

Human Development

Piaget (1952)

- Swiss psychologist
- theory of **genetic epistemology**
- thought develops through action upon the environment
- **operation**: a basic logical process, including reversibility
- **schema**: an organized pattern of behaviour or understanding
- **assimilation**: handling new information using existing schemata
- **accommodation**: schema needs to change or be superseded before new information can be handled

Sensorimotor stage birth - 2 years

- infants discover aspects of the world through their sensory impressions, motor activities, and coordination of the two
- *mental representations*
- *object permanence*
- *primary circular reactions* (from 2-5 months) – repeated voluntary motor activity with little apparent purpose
- *secondary circular reactions* (5-9 months) – as above, but purposeful behaviour is more apparent
- *tertiary circular reactions* (12-18 months) – include the creation of novel behaviour patterns and the purposeful quest for novel experiences

Preoperational stage (stage of animism and precausal logic) 2-7 years

- children can think in images and *symbols*
- acquire language
- play games of pretend
- unable to make general, logical statements
- rules are inviolate
- development of certain thought processes e.g.:
 - **egocentrism**: use of a ‘collective monologue’
 - **syncretism**: everything is interconnected
 - **animism**: everything has feelings and thoughts, e.g. car hurts itself when in a crash
 - **finalism**: everything has a purpose; a marble rolls downhill ‘cos it’s going home
 - **creationism**: rivers are there to make the countryside pretty (teleological approach)
 - **artificialism**
 - **authoritarian morality**: wrongdoing should be punished according to degree of damage caused, rather than motive
 - **precausal reasoning**: i.e. non-scientific
- predominance of ‘magical thinking’

Stage of Concrete Operations 7-11 years

- understanding of logical principles that apply to external objects
- *conservation* of length & volume
- *reversibility*
- sort objects into categories - *classification*
- can appreciate the perspective of another viewer - child is able to abandon egocentrism

Stage of Formal Operations over 11 years

- can think logically about abstractions e.g. justice
- able to hold competing hypotheses in mind simultaneously and explore the consequences of each - **hypothetico-deductive thinking**
- able to think about thinking - **reflective/ recursive thinking**
- able to reason about purely verbal or logical statements and argue from various different premises without having to feel committed to them - **interpropositional logic**
- allows for idealism

Criticisms

- only 1/3 of mid-adolescents have reached the stage of pre-operational thought
- only 1/10 are capable of formal operational thinking
- most people reach cognitive maturity in Piagetian terms by age 25
- in one study, only 1/5 of adults had reached maturity
- overestimation of the amount of heterogeneity within the overall field of intelligence

Erikson's stages of psychosocial development (1968)

Age	Central Psychological Issue or Crisis
Year 1	<i>Trust vs. Mistrust</i> Infants learn that their needs will be met by their mother - or they learn to mistrust the world
Year 2	<i>Autonomy vs. Shame and Doubt</i> Children learn to make choices and exercise self-control - or they become uncertain and doubt their own abilities
Year 3-5	<i>Initiative vs. Guilt</i> Children learn to initiate activities and enjoy their accomplishments - or they feel guilty for their attempts at independence
Year 6 through puberty	<i>Industry vs. Inferiority</i> Children develop a sense of industry and curiosity - or they lose interest and feel inferior
Adolescence	<i>Identity vs. Role Confusion</i> Adolescents come to see themselves as unique and integrated - or they become confused about what they want out of life
Early Adulthood	<i>Intimacy vs. Isolation</i> Young people learn to commit themselves to another person - or they develop a sense of isolation in the world
Middle Age	<i>Generativity vs. Stagnation</i> Adults are willing to have and care for children, and devote themselves to their work - or they become self-centred and inactive
Old Age	<i>Integrity vs. Despair</i> Older people enter a period of reflection and are able to face death with acceptance and dignity - or they are in despair for their failures and unaccomplished goals

Epigenesis

1. development is not predetermined, but the result of interaction between individual and environment
2. there are many possible developmental pathways
3. stages are not superceded or arrested at
4. environmental trauma continues throughout the life cycle

