Doctoral Researchers in the Leibniz Association:
Final Report of the 2017 Leibniz PhD Survey

- SHORT VERSION -

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To access the full version of the final report, please visit:

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1 Preamble

The Leibniz PhD Network was founded in 2016 by a group of doctoral researchers as an initiative for building a platform for cross-disciplinary exchange among all doctoral researchers in the Leibniz Association and to give them a voice. One of the aims of the Leibniz PhD Network is to work towards common standards of working conditions for doctoral researchers within the Leibniz Association and help create greater transparency regarding careers within and outside of academia.¹

This short version of the final report contains the executive summary and the fields of action chapter of the full report. In November 2017, the Leibniz PhD Network sent out invitations via PhD representatives and works councils to the doctoral researchers within the 91 Leibniz Institutes and Leibniz Research Museums to participate in the survey’s online questionnaire. More than 1,000 doctoral researchers answered the online survey by early February 2018, resulting in a response rate of 40.5%.

¹See https://leibniz-phd.net for further information on the aims and organizational structure of the Leibniz PhD Network.
2 Executive Summary

In general, the survey data illustrate a high level of overall satisfaction of respondents with their situation as doctoral researchers at Leibniz Institutes and Research Museums. A little over 65% of our respondents are satisfied or very satisfied with their general situation in their Leibniz Institute. Similarly positive is that these perceptions appear consistent across various groups: Women and men, international and German respondents, doctoral researchers in any of the five Leibniz sections, and stipend holders all express a certain degree of satisfaction with their situation. However, it is striking that doctoral researchers in the early phase of their doctorate are much more satisfied than those at a later stage. Some dissatisfaction surfaces when it comes to the duration of the doctorate.

A central aspect of satisfaction is how frequently doctoral researchers have considered abandoning their PhD. About 43% of the doctoral researchers indicate that they have thought about not continuing their doctorate. This number is larger for German than international respondents (36% vs. 47%); larger for parents (55%) than for non-parents (42%); and larger for those who are mainly funded through working contracts (45%) rather than stipends (35%). The three most important rea-
sons for thinking about not continuing a doctorate are as follows: 66% of the doctoral researchers did so because of an unclear career path or career opportunities; 31% thought they have no or only poor academic results; and 29% did so because of financial insecurities.

According to the survey data, 79% of all doctoral researchers have a working **contract** with their institute. Another 18% of respondents hold a **scholarship or stipend** from an external funding body or their own institute (5%). A small group of stipend holders has an additional working contract (4% of all respondents). Considerable differences with respect to the contracts of doctoral researchers across sections can be observed. The upper limit is set by Section A, in which more than 94% of all respondents have a working contract without an additional stipend, whereas this is the case for only 73% of the respondents working in Section B. We also observe remarkable differences with respect to the citizenship status of our respondents. Only 62% of our international respondents have a working contract and no stipend, which is 27 percentage points fewer than German doctoral researchers (89%).

Among those respondents with a working contract, every third respondent receives a **payment** of 50% TVöD²; another 36% are paid between 50 to 65% TVöD; and only 10% of all doctoral researchers in the Leibniz Association hold a working contract with 76% or an even higher fraction of paid working time. Strong differences in the level of payment appear across sections, as Chapter 5.2 of the full report shows.

3% of all respondents have an income of less than 950 euros net per month, which defines “relative poverty” in our report.³ Remarkable differences become apparent when comparing different groups. Some groups are more affected by the peril of relative poverty. Among the 121 parents, 9% are relatively poor⁴, compared to 3% of respondents without children.

The level of **satisfaction with supervision** is relatively high. A majority of the doctoral researchers is satisfied (40%) or even very satisfied (23%) with their PhD supervision. At the same time, as with overall satisfaction, the level of satisfaction with supervision clearly declines over the time of a doctorate. We identified three factors that contribute to a positive perception of the supervision

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²Tarifvertrag für den Öffentlichen Dienst (TVöD), collective agreement determining the salaries in the public sector
³In Germany, individuals earning less than 999 euros net per month are at risk of being relatively poor. For further information, please refer to [http://www.amtliche-sozialberichterstattung.de/A2armutsgefaehrungsschwellen.html](http://www.amtliche-sozialberichterstattung.de/A2armutsgefaehrungsschwellen.html).

⁴Assuming they are single households.
received. Firstly, the supervisors’ engagement in the doctoral research, their accessibility, and their awareness of the current state of the research seem to be essential. Secondly, the degree of independence, trust, and friendly interaction are important factors for the level of satisfaction with the supervision. Thirdly, the frequency of communication regarding the research project affects the level of satisfaction with PhD supervision. Doctoral researchers are significantly more satisfied when their supervisor communicates with them at least on a monthly basis. On average, doctoral researchers are granted sufficient time during their working hours to pursue their PhD project. They spend 50% of their working hours on their PhD. 17% of their working hours is dedicated to research not related to their own PhD\textsuperscript{5}.

