

# PhD working conditions at NTNU with a special focus on PhD candidates with kids

**Final project report, Revision 1**

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PhD with kids project

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The Interest Organization for  
Doctoral Candidates at NTNU

# Abstract

## Summary

During 2016-2017, DION conducted an analysis of the PhD working conditions at NTNU, with special focus on PhDs with children. All NTNU PhD candidates were invited to respond to a survey regarding working conditions and children. In total 583 PhD candidates responded, resulting in the following report, which was presented to the NTNU University Research Committee on the 8th of May 2017.

The report as well as the results of the survey will be published on DION's webpage, and DION will forward the report to faculties and departments at NTNU.

In general, the report reveals that working conditions are perceived as good, but PhDs with children face additional challenges, mainly due to the time limitations on their PhD project versus family life. Based on the quantitative responses, qualitative comments, and suggestions from PhD candidates, we present a set of measures for improving the conditions. For example: a unified and more sophisticated parental leave and sickness regulations, better support of research stays abroad, an on-campus kindergarten with flexible opening hours to account for exam periods and other aspects affecting academics.

## Sammendrag

I perioden 2016-2017 utførte DION en undersøkelse av arbeidsforholdene for doktorgradsstipendiater ved NTNU, med spesielt fokus på stipendiater med barn. Alle stipendiater ved NTNU ble invitert til å delta i en spørreundersøkelse om generelle arbeidsforhold, med et særlig fokus på hvordan stipendiattilværelsen oppleves for kandidater med barn. 583 stipendiater svarte på undersøkelsen, og den følgende rapporten tar for seg analysen av disse resultatene. Rapporten ble presentert for Forskningsutvalget den 8. mai 2017.

Rapporten og svarene fra spørreundersøkelsen vil bli publisert på DIONs nettside, og DION vil videregående rapporten til alle fakulteter og institutt ved NTNU. Generelt viser resultatene at arbeidsforholdene er ansett som gode, men flere stipendiater med barn opplever at det er utfordrende å kombinere doktorgradsgradsprosjektet og foreldrelivet. Basert på den kvantitative responsen og de kvalitative kommentarene fra stipendiatene har vi noen forslag til forbedringstiltak. Først og fremst må NTNU sentralt sørge for at fakultetene følger samme praksis for forlengelse av midlertidige kontrakter ved fravær grunnet amming, omsorg for syke barn og barnehagetilvenning. Videre er det et behov for å synliggjøre støtteordninger og tilrettelegging for forskningsopphold i utlandet for stipendiater som reiser med barn. Sist vil vi oppfordre til å etablere barnehage på campus med fleksible åpningstider, der stipendiater har høy prioritet.

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# DION

# 1 Introduction

## 1.1 Situation

PhD candidates at NTNU contact DION as a third party body for many reasons, and DION regularly provides advice and support to PhD candidates at NTNU with regard to topics such as parental leave, sick leave, sickness of a child, extension of contract, research stays abroad, etc.

In many cases the questions relate to practices or policies of the candidate's department and/or supervisor. Working conditions related topics are to some extent defined on the NTNU level in *FOR 2009-06-17-959: Regulations for the required duties and employment conditions of PhD candidates at the Norwegian University of Science and Technology* (NO, EN). However, many of the details are regulated and implemented on the faculty and/or department level. Many cases DION has dealt with in the past were due to unclear and/or non-existent regulations on that level. Also, inconsistencies of rules between departments/faculties often create uncertainty for PhD candidates.

A considerable number of cases DION has dealt with in recent years falls under the heading of "Challenges in obtaining a PhD for candidates with kids". Many of these cases indicated that having children - despite the overall joy and enrichment of the experience - may impose multiple serious constraints on PhD studies and may create difficulties in successfully completing the PhD studies in the given timeframe.

As opposed to the situation of permanent employees, who may also have kids and similar challenges, the PhD situation is different due to its temporary nature. As depicted in Figure 1 (top level 1), the PhD project typically has a fixed budget, which typically supports required equipment, travel expenses and research and study time of three man-years<sup>1</sup>. In this survey, almost half the respondents have a three-year contract with no duty work. The project deliverable, the PhD thesis worthy of defense, is due at the end of this timeframe. PhDs may extend their PhD studies to up to six years total; however, since the funding usually ends with the default timeframe of three years, this is not always realistic, especially if one has to support a family with kids.

As budget and timeframe as well as the deliverables are fixed, the only degree of freedom is the additional time invested on top of the three man years in order to account for unforeseen challenges, which are standard in any PhD project. While it is not uncommon for many PhD candidates to put in additional time beyond the standard weekly limit of 37.5 h, it is a major issue for PhD candidates with kids as family usually requires the remaining hours of the week.

Yet the special situation of PhDs with kids and their specific challenges are rarely discussed in a wide forum. Only limited information is available on a per-case basis, for instance the above mentioned issues DION has dealt with such as parental leave. Hence, more detailed information is required to get a better understanding of the challenges of PhD students with kids.

## 1.2 Motivation & scope

With this in mind, DION initiated a project to further investigate the subject in the board term 2016-2017 with the following tasks:

- Gather data and analyze the current working conditions of PhD candidates at NTNU
- Focus on the specific challenges of PhD candidates with kids
- Identify issues
- Propose measures, as appropriate

Please note, even though the particular driver for the project was the special situation of PhDs with kids, the report also provides useful information regarding the current working conditions and demographic information on the PhD candidate population at NTNU.

## 1.3 Structure of this report

In section 2, the concept of this study and the methodology is briefly presented.

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<sup>1</sup> Note that 4 year PhD with a one-year duty work obligation also have a timeframe of three years for their PhD studies.

In section 3, the relevant survey results are presented following the study concept depicted in Figure 1. The complete results are appended. Some of the data is presented in both relative and absolute manners for clarification and ease of understanding.

In section 4, the results are briefly discussed, again following the structure presented in Figure 1. In many cases, the quantitative results obtained are connected with text responses.

Finally, section 5 provides a conclusion along with potential measures how NTNU may address and improve the situation of PhDs with kids.

