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Helmholtz Juniors

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Report on the Survey 2012 amongst doctoral candidates within the Helmholtz Association

Created, carried out and evaluated by the Helmholtz Juniors,
the PhD representatives of the Helmholtz Association

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Martin Seilmayer (HZDR), Lukas Schmidt (AWI)*

July 2013

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1 About the Report

The Helmholtz Juniors are the PhD students' network of the German Helmholtz-Association (Helmholtz-Gemeinschaft Deutscher Forschungszentren, HGF). Their main mission is to intensify collaboration between the PhD students of the different Helmholtz research centers and improvement of the PhD education. They consist of elected or delegated members of the PhD representative teams of each center.

In order to represent the interest of the PhD¹ students at the Helmholtz Association, we need to have precise and up-to-date knowledge about the working conditions, problems and wishes of PhDs. This survey is a crucial basis therefore. After 2008 and 2010, this report refers to the third wave of the Helmholtz wide PhD survey. Its results technically enable us to even describe developments over the last 4 years, which should be the aim of a separate, comprehensive report in the near future.

Within the Helmholtz-Juniors, the working group *PhD-Survey* developed, conducted, analyzed, and reported the survey and its data. The raw data is held by the working group. The report is free to be used by the Helmholtz Centers as well as their PhDs. In the report, the centers are coded by random ID numbers. According to our data protection policy, each center could be provided with only their ID number.

In the report, firstly we provide information about the background of the participants. Secondly we address four main topics of interest, namely PhD project planning, the income situation of PhD students, conditions for starting a family during the time as PhD student and the situation of students of foreign nationalities within the HGF. And thirdly we report results regarding the Helmholtz graduate schools. We do neither refer to every question in the survey nor do we present cross tables or in depth information. If one is interested in further analysis, she may contact the members of this working group. The complete questionnaire is appended.

1.2 About the survey

The survey was conducted online from June 8th to July 30th 2012, applying the platform unipark.info of the QuestBack AG. The invitation to participate was sent to the representatives of the PhDs at 18 Helmholtz Centers in Germany. The representatives distributed the invitation to the PhDs at their center. After two weeks, a reminder e-

¹ In this report we refer to the German 'Doktorand' or 'Doktor' as 'PhD student' or 'PhD'. We also use 'PhD' as short form for 'PhD student' to improve readability.

mail was sent applying the same procedure. There is no possibility to assign a certain data set to a certain person. The data set is held by the Helmholtz Juniors Working Group *PhD-Survey*.

Two remarks have to be made according the sample. Firstly, the population we consider are all those who are registered as PhD students in any of the 18 Helmholtz Centers. The invitation to the survey was meant to be sent via e-mail using the mailing lists of the centers. However, we probably face a distribution error. On the one hand, not all registered PhDs are member of the mailing lists. On the other hand, also non-registered PhDs are member of the lists due to cooperation with universities and other institutes. However, for 15 out of 17 centers, more than 90% of the participants mainly work at their Helmholtz Center (Figure 1). Just for center 16, there is a considerable number of 28% of participants who mainly work at the university or library (2% mainly work at home, 3% mainly somewhere else). For center 11, 6% mainly work at the university/library, 2% mainly at home, and 3% mainly somewhere else. When interpreting the survey results, this should be kept in mind.

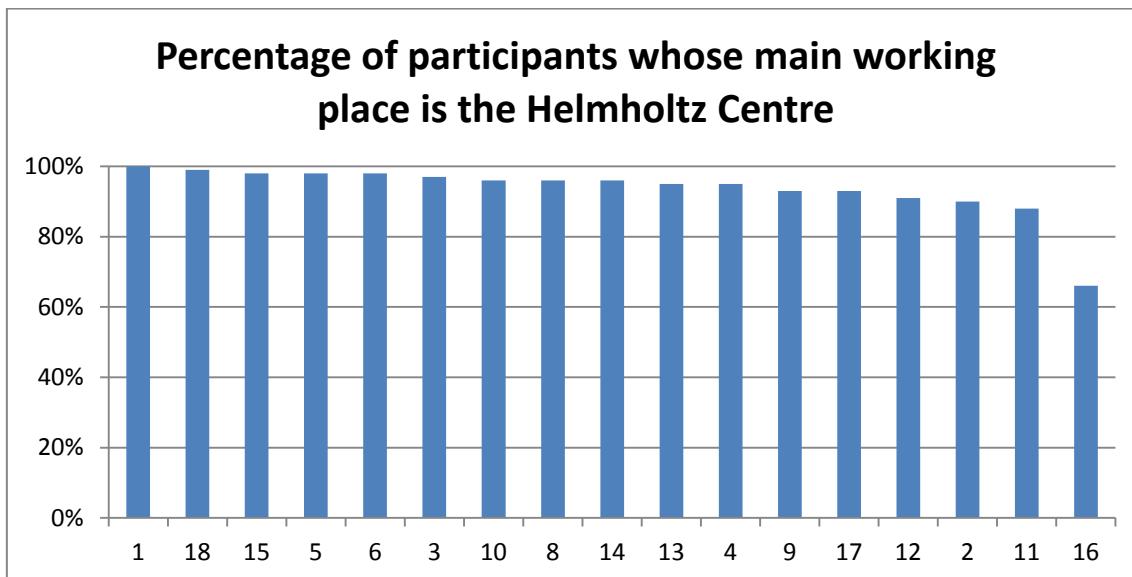


Figure 1. Percentage of participants whose main working place is the Helmholtz Center.

Secondly, there might be a self-selection error, since the survey is voluntary. However, we assume that this bias will effect all centers equally. The survey yields a total of 1636 valid datasets (Figure 2). The absolute numbers of participants ranged between 21 and 194, while 48 participants did not specify their center. From center 7 only one person answered. We thus excluded center 7 from the following analysis.

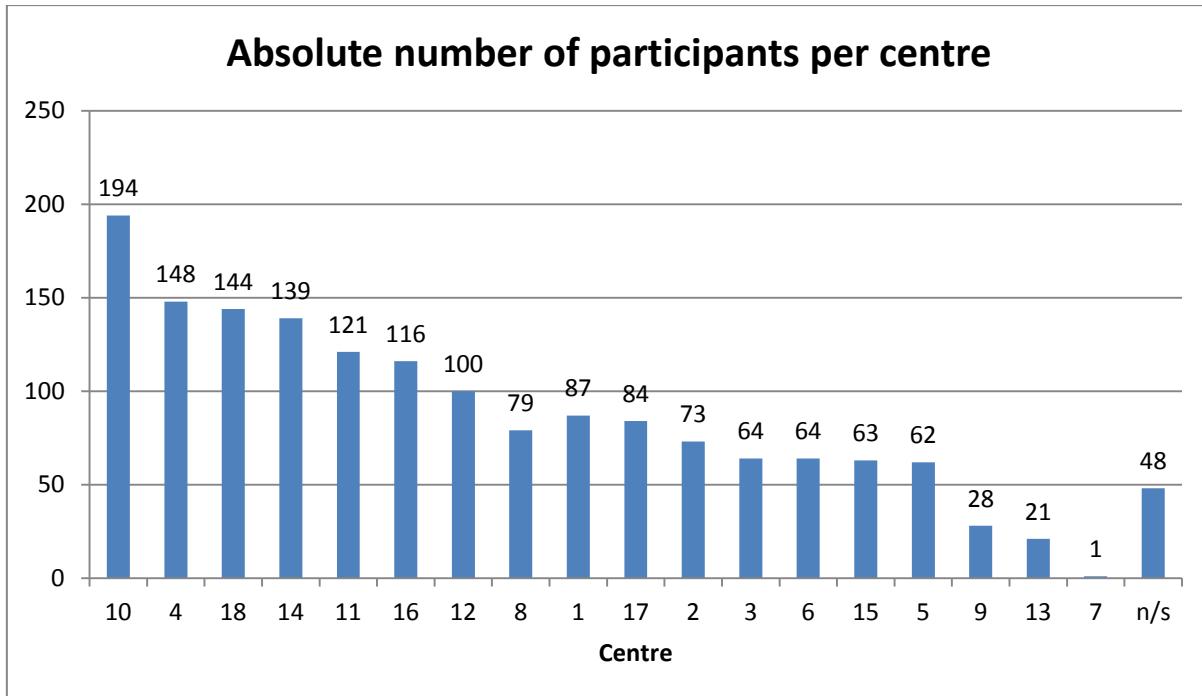


Figure 2: Absolute number of participants per center.

To calculate the response rates, the (adjusted) population should be all PhDs who received the invitation to the survey. However, this number was hardly to get. Thus, we referred to the total number of PhDs that were registered at each center in December 2011. Those numbers were delivered by the centers in varying precision, reliability, reference frame (who counts as a registered PhD student), and source of information (person delivering the number). See Table 1 for an overview of the number of participants and registered PhDs. Nevertheless, we took the reported total number as an orientation to calculate the response rates. Doing so, the rates differ between 23% and 76% with two extremes (center 7: 0%, center 8: 99%) which is satisfying enough to do the analyses (Figure 3).

Table 1. Total number of PhD students and number of participants for each center.

Center	8	17	15	1	2	11	3	6	16	10	4	5	9	12	13	18	14	7
Participants	79	84	63	87	73	121	64	64	116	194	148	62	28	100	21	144	139	1
Total no. of PhDs	80	110	90	140	150	248	160	160	300	500	381	160	72	269	57	482	600	800

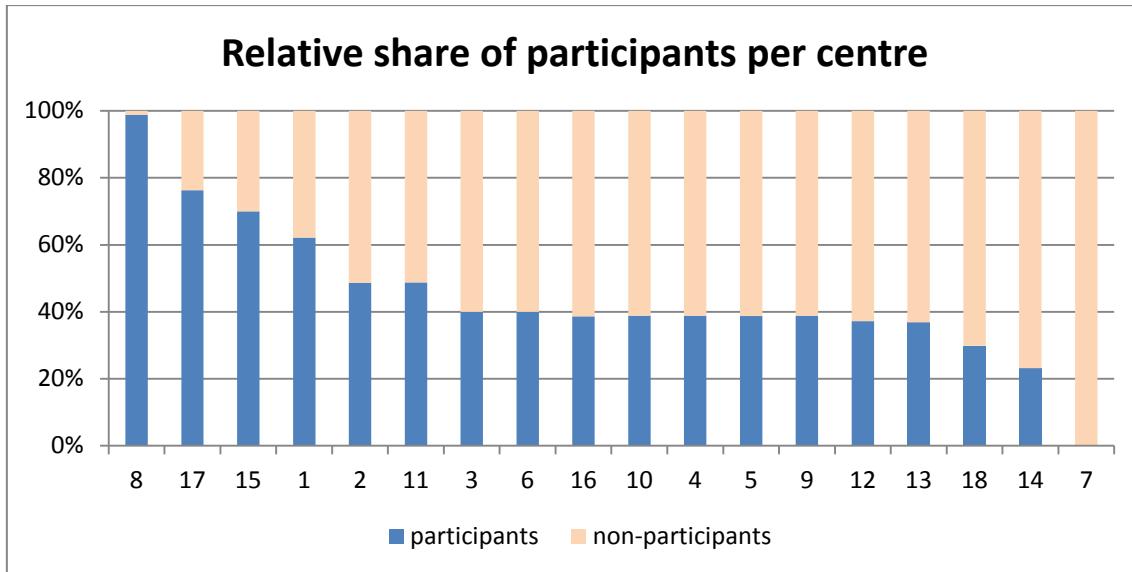


Figure 3. Relative share of participants per center.