Attachment Theory - John Bowlby

- states that the clinging behaviour which young children display towards their parents is normal and biologically determined, has particular characteristics, and is especially important in psychosocial development
- relationship with mother provides a template for relationships in later life, and the quality of that relationship will govern the quality of subsequent close relationships
- **attachment behaviour** refers to what you actually see, i.e. the **separation anxiety** shown by the child at separation from his or her **attachment figure**
- attachment behaviour appears around 6-7 months

The attachment figure

- she or he does not have to be related by blood
- does not have to be biological mother
- little or no relationship with events during the neonatal period
- feeding is not the crucial issue and it has more to do with comfort and play
- harsh physical treatment is compatible with the development of attachment to the abuser
- the amount of time spent with the [baby] isn't crucial - what matters is the intensity of social interactions
- after the first attachment (usually the mother) a few other attachments are likely to be formed (particularly the other parent) but they do not have the intensity of the first one

Attachment behaviour

- normal attachment behaviour comprises:
 - crying when mother leaves the room
 - calling for her or crawling after her
 - clinging hard when anxious, fearful, tired or in pain
 - talking and playing more in her company
 - using her as a secure base from which to explore
- the 3 stages of attachment behaviour:
 1. protest
 2. despair
 3. detachment
- evident in toddlers between 6 months and 3 years (peak around 12-24 months)
- may be less selective when the child is reared in a large or extended family
 - many children form two or more attachments simultaneously
 - separation anxiety is less evident - the child still feels secure even though the person changes
- abate gradually after the age of 3
- **stranger anxiety** - a shyness of strange people which promotes clinging to the attachment figure
 - compatible with the formation of a secure attachment
- **transitional objects:**
 - do not indicate insecurity
- attachment behaviour and its disappearance depends on 3 variables:

1. the temperament (personality) of the child
 2. the way that the mother handles the child
 3. what experiences the child has of actual or threatened separations
- adequate resolution of separation anxiety is promoted by the mother being **sensitively responsive** to the child's needs and providing a sense of **security**
 - if the mother responds to clinging by pushing the child away or if she uses threats of abandonment as coercions (*persecutory mothering* - failure to remove anxiety by attachment behaviour), or if her health and constancy are threatened in the child's eyes, then the child continues to feel **insecure** and anxious

The resolution of separation anxiety

- depends on the child developing an *internal representation* of a good mother
- a failure to develop affectional bonds may result in a lack of **basic trust** with resulting shallowness, suspicion and selfishness in future relationships
- the whole process is echoed in late adolescence and adult life by falling in love, which is sometimes called **pair bonding**

Abnormalities of attachment formation

1) **absent or attenuated attachments**

- failure of attachment behaviour due to:
 - autism
 - emotionally cold or rejecting parents
 - institutional rearing
- child is unable to differentiate between familiar and unfamiliar adults in seeking comfort and attention
- the relationship is superficial and easily broken by separation without any anxiety
- long term outcome is poor:
 - difficulty forming and sustaining close relationships
 - difficulty learning social rules
 - propensity in adult life to aggressive, promiscuous, or feckless behaviour
 - attention-seeking behaviour

2) **avoidant (or anxious-avoidant) attachment**

- child has formed a selective attachment but it is insecure
- separation behaviour is muted; on her return he is indifferent to her presence and even actively avoids her greeting
- may behave aggressively toward her
- generally, mothers do not feel emotionally close to their child - the child keeps mother at a distance and seems to strive for emotional self-sufficiency prematurely
- the child dislikes cuddles and intimacies, even though the parents are loving and affectionate
- prognosis is generally good as long as the parents can accept their child's individuality
- no strong link with aggressive behaviour
- however, the pattern arises on account of harshness or rejection on the parent's part and carries an association with future antisocial behaviour

