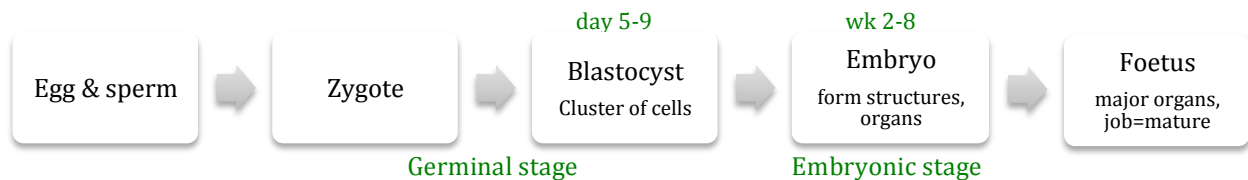


W1 - Developmental Psych

Dev Psych: way behaviour carries as function of age – physical, cog & psychosocial dev

Change (systemic: orderly, patterned and enduring) and **continuities**

Early Experience In Utero



Brain Development In Utero

- Day 18 - early adult
- 18d-6m proliferation (huge neuron dev)
- 4m+ cell migration into brain areas/systems
- Post-birth myelination, synaptogenesis and pruning

Obstacles to Fetal Development

Sensitive Periods

- Teratogens (threat to embryo dev) e.g. smoking → low birth weight
- Timing & duration determines impact
 - o Alcohol → fetal alcohol syndrome (facial anomalies)
 - o Rubella virus when ear dev → poor hearing
- 0-3y extensive neuro dev
 - o Early no language = can't catch up (Romanian orphans)

Prem birth

- <36wks, 25wk viability
- Poor lungs & brains → delayed cog and physical dev

Low birth weight

- <2.5kg for full term → Death, infection, dev delays, psych disorders
- May reflect other difficulties - need prenatal care/edu

Genetic Disorders

Conceptual Challenges

Nature vs Nurture

- Reciprocal influences
- Gene-environ interactions: gene effect depends on environ
- Nature via nurture: genetic drive to select/create environ to express the gene
- Gene expression: due to environ events
- Epigenetics: environ cond. regulate activity of genes

Early experience

- Critical/sensitive periods oversimplification
- Humans complex and **resilient**

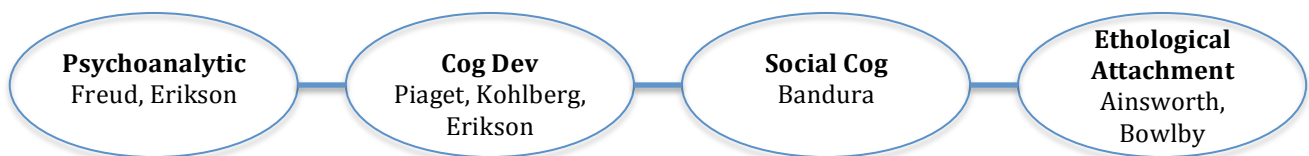
Other

- **Cohort effect:** effects b/c sample grew up same time
- Post hoc fallacy: event caused by prior event false)
- Bidirectional influence: child dev \leftrightarrow experiences

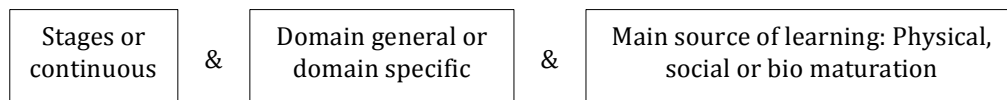
Motor Development

- Nature (gene programmed patterns) and nurture (change gene expression)
- Sit up \rightarrow crawl \rightarrow stand \rightarrow walk [varied timing, not order]
- Carrying baby on body \rightarrow head & neck strength \rightarrow earlier motor dev
- No tummy time = slower dev

Developmental Theories



Cognitive Development Theories



Piaget's Theory of Cognitive Development

- Constructivist theorist: Child actively constructs understanding through experience
- Stages + domain general + physical experience
- **Equilibration:** balance new experiences and prior understanding
 - o **Assimilation:** new info assimilated into existing schemas
 - Thinks world is flat, learns it's round. Imagines a round flat disk.
 - o **Accommodation:** schemas updated to accommodate new info
 - Views world as a round globe.

4 Stages intellectual growth:

1. Sensorimotor intelligence (0-2)
 - here and now, learn from physical encounters
2. Pre-operational period (2-7)
 - Symbolic mental representations using language, drawings and objects
 - Pre-logical, egocentric
3. Concrete operations (7-11)
 - Physical mental operations e.g. add/subtract
 - Pass conservation tasks
4. Formal operations (11+)
 - hypothetical reasoning, abstract mental operations e.g. algebra