1.3 About the participants

The share of male PhDs ranges between one third and more than four fifth. This assumably depends partly on the topics of the centers. The total mean expresses an equal distribution of male and female PhDs participating in the survey (Figure 4). The share of non-German PhDs ranges between 11% and 46%, the mean equals 27% (Figure 5)

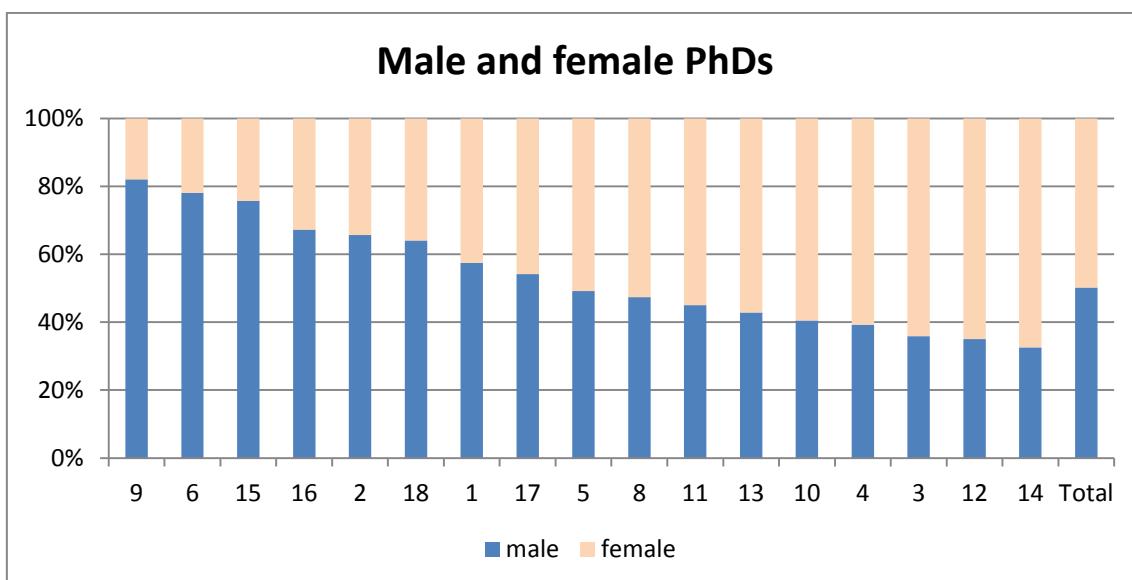


Figure 4. Male and female PhD students.

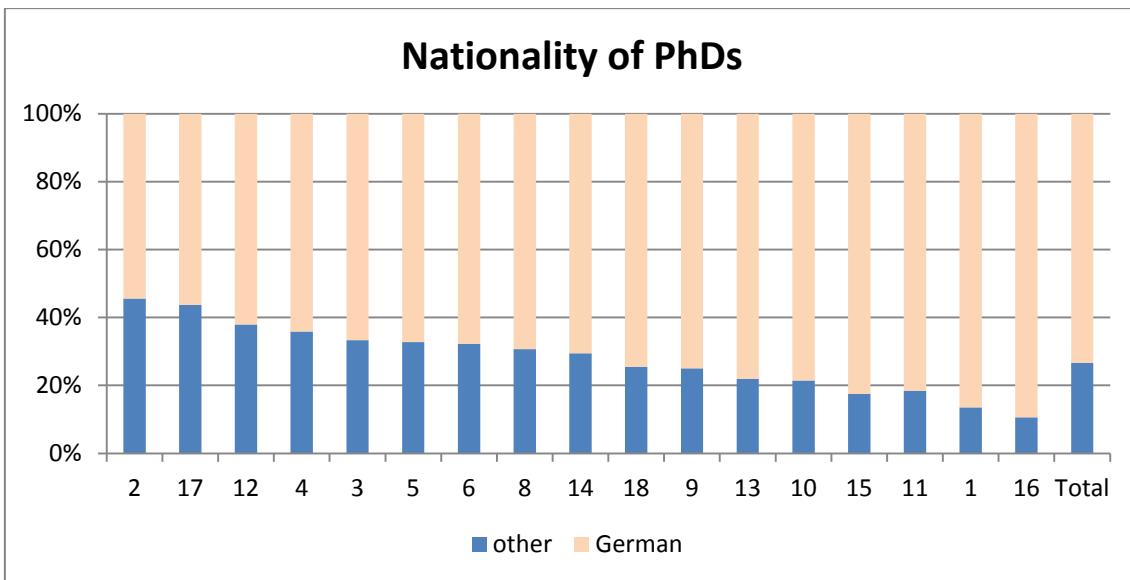


Figure 5. Nationality of PhD students.

We asked for the total number of months that participants already worked on their PhD project. Thereupon, we assigned each participant to the first, second, third or fourth year of their PhD project. Figure 6 indicates that the shares of PhDs of certain years differ a lot between the centers. While in center 13 more than half of the participants are PhDs in their first year, this group represent only about 11% in center 9. However, from those centers, a total of only 21 and 28 PhDs, respectively, participated in the survey. But regarding center 4 and center 11, that have high absolute numbers of participants (both more than 100) and a sufficient response rate (about 40% each), they likewise show huge differences in the number of participants, but in their fourth year. Since this survey cannot prove representativeness, this data provides an overview and guides further analysis.

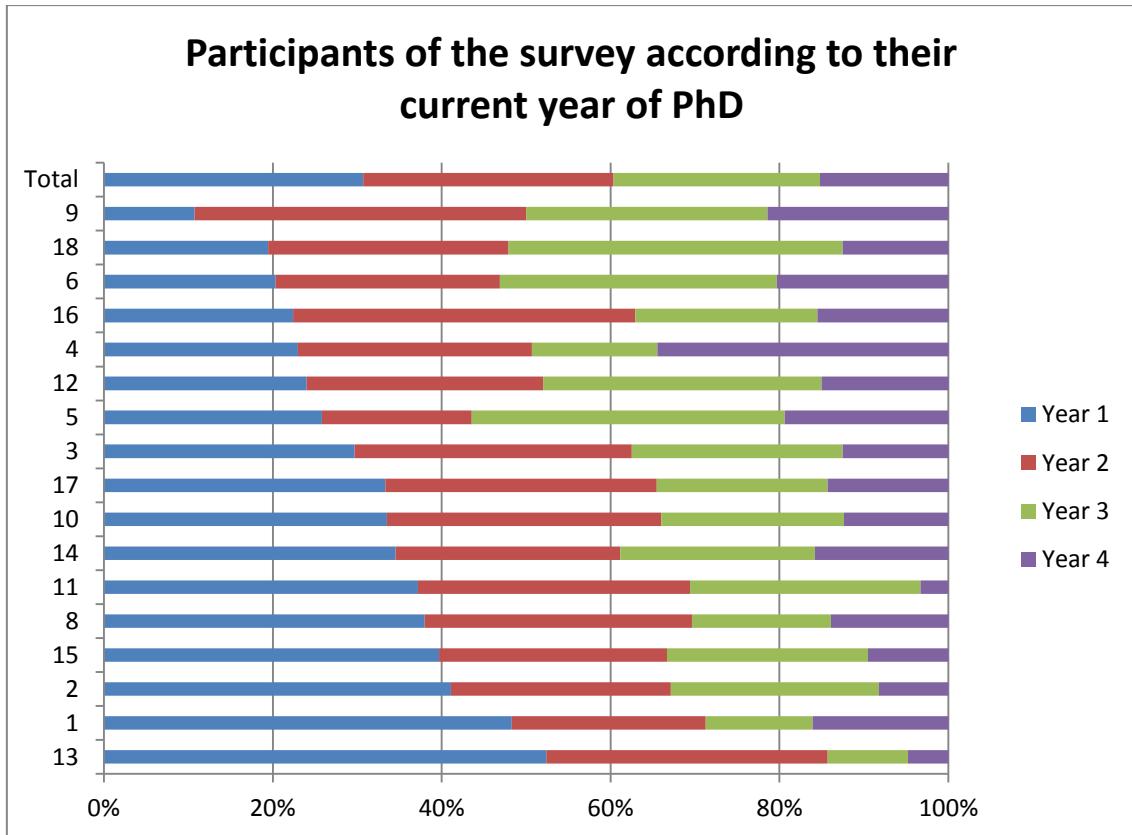


Figure 6. Participants of the survey according to their current year of PhD studies.

It did not seem appropriate to just calculate the mean of the age per center, since the participants are in different phases of their projects that correlate highly with their age. Thus, Figure 7 presents the mean age of each center for participants in the first year and in the fourth year only. On average, in their first year people are between 25 (center 6) and 28 (center 5). In their fourth year, the average age ranges between 29 (center 2) and 32 (center 8). The differences between first year age and fourth year age vary between the centers from 1.6 to 4.7 years. This is not the average time of a PhD project, it just indicates the homogeneity or heterogeneity of the age of PhDs at a center.