All data gathered in this study and the data analysis conducted were anonymized and are enclosed in section 6.



## 2 Methodology

The methodology applied in this project involved data collection, analysis, and dissemination, conducted mainly between September 2016 and April 2017.

In a first step, based on the problem formulation presented in section 1.1 and the history of PhD cases DION has dealt with so far, a study concept as depicted in in Figure 1 was developed.

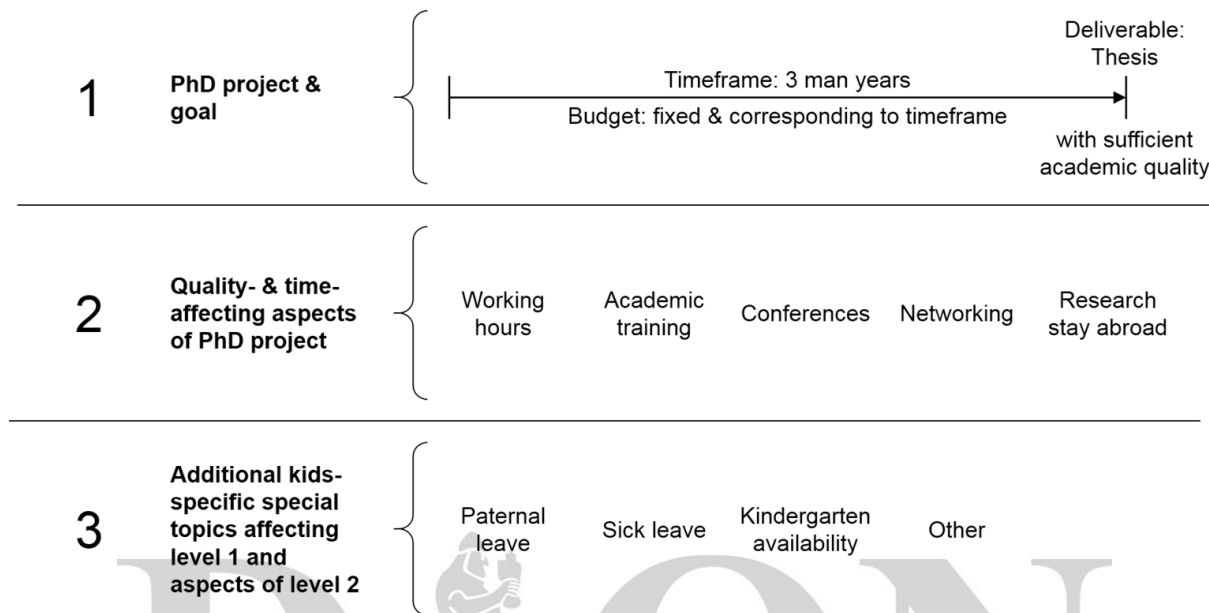


Figure 1: Study concept

Here, the top level 1 is the PhD project as such and introduced in section 1.1. The positive outcome of any given PhD project may be affected by a large variety of factors. Level 2 provides a selection of relevant quality- and time-affecting aspects, which will be investigated in this study. Finally, level three focuses on special topics with particular relevance for PhDs with kids. These topics nevertheless may also affect the goal of a successful PhD project, either directly or indirectly via the aspects of level 2.

A survey was drafted, where the different aspects and topics depicted in Figure 1 were accounted for with quantitative questions. The survey was structured as follows:

- a general section, where general information including age, sex, working hours, conference visits, etc. was asked for,
- a section dedicated to PhDs who will have kids within the time frame of their PhD,
- and a section dedicated to PhDs with kids.

In addition to the quantitative questions, the respondents who have kids were also asked to provide qualitative feedback with regards to negative experiences they have had at NTNU, in general and specifically regarding parental leave. Furthermore, the respondents were asked to state what would significantly improve their life as PhD candidates with kids at NTNU.

Appendix 6.1 provides the survey questions as well as the answers. The survey was sent out to every PhD candidate at NTNU registered as a PhD candidate in NTNU's database FS (Felles studentsystem) on 16.11.2016 and was closed on 07.12.2016.

In a third step, the information provided was compiled into a database. Members of the DION board analyzed this information in order to find similarities and differences between the situations of PhD candidates with kids, those without and those planning to have kids within the timeframe of their PhD. In particular, the effects of having kids on the level 2 aspects displayed in Figure 1 were analyzed. Furthermore, for the level 3 topics displayed in Figure 1, the quantitative feedback received was related to and explained in terms of the qualitative feedback (full-text responses) received from respondents with kids.

This report contains the main survey results, briefly discusses the current situation of PhD candidates with kids at NTNU as well as the corresponding challenges and issues, and provides recommendations for how NTNU may address and improve the existing situation.





## 3 Results

In total, 583 responses were received. This represents approximately 25 % of all the PhD candidates at NTNU. As depicted in Figure 2, 62.3 % of the responses stated they do not have kids, 29.2 % stated they do have kids, and 8.6 % stated they plan to have kids within the timeframe of their PhD.

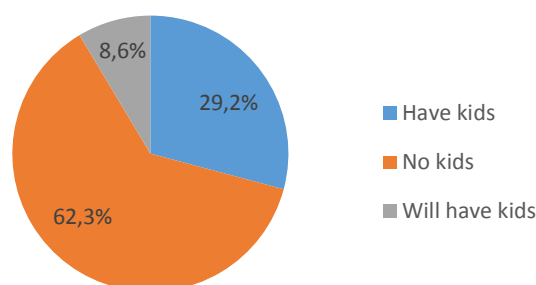


Figure 2: Distribution of responses with respect to children

The distribution may not be representative of the true distribution of all PhD candidates at NTNU. The PhDs with kids may be overrepresented as the subject of the survey was more pertinent to their situation, or underreported because they may have less free time.

