

## **Cognitive and non-cognitive Skills and the Reproduction of Inequalities**

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Both cognitive and non-cognitive skills are important determinants of educational and occupational attainment. These skills also play a major role in the reproduction of social class across generations. Cognitive and non-cognitive skills are in part inherited and in part nurtured by one's family of origin. Nevertheless, research so far has paid little attention to disentangling the influence of non-cognitive and cognitive skills from other origin effects. The first aim of this paper is to address the stratification of these skills and their contingency on family of origin characteristics. We investigate to what extent social background characteristics such as parental education and household income determine cognitive and non-cognitive skills, while simultaneously taking into account parental cognitive and non-cognitive skills.

The second aim is to assess the influence of these skills on educational attainment net of social origin confounders. More specifically, we assess the influence of general cognitive abilities and self-efficacy on attained grades in Math and German. The estimation of the influence of non-cognitive and cognitive skills in a sample of twins allows keeping time invariant characteristics of the family of origin constant. Due to the both social and biological transmission of skills we expect their influence to decrease as more of origin confounders are taken into account.

We base our analyses on the newly available TwinLife data ([www.twin-life.de](http://www.twin-life.de)), a representative sample of identical and fraternal twins and their families in Germany. Our results indicate that both general cognitive abilities and self-efficacy are stratified by social origin. Moreover, while a large part of the association seems to be driven by unobserved confounders associated with the family of origin, general cognitive abilities and self-efficacy affect educational achievement independent of social origin.