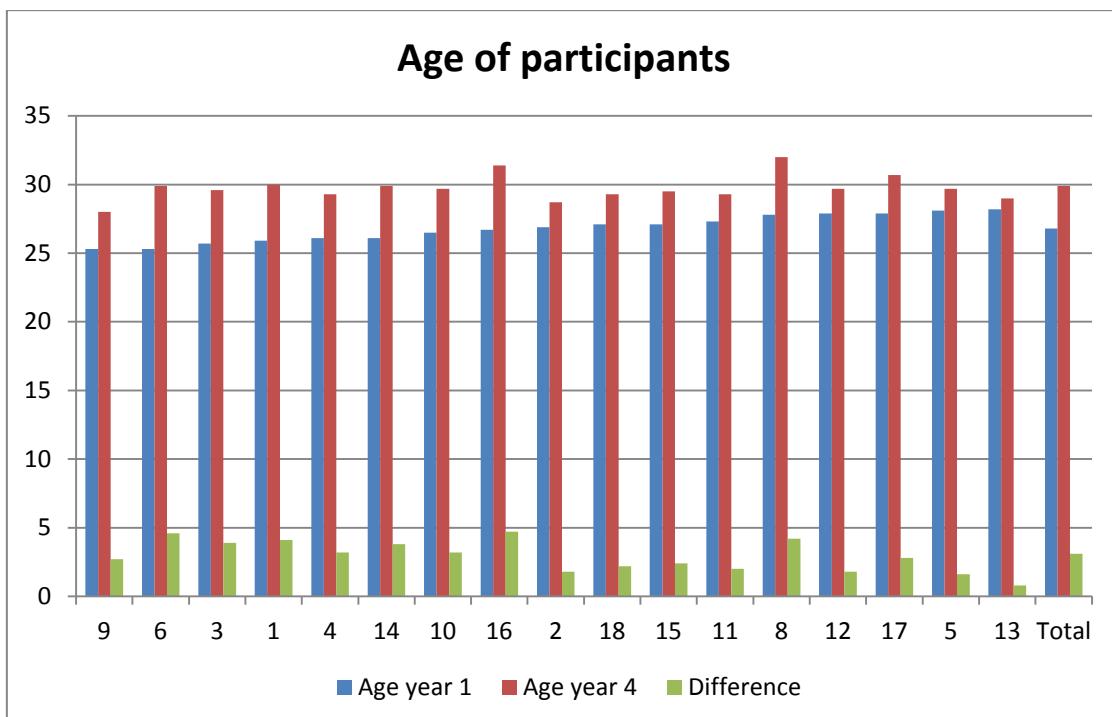


Figure 7. Age of participants.

2 Addressing four main topics of interest

The scope of this survey is to provide an overview of the current situation of PhD students within the HGF and to identify potential for improving it. To achieve this, we decided to focus on several chosen subjects that seem to be of interest, rather than presenting the dataset in every detail. Like this we hope to make the information interesting for a broad range of people within the HGF.

2.1 PhD project planning

2.1.1 Support though exceeding the PhD project time span

We asked the participants of the survey if they get support from the center or research funding to complete their PhD even though it exceeds the time span. Participants had three options to select from, 'yes', 'no' or 'I don't know'. There were in total 1635 responses. We plotted the response from individual centers as well as from all Helmholtz centers together (Figure 8).

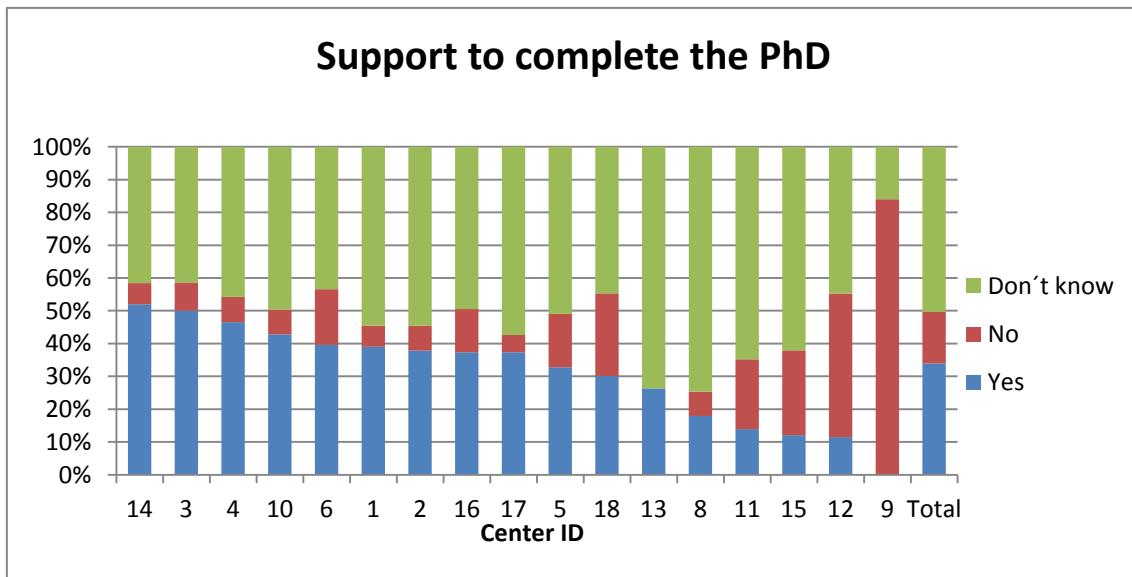


Figure 8. Answer to the question 'Do you get paid by center or research funding to graduate though exceeding the time span?'

We made the following observations from the data:

In the Helmholtz centers as a whole, 50% of the participants don't know if there is support from their research institute to complete their PhD.

- The fraction of people who responded 'yes' is 33% while 16% responded 'no'
- There is a variation between the centers
- In center ID number 9, 84% responded that there is no support from their research center or from funding, if the PhD time span goes beyond the planned time schedule.
- In centers 15, 11 and 12 there were more 'No' than 'Yes' responses.

From the perspective of a PhD student, working hard for 3 years with the hope to get the degree, but had to stop the PhD due to lack of funding is quite disappointing. What we observed was that a majority of the survey participants don't know about the possible support they could receive from their research center.

As PhD representatives, we should try to get this information from our centers and share with our fellow PhDs. For those centers where there is no support to complete PhD, either this should be requested from the respective centers or this problem should be highlighted to the Helmholtz Association president.

2.1.2 Written project outline

We asked the participants if there is a written project outline for the time as PhD student. Participants had three options to select from, 'Yes', 'No' or 'I don't know'. There were in total 1635 responses.

We made the following observations:

- In the Helmholtz centers as a whole, 55% responded that there is no project outline for their PhD, while 39% of the participants have a project outline.
- Variation between the centers is relatively high.
- In the following centers, the share of 'No' response is more than double the 'Yes' response (showing most people don't have a written project outline): 4, 1, 14, 9, 16, 13.
- There are also centers where situations are better. For instance, in center number 12, 62% have a written project outline while only 38% don't have a written outline for their PhD.

In our view, a project with a written outline is a clear and well thought project. Even though as the project progresses, the focus of the project may change; a written project outline gives confidence and enthusiasm to the new PhD student. In some centers, students complain that even one year after joining PhD, they don't have an independent project to work on. It happens more often when they are recruited via PhD programs where PIs don't need to write a proposal to get the PhD student.

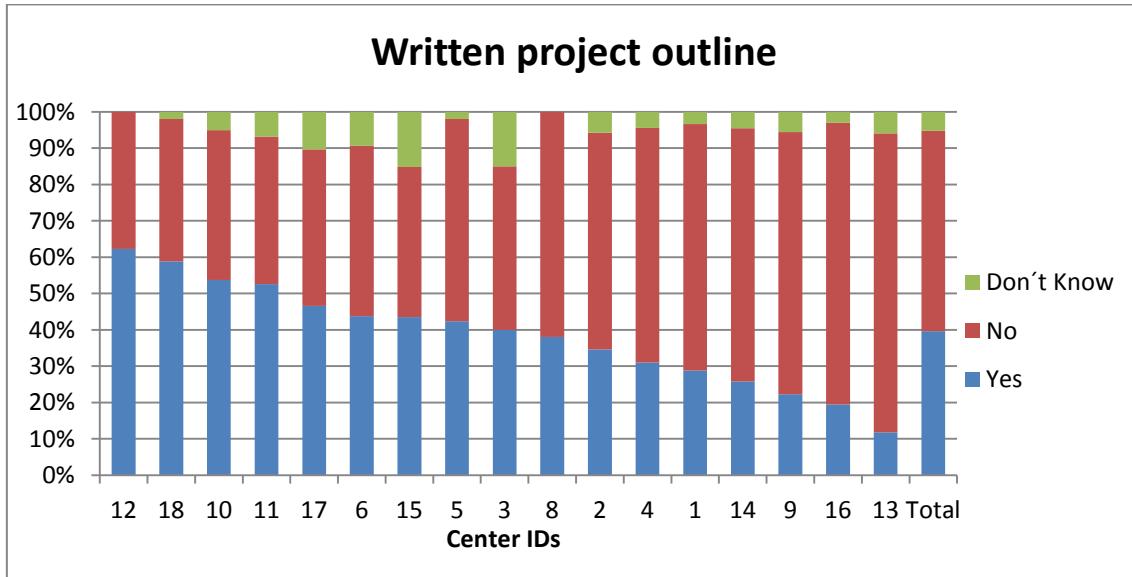


Figure 9. Answers to the question 'Is there a written project outline for your time as PhD student?'

2.2 Income situation of PhD students

Incomes of PhD students can vary significantly, since there are a variety of different contract and scholarship models. An overview shall be given here.

2.2.1 Income distribution

There are 1636 datasets analyzed including missing and not acquired values. The comparison within the income levels gives us a clear distribution over the income with a peak at 1100 – 1300 € per month. This result corresponds to a 50% contract.

Figure 10 shows the income distribution of all participants. Only a few of the asked PhDs are earning significantly more than they would on a „full“ E13 contract.

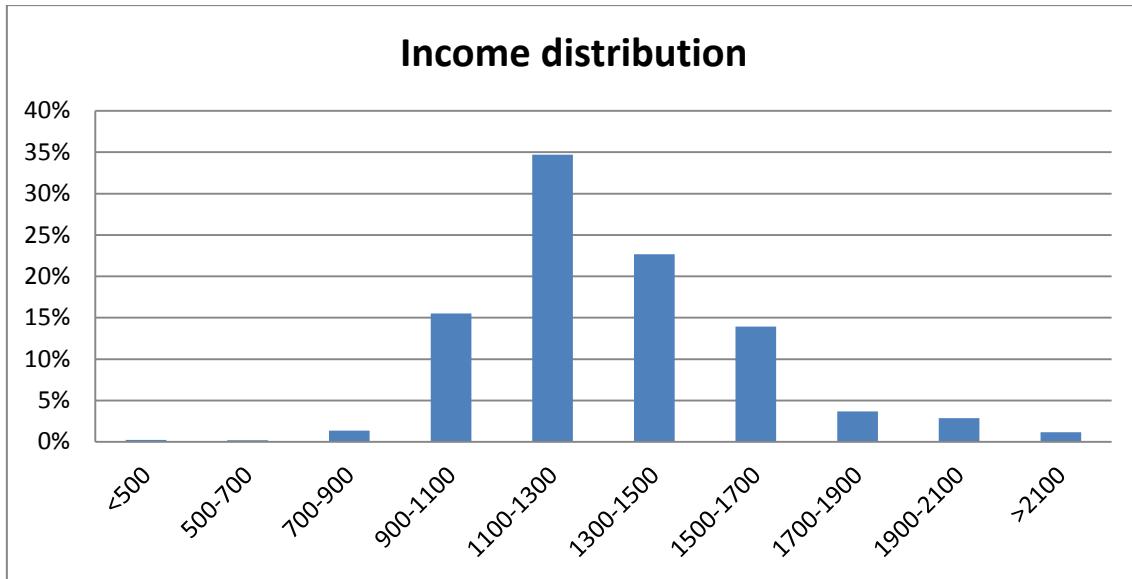


Figure 10. Income distribution cumulated over all participants.

