# International Child Law (ICL)

# The limitations of brain development studies

Dr Hedi Viterbo



### Excluding entire groups

- 1. Brain studies repeatedly generalise based on relatively few participants, often from particular cultural or class backgrounds.
- 2. Experiments exclude participants labelled as mentally 'abnormal'.

#### Cause and effect

Brain development is heavily affected by the information and experiences to which a person is, or is not, exposed.

In modern society, such external stimuli have become highly age-specific.

With so-called 'non-age-appropriate' experiences and knowledge being withheld from young people, is it any wonder they appear to be less developed?

Would brain development be different in a less age-segregated society?

# Over-simplification

- 1. These studies ignore countless factors that can influence the brain.
- 2. Brain maps are simplified (from numbers to colour areas) to make them accessible to the media and public, and are normalised for statistical 'significance', thereby failing to do justice to the messy and complex data.

## Other methodological limitations

- 1. Scientists' assumptions about brain activity, and the equipment they use, are both contested and constantly changing.
- 2. A lab setting is hugely different from real life.