The results as presented in this reports focus on the relative difference of PhD without kids vs. PhD with kids vs. PhD planning to have kids within the timeframe of their PhD. Hence, all further presentation of data features the three different groups of Figure 2 as follows:

- PhD candidates who do not have kids → “No kids”
- PhD candidates who do have kids → “Have kids”
- PhD candidates who plan to have kids within the timeframe of their PhD → “Will have kids”

Section 3.2.1 provides general findings with regards to level 1 of Figure 1, with the hypothesis that with kids potentially increases the risk of not successfully finishing a PhD within the given timeframe.

Section 3.4 provides findings specifically addressing the elements of level 2 of Figure 1, i.e. relevant indicators for successfully completing a PhD in the given timeframe.

Section 6.1.1 provides findings specifically addressing the special topics of level 3 of Figure 1, which may be related to the indicators of level 2 in a cause-and-effect-sense.

### 3.1 Demographics & cross-correlations

In this section, some relevant demographic information is presented along with some cross-correlations regarding children. For all information provided, the detailed responses may be obtained from section 6.1.5.

#### 3.1.1 Sex and family status

49.3 % of the respondents were female, 50.3 % were male. Figure 3 shows that female PhDs are much more likely to have kids. Note that the indicated percentages refer to the three groups depicted.

PhD parents reported having 1 child (37.9%), 2 children, (42%), 3 children (17.2%), and 4+ children (2.9%). Over half of PhD parents (54.1%) had a child 2 years old or younger; 10.6% had children 13-18 years old, and 7.6% of PhD parents had children 19+ years old. 94.7% reported living with their child, with other parents reporting children living elsewhere in Trondheim, Norway, Europe, or further. 97.1% of parents were in a relationship. Single parents made up about 5% of the PhDs with kids, and in most single parenting cases, the other parent does not live in/near Trondheim. A majority (57%) of PhDs with kids said they do not have relatives living in Trondheim. Of the PhD parents who do have relatives in the Trondheim area, 58% of them say their family members are a great help with taking care of the kids; 42% of them say their relatives do not help take care of the kids.

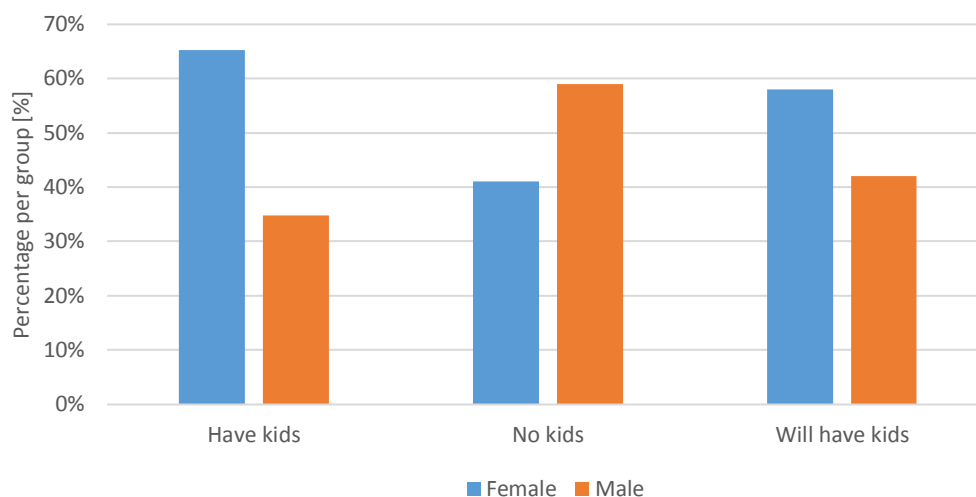


Figure 3: Gender vs. three different groups of Figure 2

### 3.1.2 Age

Figure 4 displays the age distribution of the PhDs who responded to the survey as well as the ratio of the three different groups.

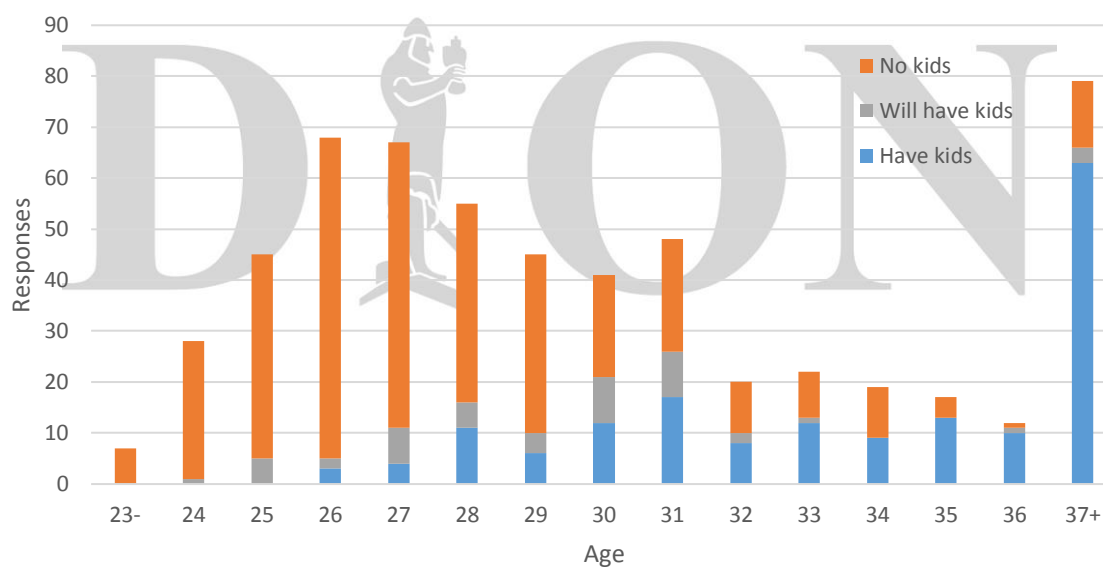


Figure 4: Age distribution vs. three different groups of Figure 2

The majority of PhDs are in their mid-twenties; however, almost 80 PhD candidates who responded are older than 37.

The ratio of PhDs with kids vs. PhDs not with kids increases with age.