2.2.2 Income versus Study

An overview of income versus field of study is shown in Figure 11. The graph is scaled to the number of answers in each study and given in percent. There is a clear behavior in this distribution. In each field of study the majority of PHD's earn 1100 to 1300 € per month. This is in agreement with the overall income distribution in section 2.2.1. The only exception is “Engineering”, here the peak number is located at 1500 – 1700 € per month. In Informatics there is another anomaly. Here one can find a second peak located at 1900 – 2100 € per month.

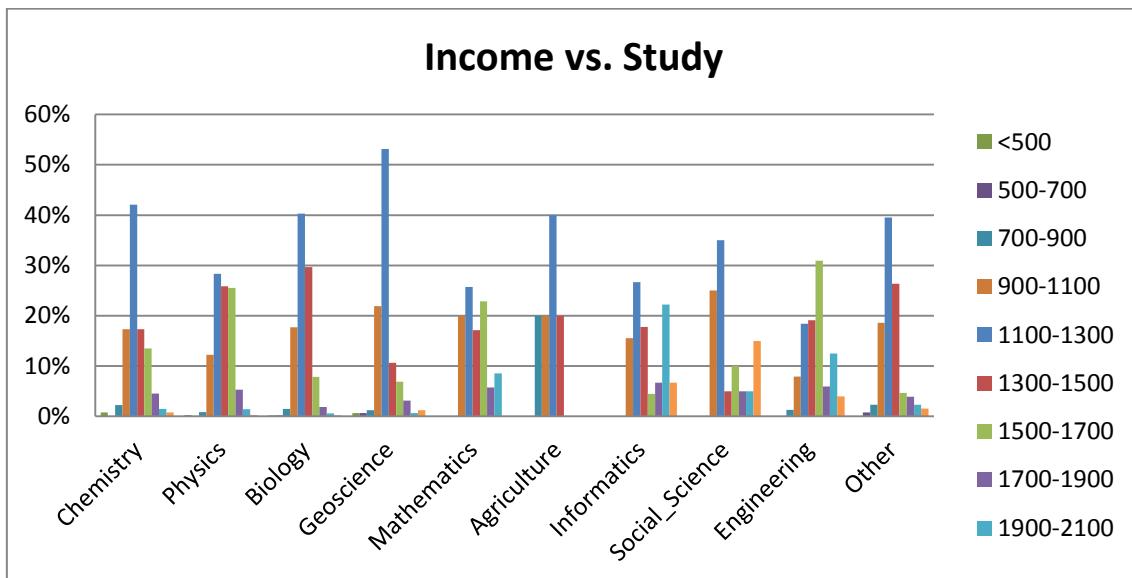


Figure 11. Income versus field of study.

2.2.3 Income distribution within centers

The income situation in the individual centers is pointed out in Figure 12. It shows a considerable variance between the centers, which can be most likely attributed to the different subject areas the centers are dealing with. The missing center had only one answer and therefore was cleared out.

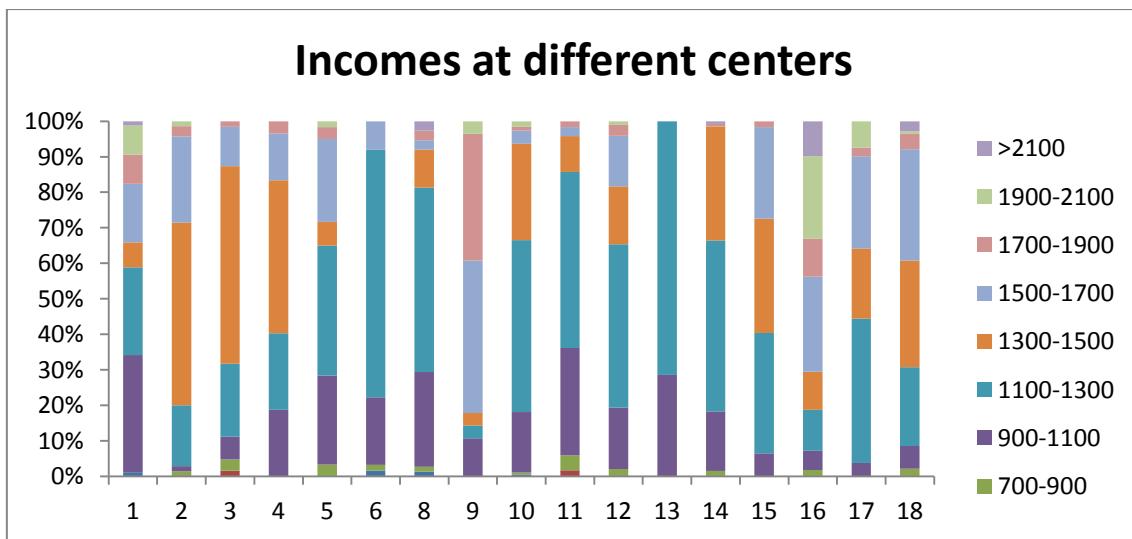


Figure 12. Income distribution at the different centers.

2.2.4 Income versus Positions

Figure 13 gives an overview of incomes for different position types. Because there are only three answers from “freelancers” this variable is not shown in the diagram.

The income distribution looks similar for the different positions. The only significant exception is the income for scholarships provided by centers. Here the fraction of people in the income range 1300 to 1500 € is more than twice as high as in the range 1100 to 1300 €. The reason for this is, that people with scholarships have to pay all their insurances from this net income, whereas the net income of standard employment contracts is the value after tax and insurances. Figure 14 is an overview of how part time contracts are distributed for different position types.

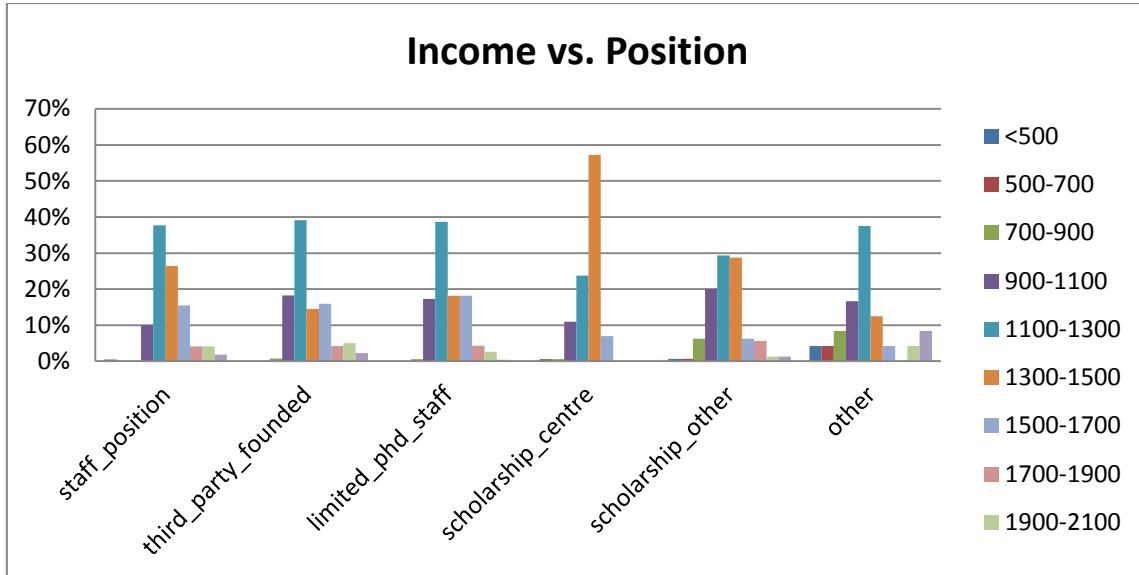


Figure 13. Incomes for different position types.

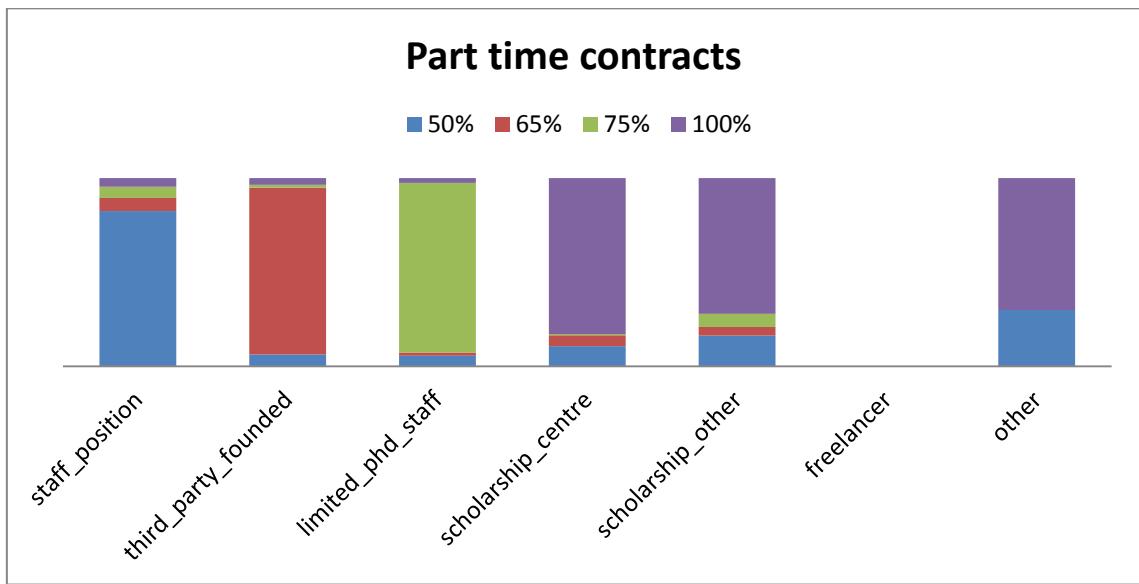


Figure 14. Part time contracts for different positions.

2.3 Graduation and starting a family

A PhD project is on one hand demanding a lot of time and commitment from an individual person. On the other hand the financial means of most PhD students are limited. These facts can interfere with plans to found a family. Figure (Figure 15) shows the answers to the questions ‘Do you have kids’ and ‘do you consider getting a kid during your PhD time’. The answers vary considerably between the different centers.