- 3) **ambivalent (or anxious-ambivalent) attachment**
- child is chronically clingy and ambivalent to the mother, being actively cross with her following the briefest separations
 - usually due to a combination of child's temperament and mother's state of mind or personality (e.g. post-natal depression/ immature and unable to separate her own needs from the child's)
 - likely to predispose to emotional disorder in childhood (e.g. *school refusal*) and may precede disorders in adolescence and adult life, such as *agoraphobia*

Effects of maternal deprivation

1. poor growth
2. developmental language delay
3. indiscriminate affection seeking
4. shallow relationship
5. enuresis
6. aggression
7. lack of empathy
8. social disinhibition
9. attention-seeking and overactivity in school

Processes occurring in Dysfunctional families

1. discord
2. overprotection
3. rejection
4. enmeshment
5. disengagement
6. triangulation
7. ambiguous or incongruous communications
8. formation of myths

Temperament

- individual differences between children in the *style* of their behaviour
- initially constitutional, largely genetically determined, which are fairly stable over time but may be modified by experience and environment
- New York Longitudinal Study (Thomas, Chess *et al.*) used 9 dimensions of behaviour; about 2/3 of the children could be grouped as follows:
- **easy** (40 %):
 - regular rhythmicity
 - positive approaches to new situations
 - rapid, positive adaptability to change or novelty
 - mild intensity of emotional reaction
 - adapt quickly and tolerate disappointment
- **slow to warm up** (15 %):
 - negative responses to change or novelty
 - slow adaptability
- **difficult** (10 %):
 - negative, withdrawing responses to novelty
 - slow to adapt to change
 - predominantly negative mood
 - intense emotional reactions
- however,
 - low numbers in study
 - stability of items or clusters is only fair
- Buss and Plomin's 3-4 traits (EASI):
 - emotionality
 - activity
 - sociability
 - impulsivity
- the Dimensions of Temperament Study (DOTS) is a self descriptive study using 5 dimensions:
 1. activity level
 2. attention span/ distractibility
 3. rhythmicity
 4. reactivity
 5. adaptability/ approach-withdrawal

Significance for later psychiatric disorder

- 'difficult' temperament is a risk factor for future psychiatric/ behavioural disorder in childhood
- 'slow-to-warm-up' pattern may predispose to phobic disorders
- inflexibility (high intensity, high persistence, low adaptability) in 3 year olds is a predisposing factor to later behavioural disorder in 6-7 year olds (Garrison, Earls and Kindlon)

Socialization

- is the process by which parents and others in authority channel children's impulses into socially acceptable outlets and teach them the skills and rules needed to function in their society
- it is shaped by cultural values

Parenting styles

- European-American parents tend to employ one of three distinct socialization patterns:
 - 1) **Authoritarian parents**
 - tend to be strict, punitive, and unsympathetic
 - do not encourage independence
 - detached and seldom praise their children
 - children tend to be unfriendly, distrustful, and withdrawn
 - 2) **Permissive parents**
 - give their children complete freedom
 - lax discipline
 - children are immature, dependent, and unhappy
 - 3) **Authoritative parents**
 - reason with their children, encouraging give and take
 - allow children increasing responsibility
 - firm but understanding
 - set limits but also encourage independence
 - children are friendly, cooperative, self-reliant, and socially responsible
 - associated with better school achievement and better psychological adjustment to divorce

Sex determination

- Factors affecting sex determination include:
 1. The Y chromosome
 2. The degree of ripeness of the ovum at fertilization
 3. Endocrine actions
- The following have a masculinizing effect during ontogeny:
 1. SRY – the testis determining factor in humans
 2. over-ripeness of the egg at fertilization
 3. 21-hydroxylase deficiency
 4. a reduced number of primordial germ cells

Gender identity and gender behaviour

- *gender identity* is an individual's perception and self-awareness with respect to gender
- *gender role* is the general patterns of work, appearance, and behaviour associated with being a man or a woman
- children learn gender-role expectations earliest in Muslim countries

Gender identity

- influenced by:
 1. chromosomes
 2. gonadal endowment (testes/ ovaries)
 3. internal structures (uterus/ prostate)
 4. external genitalia (penis/ vagina)
 5. hormonal balance
 6. gender assigned at birth
 7. response of parents to child's assigned gender
- gender roles and behaviour are learnt according to social norms and expectations