### 3.1.3 Nationality

57.8 % of the respondents are Norwegian, 20 % are Non-EU or EAA citizen, 19.6 % are EU or EAA citizen and the rest are from other Scandinavian countries. Figure 5 shows, that Norwegians are more likely to have kids. Here, all non-Norwegian have been lumped into one group.

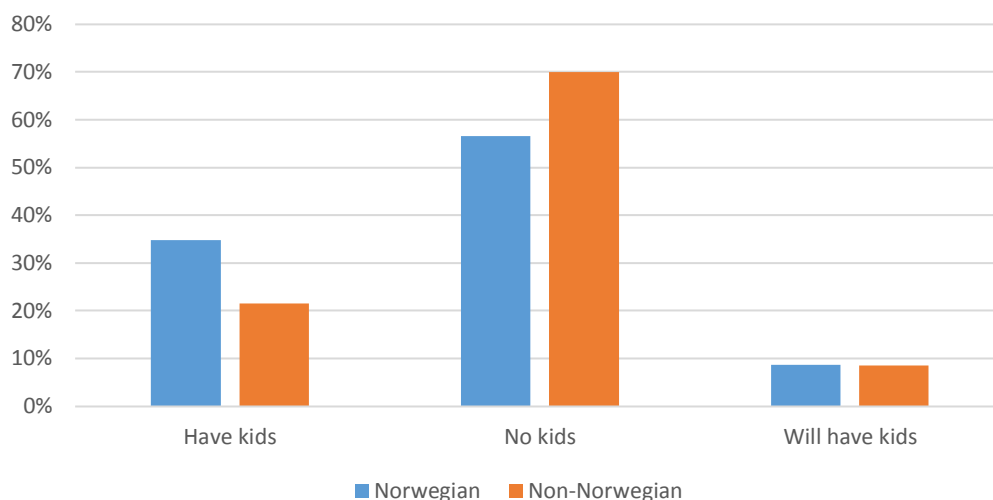


Figure 5: Nationality vs. three different groups of Figure 2

### 3.1.4 Current year of study

Figure 6 displays the current year of study each of the survey respondents is in.

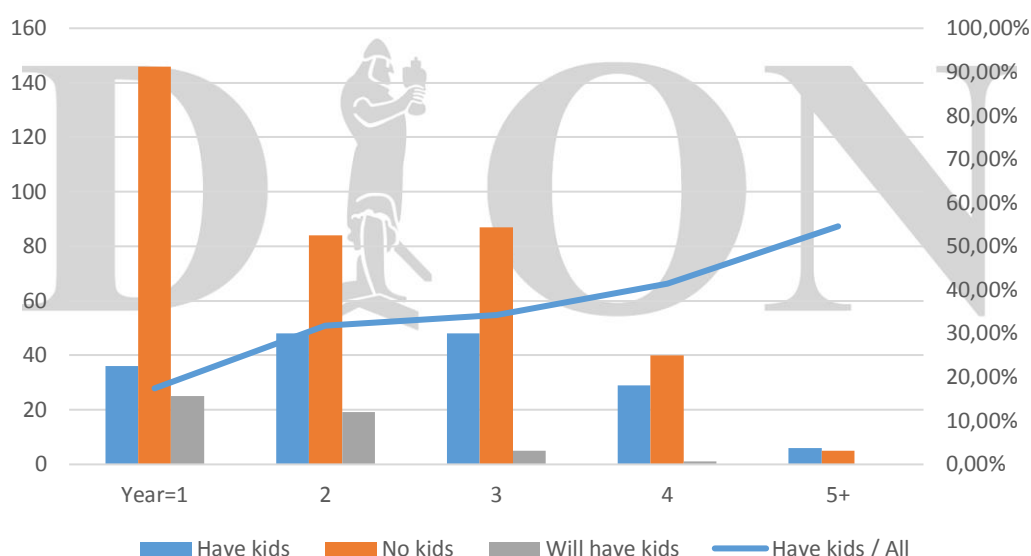


Figure 6: PhD candidates in their years of study vs. three different groups of Figure 2

The blue line indicates the relative amount of PhDs with kids vs. all PhDs. Hence, the later year year, the more likely you are a parent. At this point, we include data from the “[Database for statistikk om høgre utdanning \(DBH\)](#)” of the “Norsk senter for forskningsdata (NSD)” showing the total number of PhD contracts at NTNU per year (Figure 7) and the total number of finished PhD candidates per year at NTNU (Figure 8).

On average, women represent a little more than 40 % of all current PhDs at NTNU in the time frame 2011-2016 (Figure 7). However, they only represent slightly less than 40% of all finished PhDs in the same period (Figure 8). This may indicate that women on average need more time than men, which is in accordance with NTNU's own finding that “Netto gjennomføringstid i ph.d.-utdanningen er 3,5 år for alle kandidater og 3,6 år for kvinner.” ([Arsrapport NTNU 2014/2015](#)).

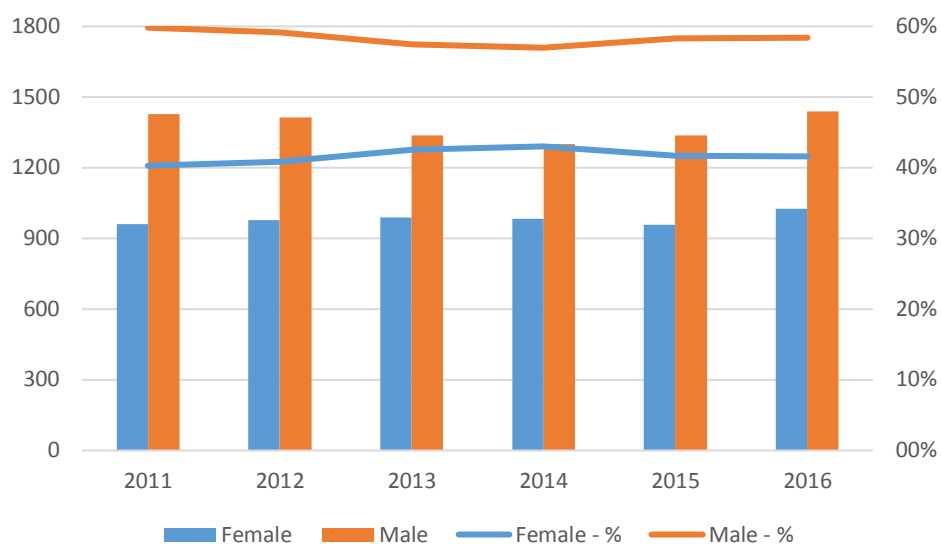


Figure 7: Total PhD contracts per year at NTNU (DBH)