2.3.1 Overview of PhD students having or wanting to have children

While at center 9 about 7% said they have kids, and about the same percentage said they consider getting a kid during their PhD time, at center 17 the numbers are 17 % and 27%. At all centers cumulated 9 % of the participants have and 18.5 % want kids during their PhD time.

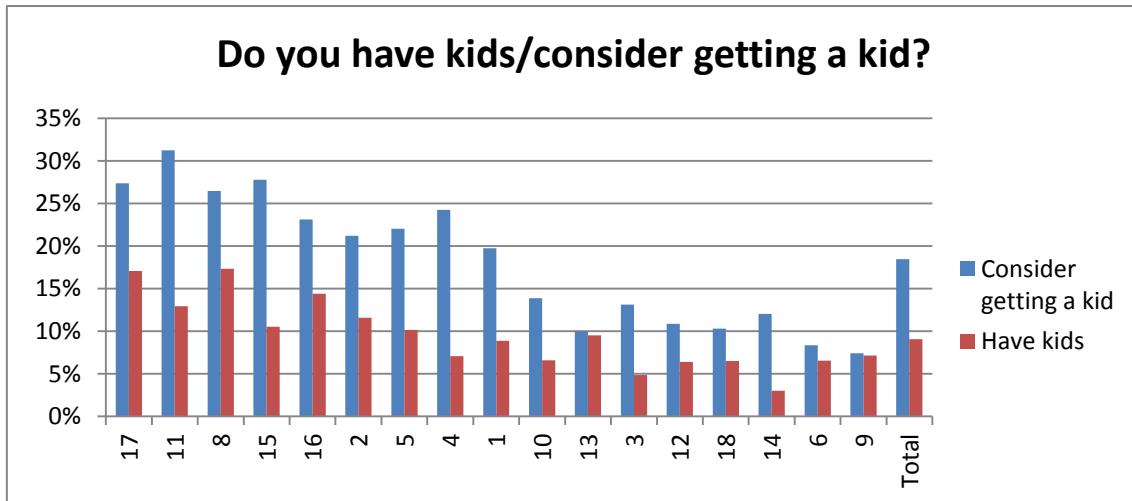


Figure 15. Participants at each center who have children or consider getting a child during their time as PhD students.

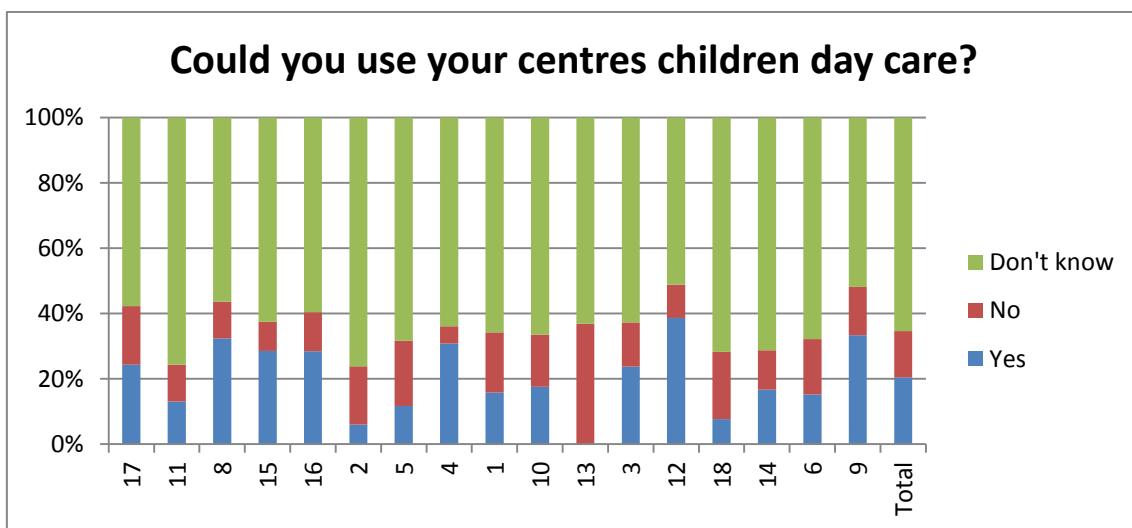


Figure 16. Could people use the children day care at their centers? Centers are ordered the same way as in Figure 15. For interpretation see 2.3.2.

The share of people who consider getting a child is distributed almost equally between female and male PhD students (Figure 17). This suggests that neither of the two genders seems to evaluate the conditions for getting a child during their PhD time as better or worse compared to the other gender. At the same time about 11 % of the male, but only 7.5 % of the female students already have children. A reason might be that it is still easier for men to combine career and family planning than for women.

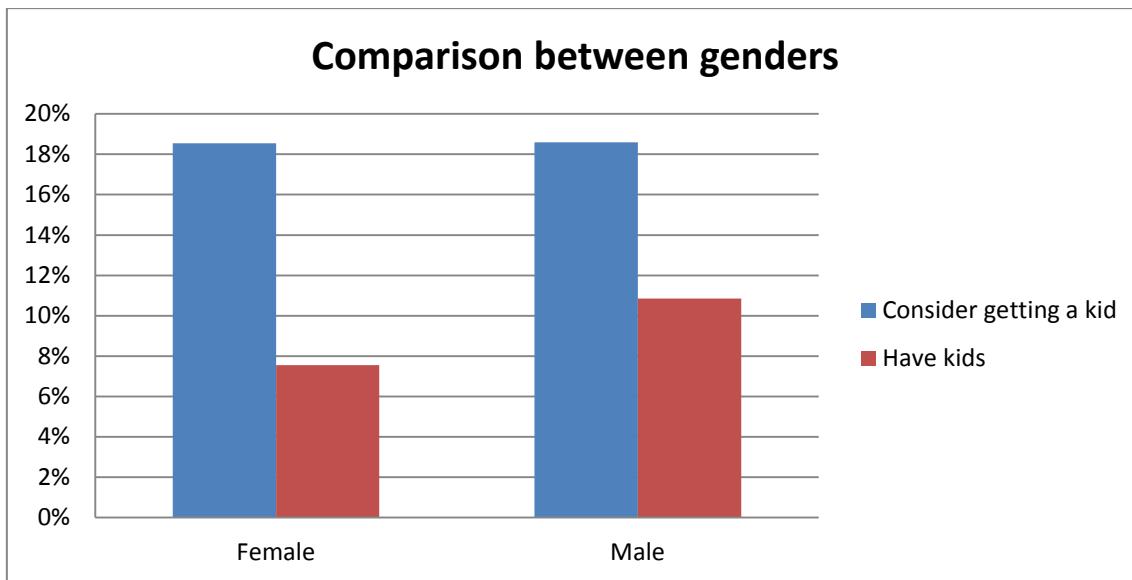


Figure 17. Comparing the numbers of female and male PhD students who have or want children during their PhD time.

2.3.2 Conditions and support for having children

Figure 18 shows the answers to five questions about the support students get from their centers for starting a family. The first three and the fifth question were answered with ‘no’ by a relatively small fraction of participants. However the existence of a children day care might apply to every student at the respective center. It was answered with ‘yes’ by a majority of people from each center except for center 13 where there was no ‘yes’, allowing the conclusion that every center except for center 13 provides children day care. One explanation for the ‘no’s’ at all centers could be that people just don’t know of the existence of children day care. The other one may be different locations of institutes belonging to the same center, not all of which might be equipped with children day care. An overall 40 % answered with ‘I don’t know’. They might just not be interested in the information and thus don’t know about it. Project extensions seem to be possible for most mothers and fathers. There could be differences between people holding a contract with their center and those holding a stipend.

Figure 16 in 2.3.1 shows as an example the question ‘Could you use your centers children day care?’ split up by centers. There seems to be no correlation with the number of students having or wanting kids (Figure 15). At many centers up to half of the students or even more say they couldn’t use the day care. The most likely reason for this is the limited capacity of the facilities.

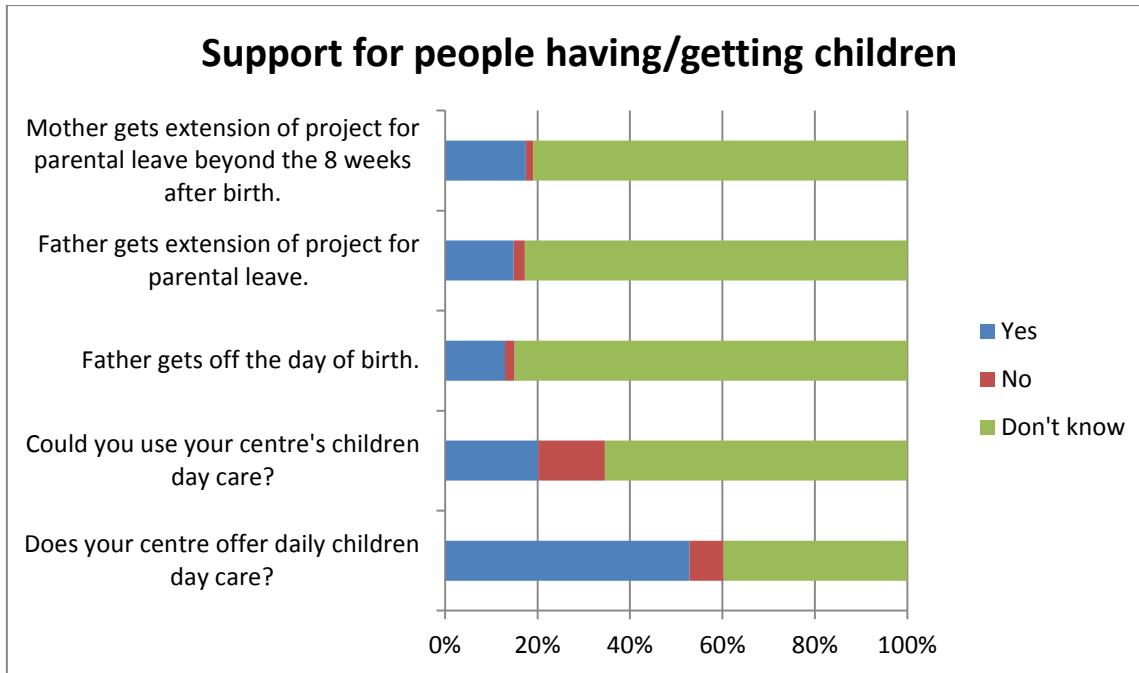


Figure 18. Answers to five questions dealing with the support PhD students who have or want to get children get from their employers.

