Education at any Cost?
The relation between academic track mismatch in secondary education and the temporal development of abilities and well-being

Research Question
After primary education in Germany, pupils and their parents have to choose between several tracks.

The academic track (Gymnasium), which is the direct way to higher education eligibility (Abitur), usually offers the best prospects and outcomes. However, teachers in grade four recommend a track based on the abilities of a child. When parents send their child to the academic track without being recommended to do so, a track mismatch occurs.

How do children with a track mismatch develop in secondary education with respect to their abilities and well-being? Are they able to catch up to their peers or are they experiencing problems due to insufficient academic performance? Is insufficient performance mediating negative effects?

Theoretical concepts

Big-Fish-Little-Pond Effect:
Since the predominant form of comparison is with peers in the same classroom, students with a mismatch find themselves at the lower end of the distribution with regard to academic abilities. This can create feelings of inadequateness and stress which might affect well-being and development of abilities negatively.

Basking-in-reflected-glory:
However, when students with a mismatch compare themselves to their peers visiting other tracks, they recognize that they are in the most demanding and prestigious schooling with best prospects after graduation, which might have positive effects on self-esteem and outcomes.

Data & Methods

- German National Educational Panel Study (NEPS)
- Starting Cohort 3 – Pupils from grade 5 to 9
- Multilevel Growth-Curve-Models (N=1114, grade 5)
- Longitudinal Regressions with Random Effects
- Control variables: gender, migration status, parental educational, parental ISEI, age, family status, siblings, parental friends, federal state (only states without binding recommendation included)

Results

Students with a mismatch display consistently lower abilities than their peers → no catch-up effects

- Significantly lower well-being and enjoyment of reading for pupils with a mismatch
- No effects regarding days absent from school and self-rated health.

Panel Regression with Random-Effects: Negative effects of mismatch can be explained by lower subjective and objective abilities
- Highly significant effects become smaller or even disappear after including abilities

Conclusion

- Pupils with a mismatch cannot catch-up to their peers
- They display lower well-being and enjoyment of reading
- Negative effects of mismatch are explainable by lower academic performance