

## PhDnet Survey 2022: Executive summary

The Max Planck PhDnet represents more than 5000 doctoral researchers (DRs) from 85 research institutes working in the Max Planck Society (MPS). This year's survey report focuses on working conditions, supervision and support structures as well as conflicts and discrimination and the current health status of researchers.

### Relevance of the survey

For the 2022 Max Planck PhDnet survey, we contacted 5455 DRs, out of which 2323 (or 42.6%) participated, indicating a lower response rate than in previous years. Of the total respondents, 46.1% identified themselves as women, 51.1% as men, and 1.7% as gender diverse. 41.6% of respondents hold German citizenship, while 19.3% hold citizenship from other EU-countries and 38% from countries outside the EU. While this shows a significant population of international and gender diverse groups, the overall numbers remain similar to the previous years.

Together, as in previous surveys these questions provide invaluable data to gain statistically relevant and representative insights. In the following paragraphs, we present an overview of the key findings of the survey which we consider the most compelling, relevant, and trend-setting for future points of action regarding the work of the PhDnet and the support of DRs by the MPS.

### Working conditions

The assessment of working conditions has consistently served as a crucial element in our surveys, enabling us to gauge the current situation of doctoral researchers and to monitor the implementation of policy changes within the Max Planck Society.

The overall employment situation of the doctoral researchers remains very diverse with only 78 to 89% employed with a support contract, depending on the section. The differences are most stark in the human sciences section where over 6.1% find themselves on an internal stipend (supposedly abolished in 2021), 8.4% are paid through an external stipend from Germany and 3.1% report being unpaid. The observed diversity in methods of payment creates big inequalities within the doctoral researcher community and leads to instability due to intransparent regulations and unclear communications. Confusion related to the many different payment situations could lead to some DRs missing out on additional governmental support payments, such as those offered due to the COVID pandemic and inflation this year.

We observe that contracts were distributed more equally among genders and nationalities in 2022 than in previous years. More ethnic minorities and citizens from countries outside European Union hold stipends, which could be due to how many of them are granted stipends for the research stay in Germany by an institution in their home country. This has been a persistent trend throughout the years. It is worth noting that DRs on stipends face less financial stability, receive no social security or insurance benefits, navigate a precarious immigration status, and in general are paid less.

The official Max Planck Society guideline for contract duration is that they should follow a "3+1" rule: an initial contract of 3 years followed by a possible 1 year extension. It is worth noting, however, that the average time to PhD completion in the MPS calculated from the 2022 PhDnet survey lies around 4 years. This is lower than other Germany-wide estimates (5.7 years), which include DRs who have more teaching obligations at the universities. The survey results also show that the 3+1 rule is not equally applied. 16% of the DRs in their 1st year reported already

having received more than 1 contract. By the third year, only 64% are still funded by their first contract while 8% received 3 or more. These results hint at the existence of chain contracts and show that a significant amount of doctoral candidates start their PhD on short term contracts. Furthermore, 1.2% of DRs report working on their thesis while being unpaid.

We also observe 74.5% of doctoral candidates work more hours than required by their contract. At the same time, 54.7% of DRs work on at least 2 weekends per month, and 52.6% do not take more than half of their holidays. The major reason for this is that they want to finish their PhD before the end of their contract. Altogether, this data suggests that with the current system it is extremely hard to finish the PhD thesis in the suggested 3 years, putting the doctoral researchers under immense stress and leading them to adopt unsustainable working patterns.

### **Supervision and Support systems:**

A successful doctorate relies not only on the capacities of the DRs but also on the quality of supervision and support received. Despite the established recommendations, less than half of DRs (44%) report having both a thesis advisory committee (TAC) and a written supervision agreement. The satisfaction with the supervision and the meeting frequency varies greatly with the supervision constellation the DR is exposed to. 22% of DRs with two-supervisor arrangement meet their formal supervisor significantly less than they would like. Data also shows cases where DRs are mainly supervised by another DR or early-stage Postdoc.

The support received by doctoral candidates from their institutes also varies. While 64.3% report receiving support with university enrollment, 52.1% feel they would benefit from more support in this area. Further need for support is expressed related to finding accommodation (49.1%) as well as translation of the working contract and relevant documents (25.6%). With 21.6% of DRs having no knowledge of German, 41.9% speaking it at a beginner's level and 30% of the institutes not offering any language learning support, we see that language barriers can be a problem. More than 20% of DRs report German language being an obstacle at least to some extent while 31% report only some of the relevant information being available in a language they can understand.