2.4 Situation of PhD students from foreign countries

Figure 19 shows the answers to eight questions addressed specifically at PhD students from foreign countries. It provides an idea of how well these students are integrated, cumulated over all centers. The total number of answers amounts to about 400 per question, thus allowing significant statements. Answers could be chosen on a five-point-scale from 1 (agree) to 5 (disagree).

Generally, most people seem to feel comfortable about their situation as foreigners. All points were rated positively by more than 50 % of the participants. Most students feel welcome at their centers and would recommend them to others. Centers also seem to be doing a good job regarding language support. Most people think that all information they need is available in a language they understand. They are also widely supported in learning German.

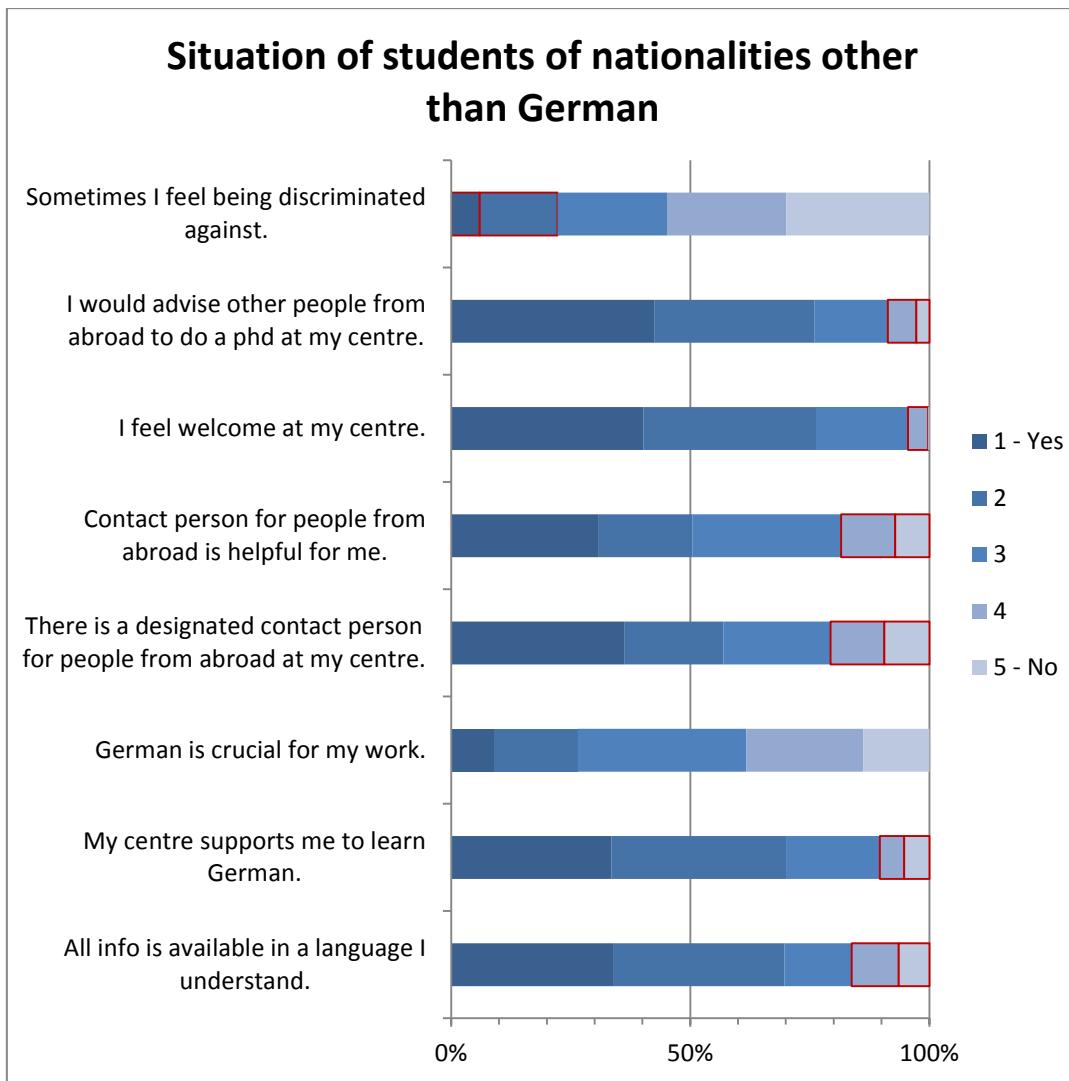


Figure 19. Answers to 8 questions to students from foreign countries about their working situation on scales from 1 to 5. For all questions (except for question 3, 'German is crucial for my work.') the fractions of answers that indicate potentially problematic situations were marked in red.

Figure 20 shows a simple index that was calculated based on the mean result of the Questions shown in Figure 19, giving a measure for the level of integration at the different centers. As for the answers, the range of the index is from 1 to 5. The Answers were sorted in order to make 5 the best possible value. Therefor the results of all questions except for question 8 ('Sometimes I feel being discriminated against.') were reversed. Question 3 ('German is crucial for my work.') was excluded since it is not clearly attributable to a good or bad integration. The Index is then the arithmetic mean of all remaining values. It is higher than 3 for all centers, meaning that they were evaluated as rather good than bad by the students. Of course the Index is only a rough measure for integration, but it shows that no center seems to provide an overall poor environment for foreign students.

However, as Figure 19 shows, for almost all questions there is a considerable percentage of people who are apparently having difficulties with their situation as foreigners at their respective centers. More than 20% of the students with nationalities other than German agree totally or predominantly with the statement 'Sometimes I feel being discriminated against'. About as many say, they feel not welcome at their centers and about 20% do not have a contact person for people from abroad at their centers or do not consider it useful. At the same time only about 10 % with foreign nationalities would not or rather not recommend their centers to other people from abroad for doing their PhD.

This should be cause for reflection. On one hand peoples situations depend on their individual surroundings. There may be certain colleagues or supervisors not acting politically correct or simply neglecting contact with people not speaking German. On the other hand there may also be institutional causes of discrimination. An example would be forms or important information not available in English.

Either way, institutes should take their responsibility seriously for ensuring a climate in which students with other nationalities are not being discriminated against and have the same chances as students from Germany.

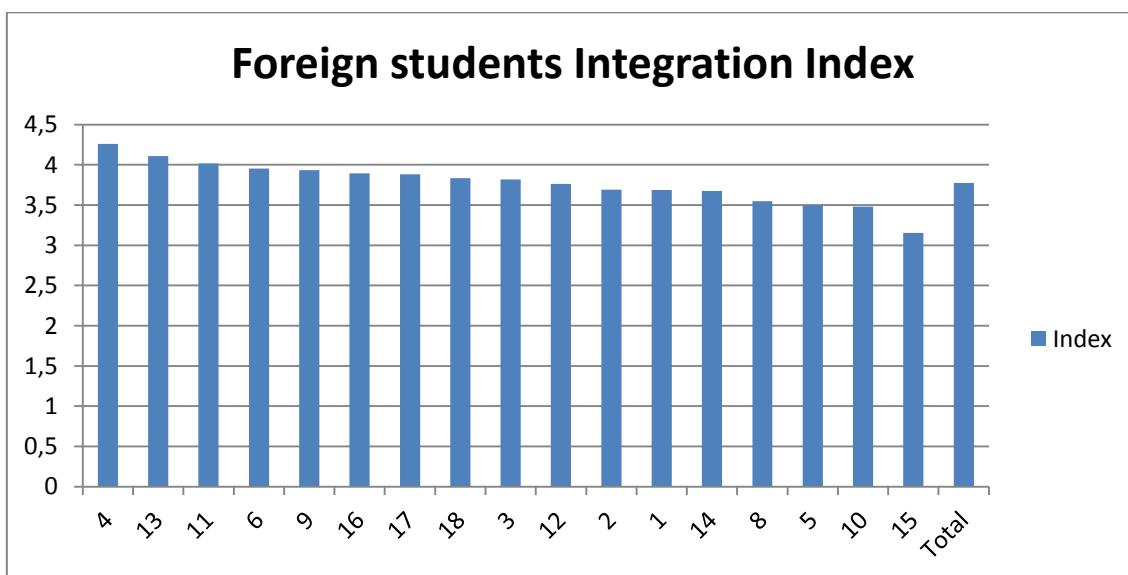


Figure 20. An Index pointing out the situation of students from foreign countries. It is based on the questions shown in Figure 19, except for question 3 ('German is crucial for my work.').

3 Graduate Schools

The survey included several questions concerning the graduate schools of the centers. These questions were mainly developed by the working group of the graduate school coordinators of the Helmholtz Association. The participants were firstly asked, whether there is a graduate school at their center. Figure 21 shows, that there are 10 centers where every fifth up to more than every second PhD student did not know whether there is a graduate school at their center or not (red colour bars). At the same time, there are 7 centers, where almost every PhD knows that there is a graduate school.

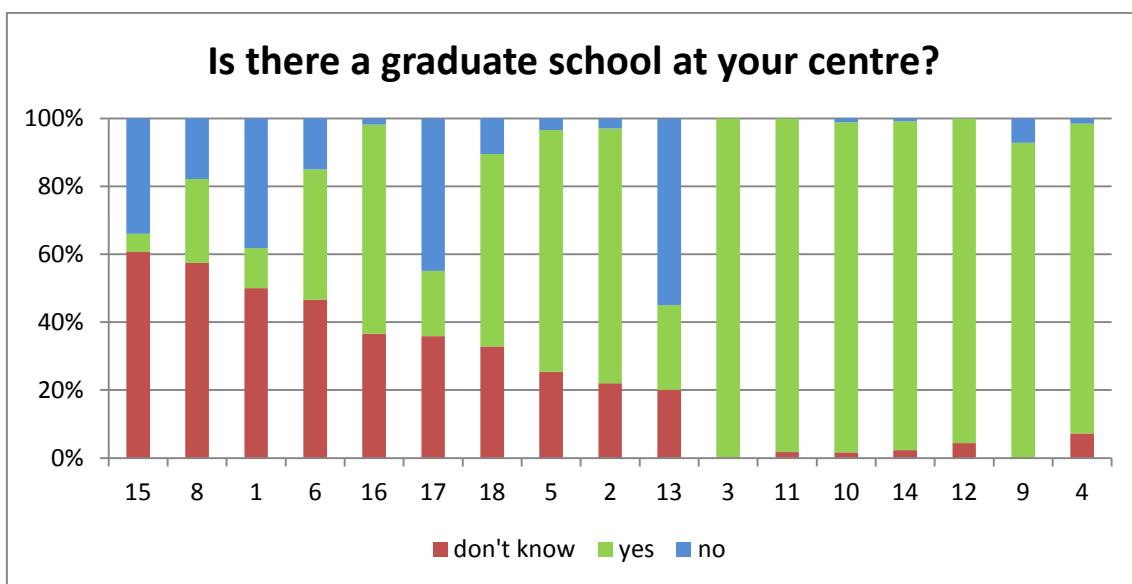


Figure 21. Answers to the question 'Is there a graduate school at your center?'.