**Career development** constitutes a crucial aspect of the doctorate. Leibniz Institutes can support doctoral researchers in their career development beyond the provision of good research facilities. We find that for 71% of the doctoral researchers, the costs for conferences involving active participation are fully covered by the respondents’ institutes. More than half of the doctoral researchers receive full financial support for specific training. The majority of doctoral researchers have access to training in scientific writing and scientific methods, and can attend graduate schools. Yet there are considerable differences depending on the contractual situation. Doctoral researchers who have a working contract receive almost twice as much support for conferences compared to doctoral researchers with a stipend.

\begin{figure}[h]  
\centering  
\includegraphics[width=\textwidth]{figure4.png}  
\caption{Support for conferences with active participation by contract situation}  
\end{figure}

\textsuperscript{5}We summarized the remaining categories in “other activities”, since each category taken for itself is rather negligible. Doctoral researchers spend 33% of their time occupied with other activities.
Regarding future development and career aspirations and perspectives, about two thirds of the doctoral researchers want to pursue an academic career. Fewer women than men want to stay in academia. Further, when doctoral researchers decide against pursuing a career in academia, they rarely indicate lacking qualifications or interest as reasons. Rather, the reasons given are frequently precarious employment conditions in academia, which are characterized by limited working contracts, the necessity to be mobile, and low income. Besides pursuing a career in academia, 57% of the doctoral researchers could imagine doing research in various industries; 46% would consider research in the public sector; 36% can imagine pursuing a career in private, non-academic jobs; and 35% want to embark on a career in publicly funded, non-academic jobs.

![Figure 5: International doctoral researchers receiving all relevant information at their institute in a language they understand by section (N=285)](image)

**International doctoral researchers** make up one third of doctoral researchers in Leibniz Institutes and Research Museums. We closely examined this group, since international collaborations are important for most Leibniz Institutes and international doctoral researchers need additional support structures. Indeed, half of all international respondents wish to have more support from their institutes (49%). Only four out of ten international respondents state they have a contact person for international researchers at their institute. 40% of international respondents face language barriers at work. An equal proportion of international doctoral researchers do not receive all rele-
vant information in a language they understand.

The **compatibility of life domains** is an important component for doctoral researchers as well. Only 8% of the doctoral researchers declare that being in a partnership and working in academia are not compatible. 35% (strongly) disagree that working in academia is compatible with childcare responsibilities. Differences across the Leibniz sections are present in this perception. An active social life and hobbies are considered incompatible with working in academia for 36% and 26% of the respondents respectively. In addition, 76% of the doctoral researchers think that working in academia creates too much financial insecurity; 55% think it requires them to move too often; and 35% indicate that working in academia is incompatible with making private-life plans. The latter numbers are higher for parents.

**Figure 6: Perceptions on compatibility of working in academia and partnerships, hobbies, and a social life**

### 3 Fields of Action

High levels of satisfaction among doctoral researchers create a solid basis when tackling areas of improvement and naming possible fields of action. Overall, three out of five doctoral researchers are satisfied or very satisfied with the situation at their Leibniz Institute or Research Museum. Further, about six out of ten doctoral researchers are satisfied or very satisfied with their PhD supervision. Nevertheless, some scope for improvement exists.
First of all, our data show that stipends as an option for funding create income inequality within the Leibniz Association. Additional inequality also exists among those doctoral researchers holding a working contract. There is still a large majority of doctoral researchers employed on contracts below 65% TVöD. In fact, part-time contracts are not associated with a lower average working time, as our data shows. Doctoral researchers in the Leibniz Association work on average between 39 to 44 hours per week, no matter how much of this working time is actually paid. Part-time contracts therefore lead to a larger number of unpaid extra hours and to a significantly lower level of hourly recompense for most respondents.

Apart from better payment and improvements to the contractual situations, as well as more research associate positions, institutes could also use more flexible financing tools to improve the situation of doctoral researchers. For example, many respondents wish to have completion grants (27% of all respondents) to finish their PhD without worrying about financial uncertainty. According to the estimations of our respondents, a PhD takes 3.8 years on average to complete, with some differences between sections (see Chapter 4 of the full report), whereas many positions are limited to three years.

Regarding career development, almost half of the doctoral researchers indicate the need for support and training with respect to grant applications. The survey also inquires whether doctoral researchers benefit by a mentoring program, as mentors can play a crucial role in the career of researchers. The data shows that only one in eight doctoral researchers has access to such a mentor. Completion grants, support for grant applications, and mentoring could provide the means to reverse declining satisfaction rates over the course of a doctorate, in terms of the general situation as well as with regard to supervision. Institutes might further think about more targeted ways to address the specific needs of doctoral researchers in the later stages of their doctorate, for instance by increasing transparency in terms of their career opportunities within as well as outside of academia. The number of doctoral researchers considering a career outside of academia after their dissertation shows that it is of major importance that Leibniz Institutes and Research Museums consider further measures to prepare their doctoral researchers for alternative career paths.

Scope for improvement exists regarding the integration of international researchers and the balance
between working life and private life, especially for doctoral researchers with childcare responsibilities. Chapter 9 of the full report reveals potential areas for a transfer of knowledge across Leibniz sections, as present differences in the available support options provide a basis for an exchange of best practices with respect to supporting structures for international researchers. The necessity to empower parents, and especially mothers, to feel prepared for pursuing their PhD and to take up job opportunities in academia is a relevant field of action revealed in Chapter 10 of the full report.