



PLASTICITY - brain is "flexible"

- other parts of brain can adapt to perform tasks if needed
- dendrites make new connections
- younger = more "plastic"

CHAPTER 3: Nature, Nurture, and Human Diversity

→ Behaviour Genetics - study of power/limits of genetic + environment on behaviour
environment - every nongenetic influence, from prenatal nutrition to people and things around us

chromosome → DNA → GENE (capable of synthesizing proteins)
← segment

genome → complete genetic coding for an organism

Identical twins - develop from single fertilized egg

fraternal twins - two separately fertilized eggs

ADOPTION STUDIES → examining genetic relatives vs environmental relatives

↳ environmental factors have virtually NO IMPACT on personalities

↳ only on faith, morals, attitudes, manners

TEMPERAMENT STUDIES → difficult babies = difficult adults?

↳ emotional reactivity/sensitivity

HERITABILITY - proportion of variation among individuals that we can attribute to genes

↳ behaviour geneticists can mathematically estimate the heritability of a trait

"as environments become more similar, heredity as a source of differences necessarily becomes more important"

→ group differences - heritability within a group

★ Nature and Nurture ★

- genes are "self regulating" → genes react

Gene-Environment Interaction

↳ effect of one factor depends on another factor

if needed

Molecular Genetics - subfield of biology that studies the molecular structure/fxn of genes

↳ "Do genes influence behaviour?" → "Identify specific genes dictating behaviour"

* designer babies → selecting out certain traits

on behaviour

EVOLUTIONARY PSYCHOLOGY - study of evolution of behavior and the mind

↳ natural selection

to

NATURAL SELECTION - traits that lead to increased reproduction/survival will most likely be passed on to succeeding generations

↳ **MUTATIONS** - random errors in gene replication

ens

↳ **HUMAN SEXUALITY**

Gender - biological/social characteristics by which people define male vs female

* natural selection can influence mating preferences (ex. men like "healthy" women)

critiques on Evolutionary perspective

- work backwards to propose explanation

- social consequences

rel relatives

PARENTS AND PEERS

abilities

° Prenatal environment

- nurture begins in the womb (nutrition + exposure to toxic agents)

- identical twins can/could not share placentas

↳ those that do are more similar

?

° Experience and brain development

- nurture continues outside the womb

we can

- early experiences foster brain development → neural connections

↳ enriched environment = heavier/thicker brain cortex

- early childhood → brain is more flexible

ability of a fruit

ferences

Both nature + nurture sculpt our synapses

"Two children in the same family are as different as are pairs of children selected

randomly from a population" ← parents are not really to blame

Peer influence: cooperation, popularity, interaction

Parents influence: education, discipline, responsibility, orderliness, charitable, interacting with authority

Cultural influences

↳ culture: enduring behaviours, ideas, attitudes, values and traditions shared by a group of people and transmitted from one generation to the next

shared capacity for culture enables differences

→ human nature manifests human diversity

Each culture has its **NORMS**

↳ accepted behaviour = "proper"

↓
personal space = buffer zone we maintain around our bodies

↳ they vary over time

culture and the self: individualism - one's own goals > group goals

collectivism - one's own goals < group goals

differences in child rearing?

(ex. GB has nannies, asians usually care for them (no daycare!))

* However, humans are **SIMILAR** by our shared biology **REGARDLESS** of culture

GENDER DEVELOPMENT

main differences: 1. aggression ← men are more aggressive

2. social power men = dominant women = nurturing

3. social connectedness

male	female
skeptics	open
competitive	warm
less open	intimate
	spirituality

What defines gender?

X	vs	Y chromosome	XX = girl
↳ given by mom		↳ given by dad	X Y = boy
↳ or dad		↳ produces testosterone	

Roles - a set of expectations about a social position

↳ gender role - expected behaviour for males and females

gender identity - one's sense of being male or female

↳ impacted by "gender typing" - acquisition of male/female role

Social Learning theory - kids learn gender-linked behaviour by observation and learning/punishment

Gender schema theory - combines social learning theory with cognition; gender becomes lens to view experiences