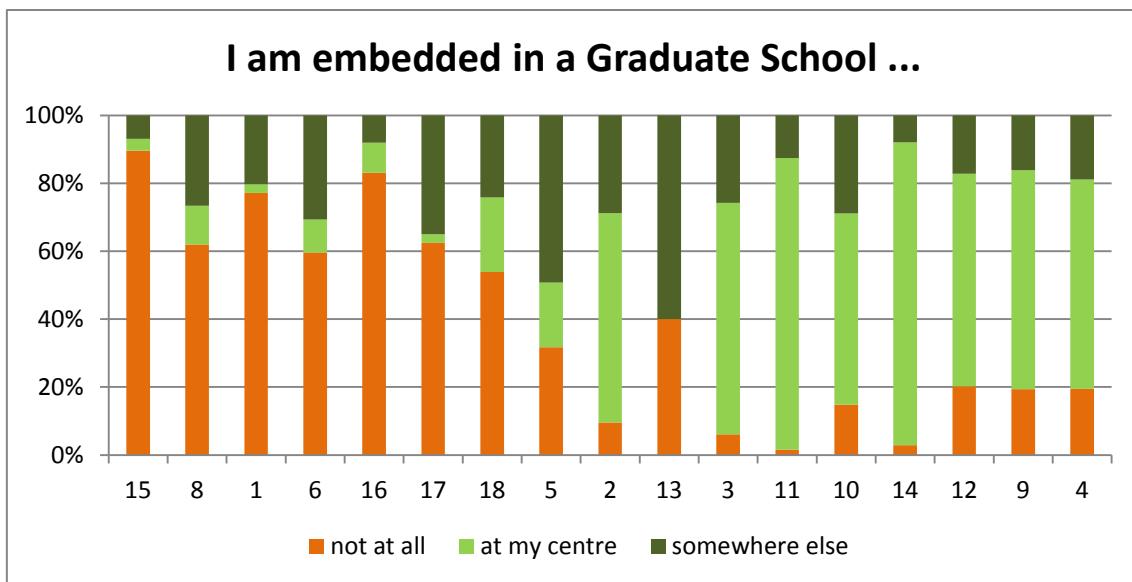


Figure 22. People who are embedded in a graduate school at their center or somewhere else.

When the participants should indicate whether they are embedded in any graduate school or other educational structure (Figure 22), three points become clear: Firstly, the share of PhDs that are embedded in any educational structure or graduate school ranges from about 10% (center 15) up to 98% (center 11 and 14). Secondly, those who do not know whether there is a graduate school at their center or not are likely to be not embedded in any educational structure at all (e.g. center 15, 8, 1, 6, 16, 17). Thirdly, in centers where nearly all PhDs know that there is a Helmholtz Graduate School at their center, there are a considerable number of PhDs that are embedded in another educational structure or graduate school, or that are not embedded at all (e.g. centers 10, 12, 9, 4).

Reasons for non-participation in a graduate school are agreed upon (multiple answers possible):

- **There is no graduate school at center or university.**
- I am not allowed to participate. 7%
- I don't know about any graduate school. 41%
- I am not interested in available graduate schools. 41%

The survey asked the PhDs, how far they agree to the statement "*My supervisor supports my participation in graduate school activities*" on a 5 level scale with 1=agree, and 5=disagree. Figure 23 shows that in all centers, PhDs think that their supervisors are neutral or positive towards the participation of their PhDs in graduate schools. On average, at no center supervisors disapprove graduate school activities of their students. At the same time, on average at no center supervisors mainly or fully support these activities.

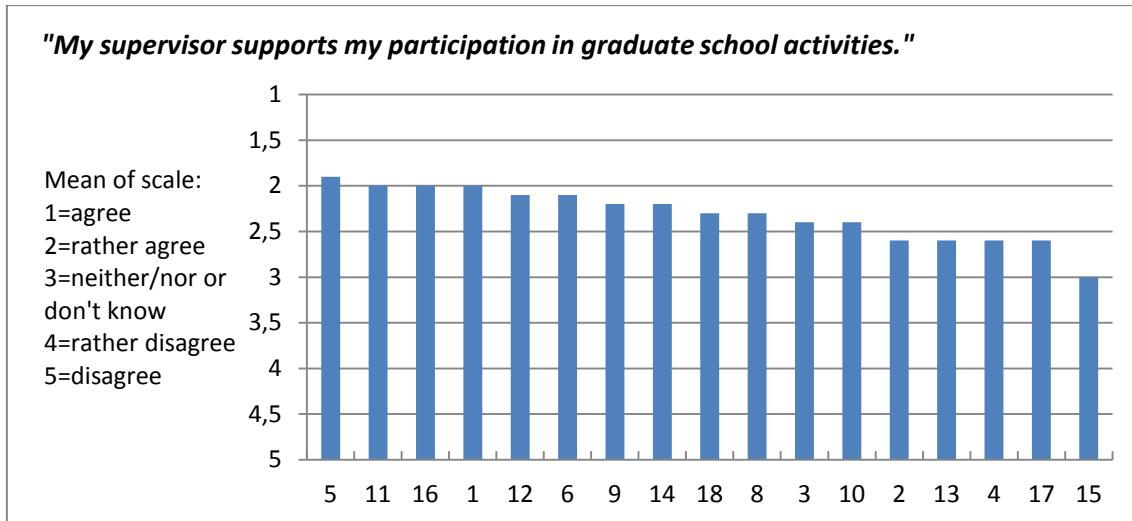


Figure 23: Support of supervisors for graduate school activities on a 5-point scale from 1 (agree) to 5 (disagree).

We also asked those PhDs, that attend any graduate school, how much they benefit scientifically from the courses. Figure 24 shows the ratings of those PhDs, that attend a Helmholtz Graduate School. The means per center indicate that the courses rather provide benefit than they do not, however the means are close to the value of 3 meaning neither/nor benefit. Especially the specific scientific benefit for the PhD projects is considered to be rather low: only 5 centers reach a value better than 3 (rounded to whole numbers), and 11 centers reach a value of 3 or lower. For the ratings concerning the general scientific benefit for the PhDs, the results are the other way round: 5 centers reach values of 3, thereby no center below 3, and 11 centers reach values of 2. Another point is remarkable: While PhDs of center 6, 15, and 17 rate both kinds of benefits equal, PhDs of other centers like 18, 11, 10, 9, 5, 3, and 2 indicate clear differences between the specific and general scientific benefits of the courses.

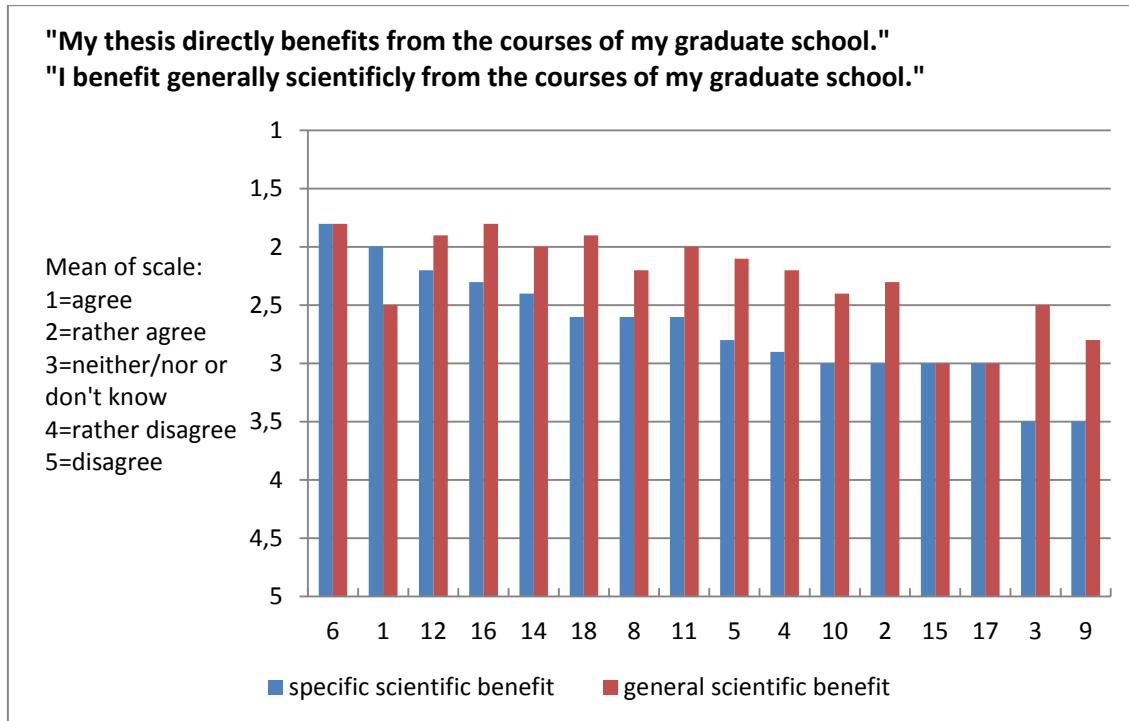


Figure 24: Ratings of PhDs that attend a Helmholtz Graduate School concerning the scientific benefit of the courses of the Helmholtz Graduate School

4 Comments from participants

At the end of the survey, participants had the possibility to mention two main wishes for their time as PhD students in their own words. Figure 25 shows the answers sorted by categories in a German version.