Boys

- more skilled at manipulating objects, construction of three dimensional forms, and mentally manipulating complex figures and pictures
- more physically active and aggressive
- more inclined to hit obstacles or people
- play in larger groups and spaces
- play noisier, more strenuous games

Girls

- less likely to suffer from speech, learning and behavioural disorders, sleep disorders, and emotional problems
- tend to speak and write earlier and be better at grammar and spelling
- likely to be more nurturant and emotionally empathic
- play tends to be more orderly

Adolescence

- growth spurt at 12 for girls, and 14 for boys
- 1) maturational tasks
 - 2) personal identity
 - 3) self-esteem
 - related to physical maturity:
 - in Western cultures, boys who go through puberty early tend to have higher status, to become leaders, and to be happy, poised, and relaxed
 - those who reach puberty late are more likely to feel rejected, dependent, and dominated by others
 - for girls, maturing early tends to lead to embarrassment, sexual activity, and increased distance between the girls and their parents
 - 4) adolescent turmoil
 - 5) relationships with parents and 'alienation'

Offer and Offer (1975)

- studied a cohort of American men who were 14 in 1962

- findings:
 - no significant drug problems
 - no significant differences in basic values from those of their parents
 - the adolescents were mainly from intact families
 - there was no major delinquent behaviour
 - 74 % went on to college
- They identified three adolescent developmental routes:
 1. continuous growth (23 %) – parents encouraged independence
 2. surgent growth (35 %) – more likely than the first group to have frequent depressive and anxious moments
 3. tumultuous growth (21 %) – recurrent self-doubt and conflict with their parents

Block and Haan (1971)

- used factor analysis to identify the following groups of female adolescents:
 1. female prototype
 2. cognitive type
 3. hyperfeminine repressors – similar to hysterical personality disorder
 4. dominating narcissists
 5. vulnerable undercontrollers
 6. lonely independents

Interaction with psychiatric disorder

- adolescence has pathoplastic effect on presentation of symptoms, it is not a cause *per se*
- anorexia nervosa has relationship with adolescent development
- social phobia may have its roots in adolescence
- delinquency peaks in mid-teens

Identity and development of the self

- by age eleven, children begin to describe themselves in terms of social relationships, personality traits, and general, stable psychological characteristics
- adolescents may also describe themselves in terms of their ethnic or national identity
- bicultural people, who affirm both their ethnic and national identities also typically have a positive self-concept
- in an **identity crisis**, the adolescent must develop and integrated self-image as a unique person by pulling together self-knowledge acquired during childhood

Kohlberg's stages of moral reasoning

- Lawrence Kohlberg found that the reasons given for moral choices change systematically and consistently with age (1971)
- he proposed that moral reasoning develops in six stages, which are age-independent

Level	Age	Stage	Orientation	What is right?	Should Heinz steal a life-saving drug for his wife?
Preconventional	up to age 7	1	punishment	Obeying and avoiding punishment from a superior authority	No - he will be jailed
		2	reward	Making a fair exchange, a good deal	Yes - his wife will repay him later
Conventional	up to age 13	3	good-boy/ good-girl	Pleasing others and getting their approval	Yes - he loves his wife and she and the rest of the family will approve
		4	authority	Doing your duty, following rules and social order	Yes - he has a duty to care for her. Or No - because stealing is illegal
Post-conventional	up to and including adulthood	5	social contract	Respecting rules and laws, but recognizing that they might have limits	Yes - because life is more important than property
		6	ethical principle	Following universal ethical principles, such as justice, reciprocity, equality, and respect for human life and rights	Yes - because of the principle of preserving and respecting life

Limitations of Kohlberg's stages

- studies in 27 cultures showed that people do tend to make upward progress through the stages, without reversals
- although stages 5 and 6 did not always appear, stages 1 and 4 did, and thus appear universal
- however, there are moral judgements made in some cultures that simply do not fit into the stages e.g. importance to the community