Personality development

- Genetic vs environmental factors:
  1. Genotype refers to our inherited, genetic potential (unobservable).
  2. Phenotype refers to the behavioural expression of the genotype in the environment (observable).
  3. Heritability refers to the proportion of phenotypic variance in a sample explained by genetic factors.

- The role of genetic vs environmental influences is assessed using twin studies and the adoptee studies.
- Twin studies compare concordance rates between monozygotic (MZ) and dizygotic (DZ) twins.
- Adoptee method determines the degree of shared characteristics between adopted children and their biological vs adoptive parents.

It’s not that simple!

- Conceptions of heritability and the environment:
  1. Abstract concepts – whenever numerical estimates of either genetic or environmental influences, they provide us with little information about the specific genes or specific environments that influence personality.
  2. Population concepts – these are estimates considering a population.

- Different types of genetic variance:
  1. Additive genetic variance – genes inherited from parents.
  2. Dominant genetic variance – dominant genes are expressed; recessive genes are not expressed.

- Shared vs non-shared environmental influence:
  1. Siblings have shared and non-shared influences.
  2. Shared = home/parents.

- The representativeness of twin and adoption studies:
  1. Sample of studies is not representative of the normal population.
  2. Kamin and Golberger (2002) twin studies might overestimate the role of genetics, particularly in MZ twins, have a more similar shared environment.

- Assortative mating:
  2. Ginsburg et al. (1998) – body height positively correlated between spouses in four ethnically and geographically different populations.

- The changing world of genetics:
  1. Fullerton et al. (2003) found a QTL (quantitative trait loci) that influences neuroticism.

Biopsychosocial approaches to personality

- Biological influences:
  1. Genetically determined temperament.
  2. Autonomic nervous system reactivity.

- Psychological influences:
  1. Learned responses.
  2. Unconscious thought processes.
  3. Expectations and interpretations.

- Social-cultural influences:
  1. Childhood experiences.
  2. Influence of the situation.
  3. Cultural expectations.
  4. Social support.
Theories on quantifying intelligence

Spearman’s two factor theory

- Intelligence is a factor specific to a particular test and a general factor.
- Charles Spearman (1863–1945):
  1. Theorised that a general intelligence factor underlies other, more specific aspects of intelligence.
  2. Based this on how he noticed people who did well on one test tended to do similarly well on others.
  3. Agreed with Lewis Terman that a single overall IQ test was best.
- To find out if intelligence is just one thing or several different abilities, scientists use factor analysis, a statistical procedure that identifies clusters of related items on a test.
- Evidence:
  1. Moderate correlations (overlap) between each test are evidence for an underlying general factor.
  2. Score depends on one’s specific ability and their level of the general reasoning ability factor.

Horn and Catell (1966) Fluid and Crystallised Intelligence

- Fluid intelligence or potential: performance on culture-free tasks e.g. those measuring ability to see patterns in a repeating series of items. Closely related to a person’s native capacity for intellectual performance/potential ability to learn and solve problems.
- Crystallised intelligence or accomplishment: tasks that require people to have already acquired information e.g. vocabulary or semantic information. Culture bound, what a person has accomplished through the use of their fluid intelligence – what they have learned.

Robert Sternberg’s Triarchic Theory of Intelligence

- Based around three main areas:
  1. Analytical (analysing, comparing and evaluating) – academic problem-solving.
  2. Creative (inventing and designing) – generating new ideas.
  3. Practical (applying and using) – required for everyday tasks where multiple solutions exist.

Howard Gardner’s Multiple Intelligences

- Howard Gardner (1943–present):
  1. Author of a contemporary theory of multiple intelligences consisting of eight separate kinds of intelligence.
  2. Multiple intelligences – several independent mental abilities that allow a person to solve problems and create products that are valued within one’s culture.
  3. Intelligence defined within the context of culture.
- Howard Gardner disagreed with Spearman and instead came up with the concept of multiple intelligences.
- He came up with the idea by studying savants (a condition where a person has limited mental ability but is exceptional in one area).
- Types of intelligence:
  1. Verbal-linguistic – reading comprehension and writing.
  2. Logical-mathematical – solving math and logic problems.
  5. Musical-rhythmic – appreciating and creating music and music theory.
  6. Interpersonal – listening, cooperation and sensitivity to others.
  8. Naturalistic – appreciates nature and ability to work with plants and animals.

Emotional intelligence (EQ)

- First called social intelligence.
- The ability to perceive, express, understand and regulate emotions.
- Some studies show EQ to be a greater predictor for future success than IQ.