

Jakob Schwerter & Lena Ilg

University of Tübingen

[jakob.schwerter@uni-tuebingen.de](mailto:jakob.schwerter@uni-tuebingen.de)

## **The impact of family formation on career trajectories of female STEM graduates in Germany Work in Progress**

Women are not only underrepresented in STEM (sciences, technology, engineering, and mathematics) fields of higher education programmes but also continue to drop out of the 'science pipeline' after graduation and in the early years of their occupational career. And while they are desperately needed in the STEM workforce, the reasons for the female underrepresentation remain largely unknown. With this project, we aim at shedding more light on the issue and examine whether family formation contributes to the excess exit of women from STEM occupations. The first ones to do so for German graduates, we use data from the 2005 and 2009 cohort of the graduate data from the German Centre for Higher Education Research and Science Studies (DZHW). Unlike most other studies on the topic, we include STEM and non-STEM graduates in our sample to compare both the exit behavior of male and female STEM graduates and relative to all other degree fields. Using individual's self-rated job adequacy as a proxy to define whether one is having a job unrelated to his or her field of study, our Logit regressions show that female STEM graduates are indeed excessively leaving STEM occupations during the first five years of their career compared to their male counterparts and non-STEM graduates. This effect is most pronounced for Computer Science graduates and insignificant for all other STEM subfields. Childcare, on the other hand, did not prove to contribute to excess female exits from STEM occupations significantly. The findings are consistent with existing findings from the literature.

**Keywords:** STEM, job mismatch, gender differences, study programs, family formation