## Studying temporal dependence within and between variables for (mixedmethod) data with small samples?

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### Briefly Explain Your Question (max. 100 words)

This project is aimed at understanding the temporal dependence of children's mindsets of intelligence (as measured by interviews) on current and past *teacher* behavior and *own* behavior (measured as proportions of mindset-related behavior in real-life classrooms). Teachers (N = 11) and students (N = 54) were filmed four times across one year. While research has shown strong concurrent relationships between these variables in a laboratory setting, very little is known about how these variables are associated developmentally, using ecologically-valid data. These advancements will contribute to a more in-depth understanding of the origins of mindsets, while

limiting sample size, and thus power.

# Scientific field(s) of the author(s)

**Developmental Psychology** 

#### Relevance to conference theme (max. 50 words) Students mindsets of



intelligence are nested within

*time* and *classrooms* (i.e., teacher). This requires a relatively complex model, and thus large samples. However, the use of observational data limits the sample size (due to the time-intensive process of coding behavior in real-time, and difficulties in obtained informed consent for filming children). Alternative analytical methods are therefore required.

### Keywords (max. 3)

Multi-level modelling, ecological research, classroom data