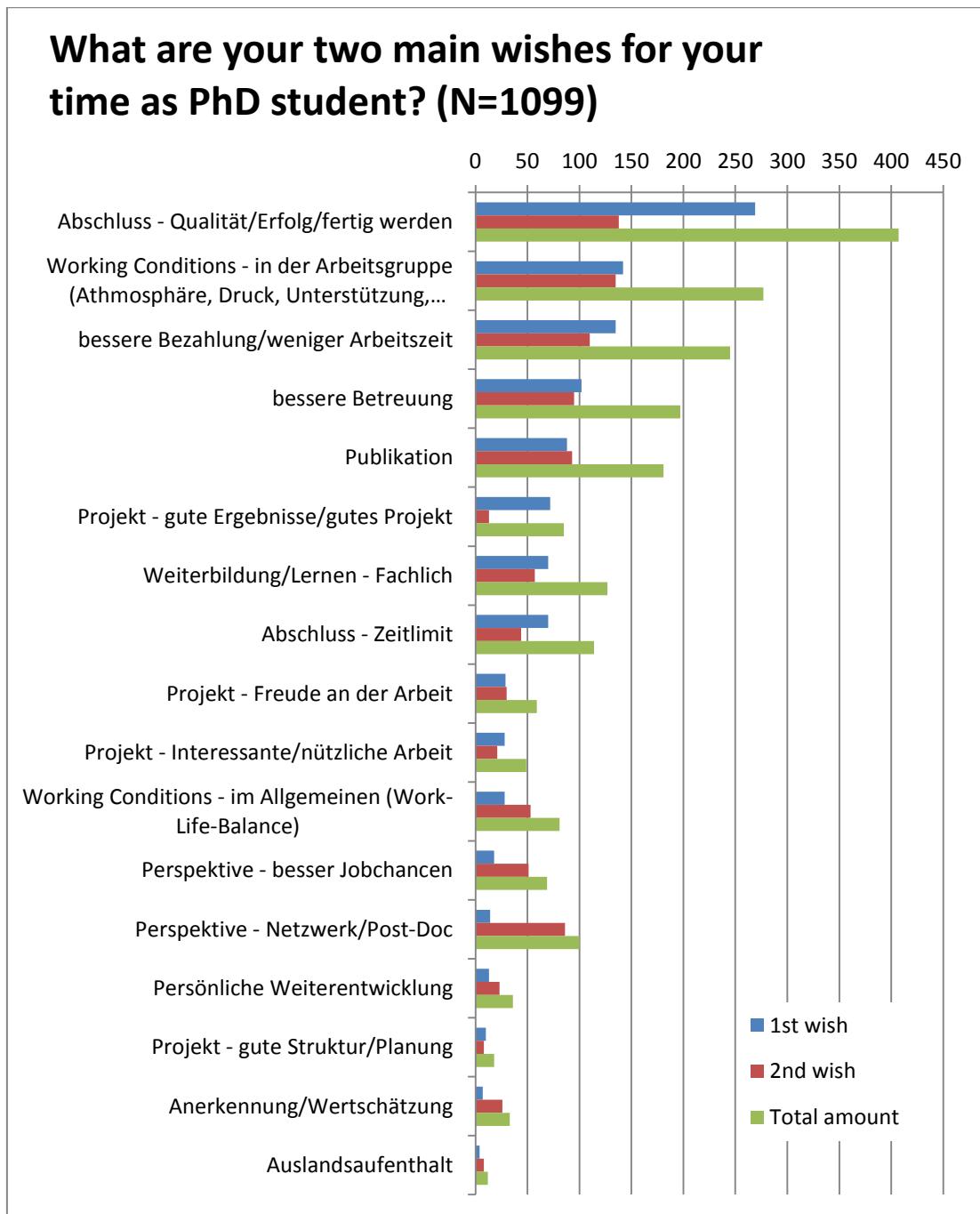


Figure 25. Participants had the possibility to give two whishes for their PhD time as free text comments. The answers were categorized and are shown here in the German version.

Attachments

A Survey questions overview

Question/Item	Answers
Background	
What age are you?	18, 19, 20,..., 40, >40
What gender are you?	male, female
Which Helmholtz-Center you are working at?	UFZ, DESY, AWI,..., DZNE
What did you study?	Physics and related, Biology and related,..., Chemistry and related, other namely: ...
What is the city of the university you are enrolled at as a PhD student?	I am not enrolled at any university; I am enrolled at the university in: ...
Where do you work mainly?	at the Helmholtz Center, at the university or library, at home, somewhere else
Does your supervisor (professor who supervises your PhD) work at your Helmholtz Center?	yes, no, don't know
PhD project	
How many months have you been actually working on your PhD project? (do not count months of parental leave, illness,...)	1, 2, 3, ..., 48, >48
In case you cannot finish your project right in time, will you receive the possibility to graduate at your center though exceeding the time span?	yes, no, don't know
In case you cannot finish your project right in time, will you get paid by your center or other research funding to graduate though exceeding the time span?	yes, no, don't know
In case you cannot finish your project right in time, will you receive unemployment money or social welfare (e.g. Hartz IV) while finishing your PhD?	yes, no, don't know
How do you estimate the progress of your work compared to the schedule?	faster than expected, right in time, behind but will catch up, far behind and have to extend time span, too far behind and consider breakup, don't know
Was an assessment of risk done for your project?	yes, no, don't know
In case the primary project plan fails, is there an alternative plan existing?	yes, no, don't know
Is there a formal agreement between you and your center which describes the outline of your project and the monitoring process?	yes, no, don't know
Gefilterte Frage: Is there any written project outline for your total time as a PhD candidate?	yes, no, don't know
Gefilterte Frage: Is the progress of your project checked and discussed from time to time?	yes, no, don't know

What do you hope to do after successfully finishing your PhD?	Stay in academia (e.g. post doc), non-science position in industry/economy/administration, science-related position in industry/economy/administration, Take a break (children, longer travel,...), Get more education e.g. in a different area of science (MBA,...), don't know yet
How confident are you concerning this hope coming true?	1= very confident, 5= very unconfident
Where do you want to work after finishing your PhD?	1= certainly in Germany, 5= certainly NOT in Germany
With whom do you discuss your career plans and options?	supervisor, career service at my center, career service at my university, graduate school coordinator, colleagues, alumni of my center, friends, other namely: ..., I do not discuss my career plans with anyone
Money	
Which contract do you have?	vertical: employment staff position, employment third party funded, limited PhD staff position, scholarship from your center (Helmholtz scholarship), scholarship from other institution, freelancer, other; horizontal: 50%, 65%, 75%, 100%, nothing indicated
What is your net income you receive for working on your PhD project?	<500, 500-700, 700-900, 900-1100, 1100-1300, 1300-1500, 1500-1700, 1700-1900, 1900-2100, >2100
Do you get monthly extra payments, e.g. for travel and material, health insurance, child supplements,...?	no, <100, 100-200, 200-400, 400-800, >800
Is your financial support guaranteed for the usual 3 year PhD period?	yes, no, don't know
Working conditions	
How many working hours per week are defined in your contract?	1, 2, 3, 4,...42, not defined
All in all, how many hours per week do you actually work?	1, 2, 3, 4,...60
How many hours per week do you work for your PhD project?	1, 2, 3, 4,...60
How many hours per week do you work for things that are NOT or NOT DIRECTLY related to your PhD project?	1, 2, 3, 4,...60
Which responsibilities that are NOT or NOT DIRECTLY related to your PhD project do you have at your center?	User support, Teaching, Supervision of students, Machine support, Public relations (Guided tours, talks,...), Organizational stuff (orders, proposals,...), committee work (e.g. PhD representative), Other namely:...

How many vacation days are you allowed to take off per year regarding your contract?	1, 2, ... 35, > 35, not defined
Supervision	
My supervisor takes enough time to discuss the progress of my work with me.	1=completely agree, 5=completely disagree
My supervisor knows much about my area of research.	1=completely agree, 5=completely disagree
My supervisor can always help me.	1=completely agree, 5=completely disagree
My supervisor offers me a lot of freedom to take own decisions concerning my project.	1=completely agree, 5=completely disagree
I am satisfied with my supervisor.	1=completely agree, 5=completely disagree
Family	
Do you have kids?	yes, no
Do you consider getting a kid during your PhD time?	yes, no, don't know
Does your center offer daily children daycare (kita etc.)?	yes, no, don't know
Could you use your center's children day care?	yes, no, don't know
Are you allowed to take time off from your project for your kids?	Father gets off the day of birth, Father gets extension of PhD project for parental leave, Mother gets extension of PhD project for parental leave
What is your personal impression: Does your supervisor approve you having kids during your PhD time?	1=strongly approves, 5=strongly disapproves
Is there anything you want to comment on the issue of being pregnant or having kids during the PhD time?	500 signs
Foreigners	
What nationality are you?	German, other
In which language do you mainly communicate with your colleagues at the center?	German, English, other
All important information is available to me in a language I understand.	1=completely agree, 5=completely disagree
My center supports me to learn German.	1=completely agree, 5=completely disagree
German is crucial to my work	1=completely agree, 5=completely disagree
Sometimes, I feel being discriminated against.	1=completely agree, 5=completely disagree
There is a designated contact person at my center/department for people from abroad.	1=completely agree, 5=completely disagree
The contact person for people from abroad is helpful for me.	1=completely agree, 5=completely disagree
I feel welcome at my center.	1=completely agree, 5=completely disagree
I would advice other foreigners to do a PhD at my center.	1=completely agree, 5=completely disagree
Scientific output	

How many conferences did you visit as a presenter (talk or poster)?	0, 1, ... 15
How many conferences did you visit as an attendant only?	0, 1, ... 15
How many publications do you have as first author in peer reviewed journals?	0-7
How many publications do you have as group member in peer reviewed journals?	0-7
How many publications do you have as first author in conference talks/posters?	0-7
How many publications do you have as group author in conference talks/posters?	0-7
Are you supported by your center to do a research stay abroad during your PhD time?	yes, no, don't know
Are you forced to have a publication in order to graduate?	yes, no, don't know
Infrastructure - How do you assess the following infrastructure aspects for your work?	
administrative support (center's administration)	1=very good, 5=very poor
technical support	1=very good, 5=very poor
laboratory equipment	1=very good, 5=very poor
library and journal accesss	1=very good, 5=very poor
amenities (bicycle stand, food supply, showers, sport opportunities,...)	1=very good, 5=very poor
Activities and exchange among PhDs	1=very good, 5=very poor
Graduate School	
Is there a graduate school at your Helmholtz-Center?	yes, no, don't know
What educational structure are you embedded in? (multiple choices possible)	Graduate school at my center (Helmholtz Graduates School), Graduate School outside my center (e.g. university's graduate school), other namely:..., I am not embedded in any educational structure
Why you are not embedded in an educational structure?	There is no graduate school at my center or university, I am not allowed to participate, I dont's know about any graduate school, I am not interested in the available graduate school(s).
Do you take part in any complementary training program for key competencies offered by your center?	yes, no
How much time do you spend on average for graduate school education per week?	Hours: 0, 1, ..., 12
My thesis directly benefits from the courses of my graduate school.	1=completely agree, 5=completely disagree
I benefit generally scientifically from the courses of my graduate school.	1=completely agree, 5=completely disagree
I benefit from the social contacts of my graduate school.	1=completely agree, 5=completely disagree
My supervisor supports my participation in the gradu-	1=completely agree, 5=completely

ate school activities.	disagree
Comments	
All in all, what are your two main whishes considering your time as PhD candidate?	1st wish (500 signs), 2nd wish (500 signs)
Is there anything you want to comment on the survey?	500 signs