Analytic Potential of the Doctoral Candidates and Doctorate Holders Study ProFile

Janine Lange* - Jakob Tesch*

*Institute for Research Information and Quality Assurance e. V. (iFQ), Berlin, Germany

Growing Sample

Every year the ProFile study starts to follow the new doctoral candidates of the partner organizations (see below). The German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) left the project in 2012 effectively reducing the number of doctoral candidates from Research Training Groups (RTGs), Collaborative Research Centers (CRCs) and Graduate Schools from the excellence initiative in ProFile. The current partners are:

- DAAD
- Heinrich Böll Stiftung
- Stiftung Studienstiftung des deutschen Volkes
- Deutscher Akademischer Austauschdienst (DAAD)
- DAAD

Matching of Institutional and Individual Characteristics

The data can be matched with information on the institutional level as long as this does not interfere with privacy regulations. The figure to the right shows an example of how this could look like. The left part of the figure is based on an analysis of 665 doctoral regulations in Germany which was carried out by iFQ in 2012 with support from the Federal Ministry of Education and Training.

The right side of the figure is based on data of 2,621 doctorate holders in ProFile who indicated the format of their thesis. Data assessment spans the years from 2009 to 2013. Both sides of the figure are restricted to the same disciplines.

Other data that could be matched are, for example, the amount of third party funding received by the university, the number of doctorates granted or bibliometric indicators on the university level.

Sequence Analysis:

Based on the longitudinal data in ProFile the data set provides the possibility to visualize and analyze specific sequences derived from the participants’ information.

The figure to the left, for instance, displays the panelists’ financial situation over the course of their doctoral candidacy (sequence index plot with order from Optimal Matching). The individual sequences show that there are four sources of funding that are quite stable over time with scholarships being the predominant form of financing, followed by positions as research assistants (third party funded and budget positions) and external employment. What is also striking is the fact that there seem to be numerous transitions from other forms of financing at the beginning of the doctoral candidate to scholarships.

This information from the sequence analysis can then be used for cluster analysis. The clusters could then be analyzed using covariates such as individual characteristics, discipline, gender and membership in a structured doctoral program.

Cox-Regressions

The dataset contains a number of date variables. These include information on the educational biography, the beginning and end of PhD as well as job-episodes all of which allow duration analysis.

The Big 5 Personality Traits

Starting in 2013, the assessment of the Big 5 personality traits was implemented in Profile. Based on a short scale of 10 items the personality traits are now assessed once for every panelist.

Logistic Regression Analysis of Career Intentions

New results forthcoming: Janine Lange, Jakob Tesch, Marco Palier, Maik Winkler, Anna Fräßdorf, Anna Hinze, Anna Fräßdorf (2015). Against all odds: Determinants of doctoral candidates’ intention to enter academia in Germany. International Journal for Researcher Development. [in print]