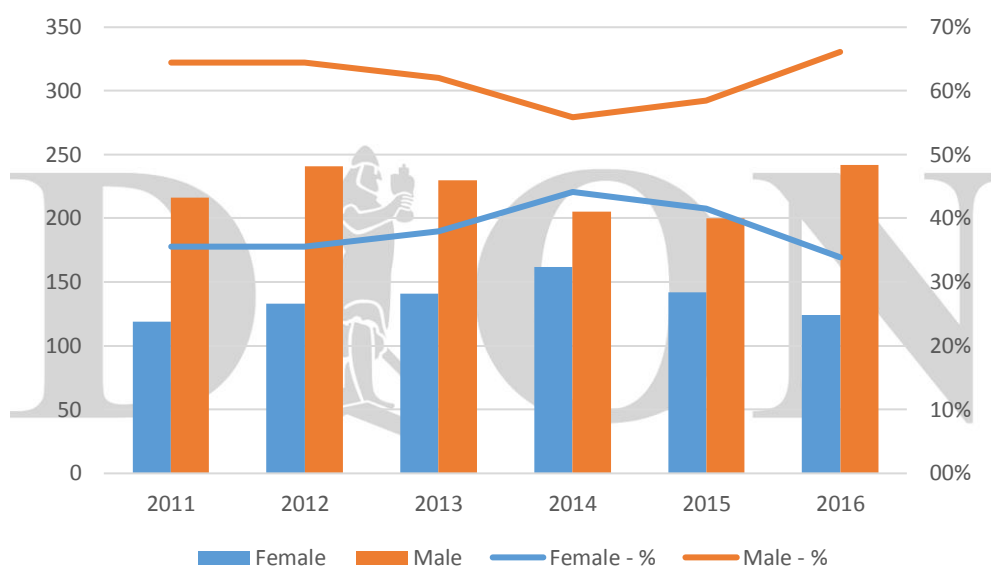


Figure 8: Total PhD examined per year at NTNU (DBH)

### 3.1.5 Duty work

46.3 % of the respondents have a three-year PhD contract involving no duty work. 46.1 % have a four year contract with duty work. 7.6 % said they have a different setup.

Figure 9 depicts the types of PhD contracts, i.e. three and four year PhDs without and with duty work obligations, vs. the three different groups of Figure 2. The ratios indicate no dependency between the categories of Figure 2 and the type of PhD contract, i.e. PhDs with kids are just as likely to have a three or four year contract as their peers without kids.

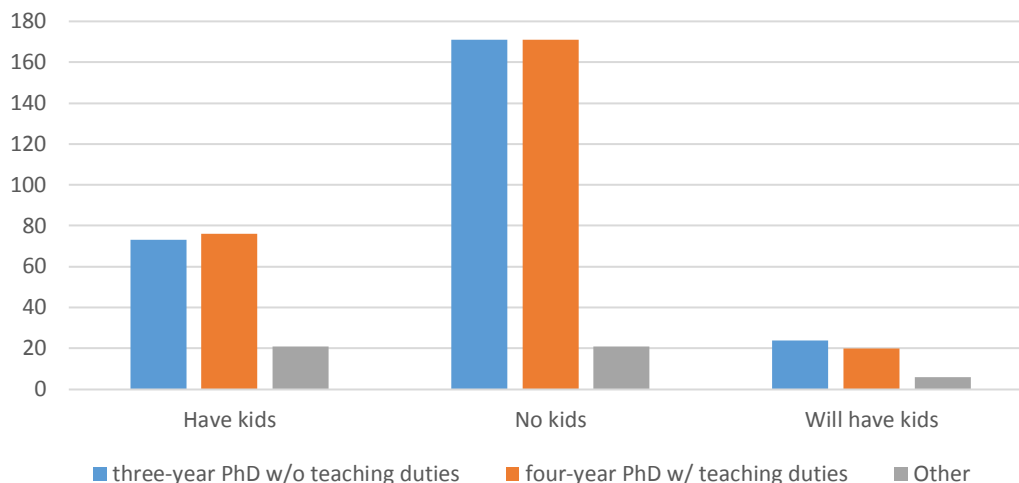


Figure 9: Duty work vs. three different groups of Figure 2

## 3.2 Quality- and time-affecting aspects of PhD project

### 3.2.1 Working hours

Figure 10 depicts the average working hours per week for the three PhD groups. The percentages indicated refer to the three different PhD groups.

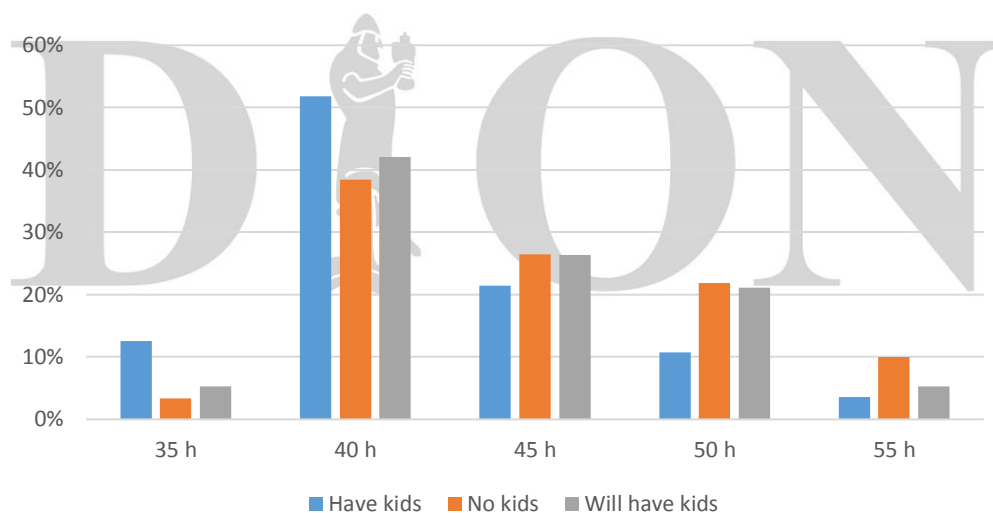


Figure 10: Working hours per week vs. three different groups of Figure 2

The vast majority of PhDs spends more than 37.5 hours/week on their project. The distribution of PhDs with kids is shifted towards lower working hours per week, compared to PhDs without kids.

