## The Impact of PhD Studies on Mental Health—A Longitudinal Population Study

Eva Ranehill

j.w.w. Sanna Bergvall, Clara Fernström, and Anna Sandberg

## **Abstract**

We study the relationship between enrollment in PhD studies and mental health using Swedish administrative data. These data comprise all individuals starting PhD studies in Sweden between 2006 and 2017 and contain detailed information on all medical prescriptions collected, as well as inpatient and specialized outpatient care visits and diagnoses. Following individuals over time, we show that prospective PhD students, in the years preceding their PhD, collect psychiatric medication at a rate similar to that of a matched sample of individuals with a master's degree. However, following the start of PhD studies, the rate of psychiatric medication for PhD students increases sharply relative to the control group. This increase grows continuously over the course of PhD studies. Our estimates indicate that, by the 5th year of PhD studies, the share of students collecting psychiatric medication has increased by about 40 percent relative to the year before PhD start. Our results raise questions about how the early stages of research careers impact mental health and, more broadly, about how professional environments influence well-being. Our findings expand recent survey-based evidence documenting high levels of self-reported mental health problems among PhD students, though our use of national-level, longitudinal data from administrative records addresses several concerns with the interpretation of these cross-sectional findings based on self-reports from smaller and selected samples.