

CEP Group Meeting

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ISGlobal

2023-07-26

Overview

- ▶ **Aim:** to research the *short-term* effects of postnatal exposures to non-persistent EDCs on neurodevelopment and neurobehavior in childhood, and how the metabolome and the proteome might *mediate* these effects.
- ▶ **How:** by making use of the principles and criteria of triangulation. We will primarily rely on the use of MTPs in combination with TMLE.
- ▶ **Population:** the HELIX sub-cohort, consisting of $N = 1200$ mother-child pairs.
- ▶ **Exposures:** non-persistent EDCs (phenols, phthalates, and organophosphate compounds), measured in childhood in a pool of two urine samples.
- ▶ **Outcomes**
 - ▶ Raven's Coloured Progressive Matrices, for assessing non-verbal intelligence.
 - ▶ Computerised n-back test, for assessing working memory.
 - ▶ Attention Network Test, to provide a measure of the efficiency of three different functions of attention.
 - ▶ Child Behavior Checklist, for assessing behavioural and emotional problems.
- ▶ **Mediators:** serum and urine metabolome, plasma proteome.

The Research Questions

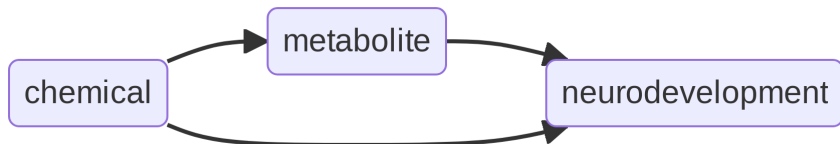


Figure 1: Simplified DAG.

Triangulation

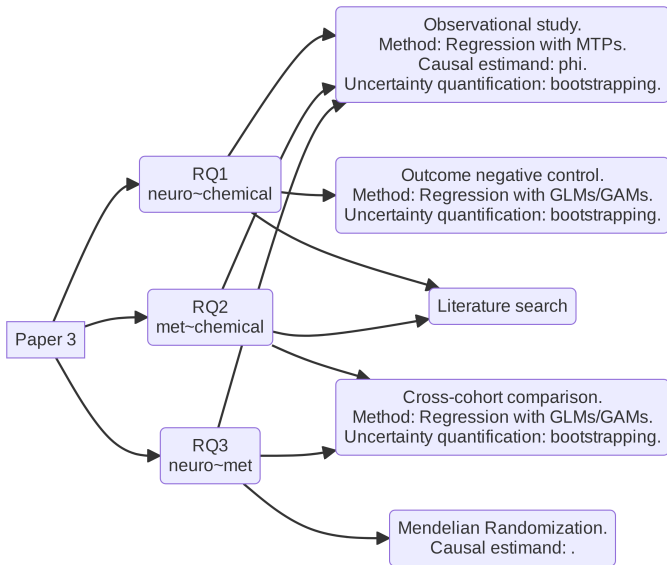


Figure 2: Diagram summarizing research questions and methods.