

Developmental Science – From Birkenhead to Bangalore



An Ancient Question

- Enquiry into one of the oldest questions, “do childhood experiences shape the man?”
- The mind as a blank slate on which experience is written (Locke)
- “Give me the Child until he is 7 and I’ll Give you the Man” (St Ignatious Loyola)
- “Give me a child until he is 7 and I will show you the man” (Aristotle)
- Freud, Klein, early experiences important in interaction with the infant’s mental life

Psychopathology

- Mental health problems as disorder? As disease?
- As extremes of a continuum or of a different kind?
- Identifiable by symptoms? Or by impairment?
- Identified in cross section? Or over time?
- As the product of disrupted function?
- As the product of adaptive processes that are maladaptive under some conditions

Ideas of Development

- Behaviour as the product of recent experience
- Behaviour as the produce of accumulated experience
- Early experiences trump recent experiences in behaviour
- Critical periods
- Early individual characteristics endure
- Early environments endure
- Critical periods
- Developmental stages or tasks
- Children as creators and chosers of their environments

What does Longitudinal Study Provide?

- Measurement of current or recent experiences and functioning so less reliant on memory
- Measurement cannot be confounded with outcome because that is not known!
- Provides opportunities to examine good outcomes in the face of adversity
- Timing of experiences and functioning
- Duration
- Temporal sequences show B to A as well as A to B
- Study how processes unfold within individuals

Challenges and Hazards

- Consider the duration of the study as one day, WCHADS assessments are like saying “hi how are you?” giving 4 seconds for the reply, 12 times.
- One study or many? One sample, some initial questions. Conceived in 2004, started in 2007.
- What guides measurement? E.g. NBAS
- Study crosses many new areas for the team. Like explorers trampling on invaluable archaeological sites?
- The field changes as the study progresses, e.g. epigenetics
- Can try to deal with confounds, but some, e.g. genetic not accounted for
- Too many variables!!

In What Sense is it Science?

- Large Hadron Collider model - test the predictions of different theories of particle physics
- 19th century explorer/collector model – no theory
- Darwinian model – interplay between theory and observation
- Within the UK empiricist tradition theories regarded with suspicion/apprehension
- How do predictions based on theory lead to novel analyses, and how should we interpret the findings. More cautiously because of low prior probability or less cautiously because predicted by the theory?
- Falsifiability?

Developmental Cross-Cultural Science

- The conceptual and empirical background is very Euro centric
- What happens at the interface with India?
- Keep enough constant across the settings so we can say ‘we did the same thing’
- Doing the same thing with the biology is probably the ‘same thing’ (but e.g. differences in MAOA polymorphisms across cultures)
- Doing the same thing with self-report measures is not **finding out** the same thing – **self-report** requires a shared ‘individualist’ perspective?
- **Observing and listening** may get closer (but discussion of mother-infant interactions)
- **The joint study of development and psychopathology challenges our ideas and creates new scientific opportunities**