This becomes clearer by considering Figure 11, where the data has been replotted and indicates the ratio of the three different PhD groups per hour category.

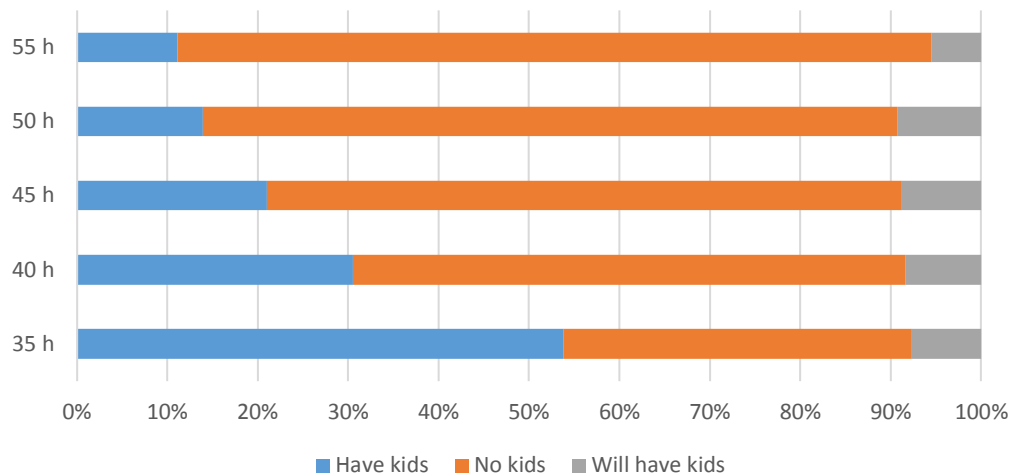


Figure 11: Comparison of parental status by number of working hours

### 3.2.2 Conferences

Figure 12 shows the total numbers of conferences attended per PhD candidate for the three PhD groups.

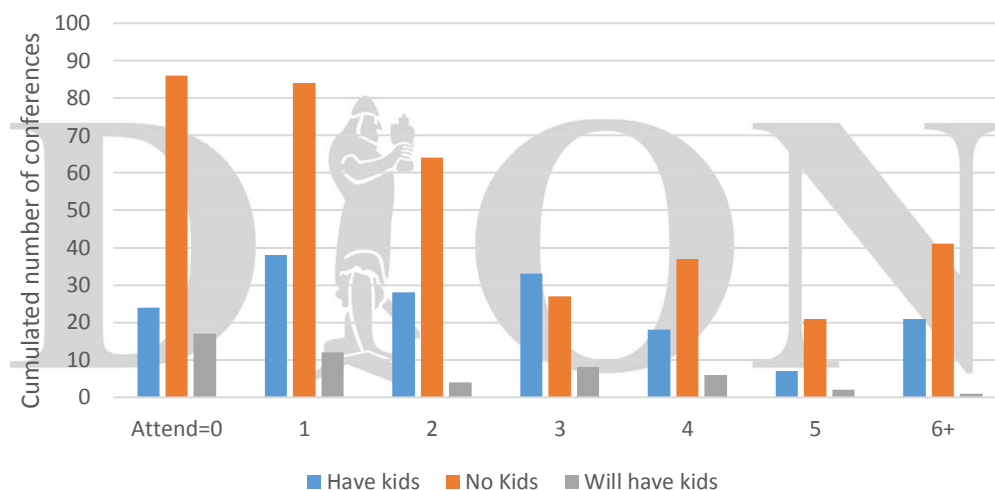


Figure 12: Cumulated number of conferences attended so far in PhD studies per PhD candidate vs. three different groups of Figure 2

The distribution of PhDs with kids is much more uniform than that of their peers without kids.

Replotting the data as depicted in Figure 13 interestingly reveals that having kids apparently does not lead to less conferences attended over the course of the PhD. Here, the different colors represent the relative number of conferences attended per PhD group. The red bars indicate the average conference visits per PhD candidate for each of the three groups.

In fact, the average conference visits per PhD candidate (bold bar, right y-axis) is highest for PhDs with kids. Note that Figure 13 does not account for the fact that candidates are more likely to have children if they are older and later in their studies. Also, the type of conference, i.e. national vs. international, and the corresponding time efforts due to traveling are not accounted for by Figure 13.