When it comes to identifying future career paths, 64% say that they would prefer to stay in academia, while 78% would also consider working in a non-academic scientific research field and 31% prefer a non-science related job. Despite these stated desires, more than 45% of DRs feel unprepared for a non-academic career and 86% wish for improvement in their career development opportunities - a trend also observed in previous surveys.

When it comes to child support at the institutes, only 22.1% of all DRs state that there is support available, while 41.1% of DRs who have children are not satisfied with the childcare support, specifically lacking reimbursements for daycare during business travel, financial support for daycare of child-friendly working environment. The general satisfaction of DRs with international support and administrative support has gotten lower since 2019 (from 62% to 55% and 60% to 57% respectively). Psychological support scores the lowest satisfaction rates with 30% satisfied and 30% dissatisfied.

### **Discrimination and conflict:**

The number of cases of sexual harassment reported in the PhDnet survey doubled compared to 2 years ago. It should be noted that this may not reflect an actual increase in the incidence of harassment, but could be due to a variety of factors such as an increase in comfort reporting sexual harassment, greater knowledge about reporting channels, different working conditions in home office, etc. Not all those who report sexual harassment in this survey chose to formally

file a report with their employer. 84% of the total sexual harassment cases were perpetrated against women, which represent 16% of all women in the survey. In 2019, it only represented 9% of women respondents, while sexual harassment rates against men were similar to 2019 (2.5%). The rates of sexual harassment was quite similar across nationalities. Survey respondents identify the perpetrator of harassment as most often other DRs, or scientific staff that are not supervisors.

22.6% respondents report getting bullied, and for 67% of those cases, the reason was the respondent's position of power. Nationality, mental health and ethnicity were other reasons for bullying. The number of reported cases of bullying was quite similar to those who reported witnessing others be bullied.

Discrimination based on nationality was highest among non-European (16% of them) and non-German Europeans (9%). Discrimination based on disability was highest among people with a recognized disability (22%), and with 8% reporting discrimination for disability that is not legally recognized. Also, 7% of LGBTQ+ people felt discriminated against for their sexual orientation, while this number is only 0.3% for non-LGBTQ+ people.

### **Health:**

Almost all survey respondents report at least some levels of anxiety. 63.5% meet the criteria for moderate to high state anxiety and 58.5% for moderate to high trait anxiety, which is very similar to the data shown in the 2020 survey. 55.8% of respondents report symptoms that indicate at least a mild depression, more than compared to 2020. Most DRs who report mental health problems also report that it affects their work: 17.6% report that it is extremely difficult to do their work while 56.3% find it somewhat difficult. 40.8% of survey participants further report developing somatic symptoms that started in course of their PhD indicating a decline in physical health. In fact, 58.6% of the DRs have at some point thought of quitting their PhD project. Overall, the persistence of the reported symptoms concerning physical and mental health over the course of the last surveys indicate that the situation has not gotten better since the COVID pandemic years. Although the MPS offers mental health support known as the Employee Manager Assistance Program (EMAP) that includes counseling services, only 6.5% of respondents have used this service, with a further 26.5% being aware of it. Of those who used EMAP, only 56.7% said that they were satisfied or very satisfied with it.

### **Conclusion:**

In recent years, there have been notable positive changes in the lives of doctoral researchers. It's essential to highlight the significant impact –of closing the gender pay gap and the subsequent increase in income- resulting from the introduction of mandatory 65% contracts in 2021. Nevertheless, there are still several areas that require improvement.

We would like to reiterate the inefficiency of the 3-year contract system to adequately cover the duration of doctoral researchers' tenure, along with the ambiguity surrounding extension rules. Some fields and institutes tend to rely excessively on both internal and external stipends, leading to a high percentage of unpaid doctoral researchers. It's important to note that stipend holders often face greater financial and social instability compared to those with contracts which became especially clear in the process of inflation payment handling.

Support structures, such as Thesis Advisory Committees (TACs) and supervision agreements, are not consistently implemented across all areas. Correspondingly, DRs find the clear and strict requirements for doctoral work, and good leadership skills are lacking from their

supervisors. We hope that the propagation of well-implemented TACs and supervision agreements can improve this situation in the future.

Lastly, many DRs would like psychological support and conflict handling to be improved. We want to emphasize the importance of the on-boarding project which can provide good guidance about mental health support to DRs upon their arrival as well as the safer space program that when implemented could provide an easily accessible peer-to-peer support structure.