Description:

**Simulation data for ‘Associations between socioeconomic status, cognition and brain structure: Evaluating potential causal pathways through mechanistic models of development'.**

The collection contains simulated data from artificial neural network (ANNs) models investigating socio-economic-status (SES) linked environmental influences and genetic effects on the development of cognition and behaviour. The file "Simulation code.docx" includes c-shell scripts and simulator code for the ANNs.

There were three populations of ANNs trained, which differed according to how SES-linked environmental influences were implemented: Stimulation, Structure, Stimulation+structure.

This archive comprises Excel files containing results and parameters for the three populations, each N=1000 individuals. Each population was given an intervention to close gaps in developmental outcomes. There are three further three 'intervention' Excel files containing equivalent results for the populations following the early interventions.

Citation of paper:

Thomas, M. S. C. & Coecke, S. (2023). Associations between socioeconomic status, cognition and brain structure: Evaluating potential causal pathways through mechanistic models of development. *Cognitive Science*, e13217. DOI: 10.1111/cogs.13217