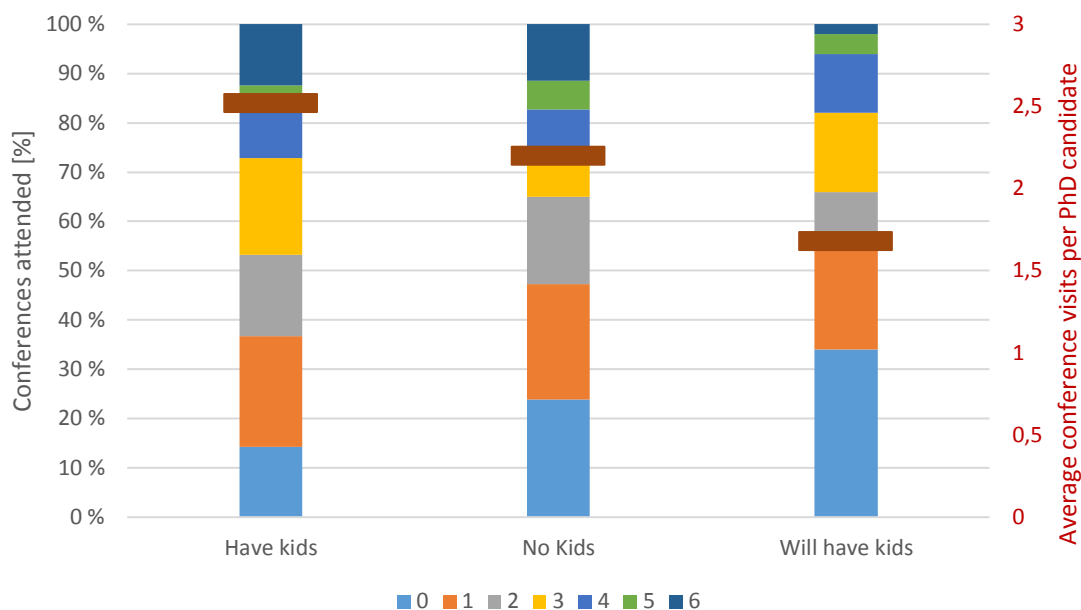


Figure 13: Relative and average number of conferences attended so far in PhD studies

### 3.2.3 Research stay abroad

Figure 14 shows the interest PhDs have in a research stay abroad.

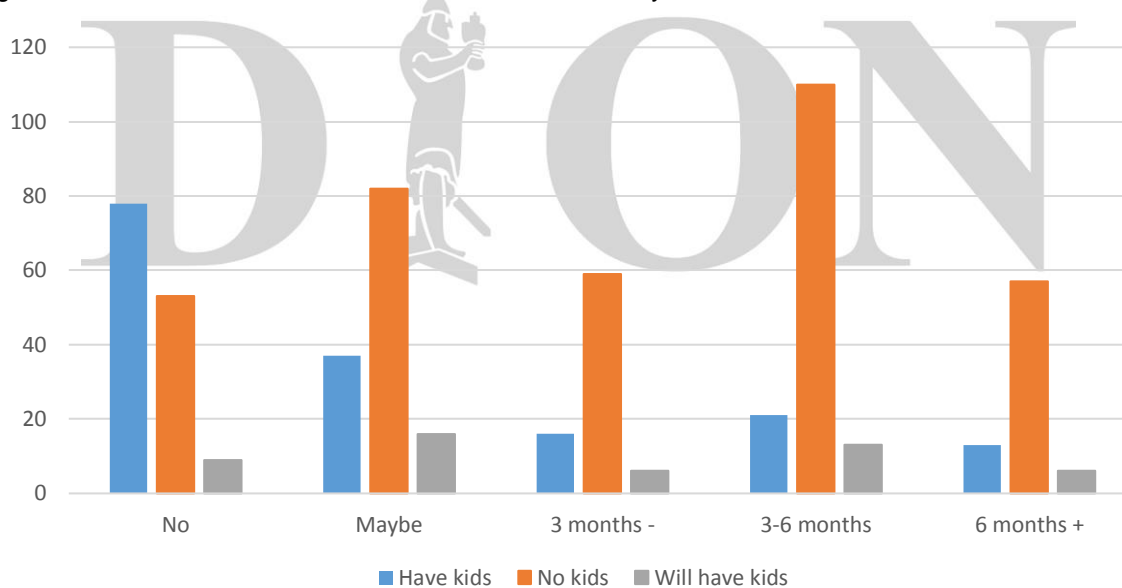


Figure 14: Interest in research stay abroad vs. three different groups of Figure 2

The responses indicate, that PhDs with kids are less likely to go abroad. This is confirmed by replotting the data in relative manners as depicted in Figure 15.

Here, the percentages relate to the three categories indicated. More than 45 % of PhDs with kids do not show an interest in a research stay abroad, compared to just 15% of PhDs without kids. Only 30% of PhDs with kids explicitly show an interest in a research stay abroad compared to 63% of PhDs without kids.

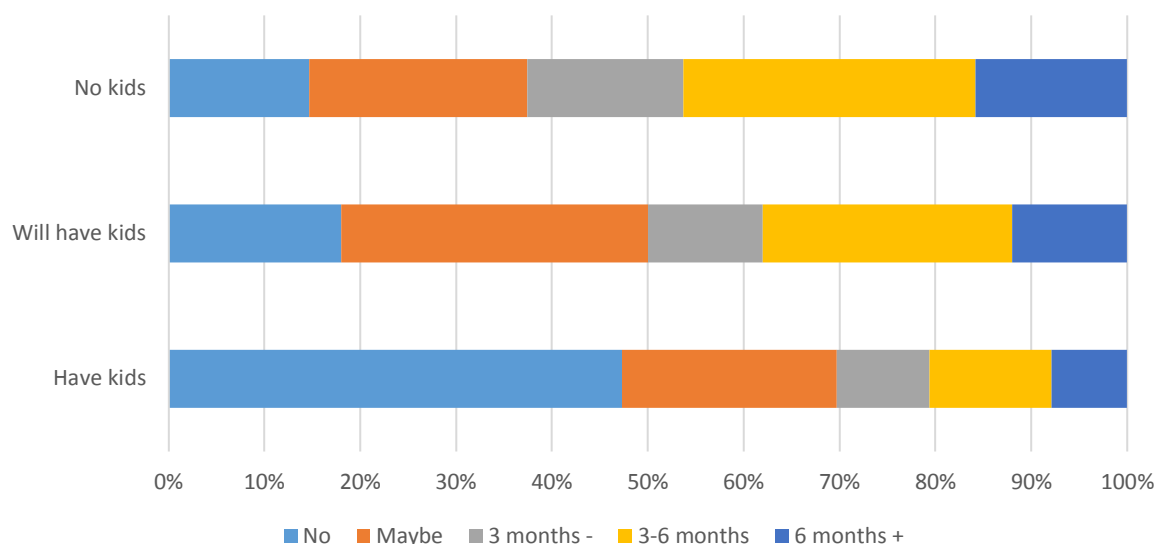


Figure 15: Relative interest in research stay abroad vs. three different groups of Figure 2

The reasons for answering No or Maybe are manifold as depicted in Figure 16. However, the majority of reasons includes partners/family and kids. But also lack of funding, support and the additional work involved have their fair share. These are also mentioned in cases 16 and 30 in section 6.1.1.2 as well as case 28 in section 6.1.1.3.

