114
- 70-84
- 50-69 Mild MR
- 35-49 Moderate MR
- 20-34 Severe MR
- <20 Profound MR

Group differences in intelligence

- Sex , few differences between sexes , inferior problem solving by women , have more difficulty in shifting set .
- Socioeconomic status , rural children attain lower average IQ than city children , high socioeconomic class children get higher scores in IQ tests than low socioeconomic class children.
- There is no real IQ difference between races , more difference is intraracial .
- IQ is fairly stable over time .

Wechsler adult intelligence scale (WAIS)

- A individual test administered by specially trained tester ,widely used .
- Has 6 verbal (information, arithmetic, similarities digit span , comprehension , vocabulary) and 5 performance scales(picture arrangement , picture completion , block design , object assembly, digit symbol)
- The validity and reliability of WAIS are high .
- Most people(70%) score between 90 and 110 .

Genetic and environmental influence

- The closer the genetic relationship the more similar the tested intelligence .
- The average correlation between parents IQ and their children is 50, adopted children 25, MZ twins 90 DZ twins 55 .
- Environment does make a difference in intelligence (nutrition health , quality of stimulation, emotional climate , and feedback elicited by behavior .
- Head start programs (2 – 5 years old from poor homes)
- Participants scored 10 points higher on WISC than those who didn’t participate .

THANK YOU