#### If not, why? , because of funding, because of relatives/partner, other,...

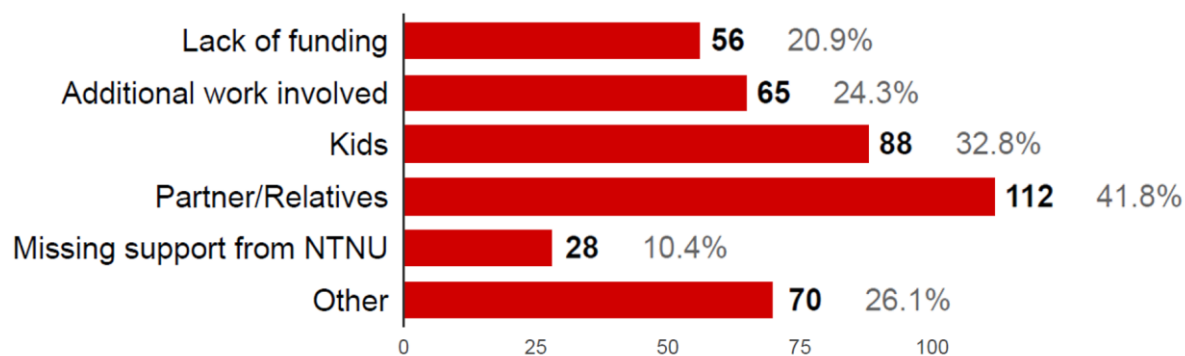


Figure 16: Reasons for not being interested in a research stay abroad

Concerning the perception of support PhD candidates with kids may get from the university in order to handle a research stay abroad, there was a large number, 119 (71.3%), who were not sure about whether support is available or not, as depicted in Figure 17. 18% of the respondents do not feel they get enough support, while only 6 % were satisfied with the conditions.



Do you feel the university supports PhDs with kids to travel abroad for extended periods, e.g. research stays abroad?

(167 responses)

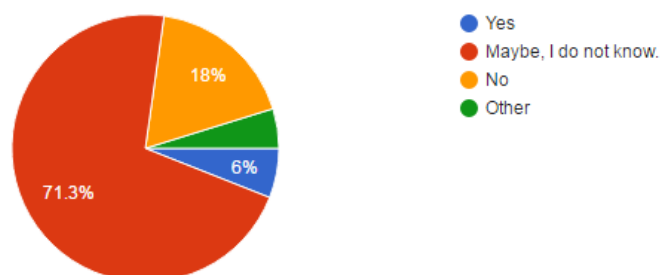


Figure 17: Perception of university support to handle a research stay abroad

### 3.2.4 Academic training

The perceived impact of kids on academic training as part of the PhD studies is displayed in Figure 18.

Does having kids make it more difficult for you to complete the required 30 ECTs coursework?

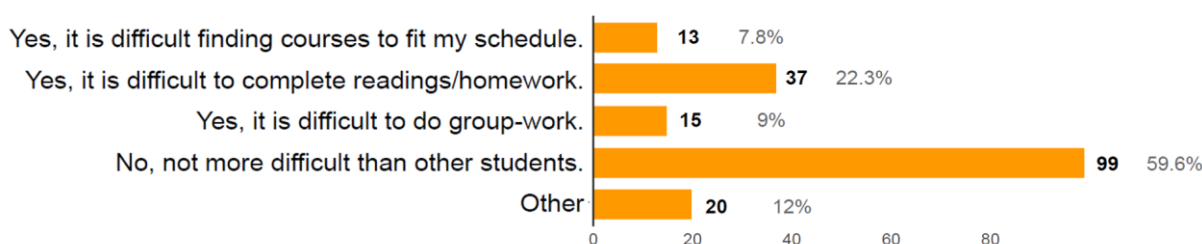


Figure 18: Impact of children on academic training

While 59.6 % of the respondents do not have problems to finish their coursework, 39.1 % stated they have difficulties to fit their schedules, to complete coursework, and difficulties in doing group work.

Full text responses (see section 6.1.1.2) indicate that exercises are sometimes scheduled later than 16:00 and that study groups often meet in the late afternoon/evening.

### 3.2.5 Networking

The perceived impact of kids on attending various social events at NTNU in order to connect to other researchers and hence improve the academic network is provided in Figure 19.

Attending social events of my group/my department/NTNU /DION/... later than 1600...

(169 responses)

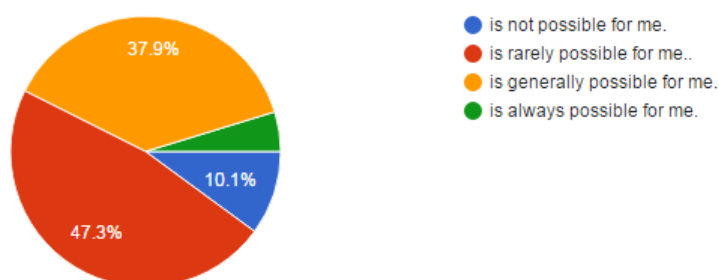


Figure 19: Impact of with kids on networking

Most of the respondents (47.5 %) stated that they rarely have time for networking events, especially after 16:00. While 10.1 % declared that it was impossible for them to take part in such events, 37.9 % said they generally have a chance to attend, and only 4.7 % of the respondents always have the chance to attend social events (see e.g. #42 in 6.1.1.2 and #19 in 6.1.1.3).

### 3.3 Kids-specific special topics

#### 3.3.1 Parental leave

Of all the PhDs with kids respondents, 53.5 % have not taken parental leave so far. 43 % have taken parental leave at least once within the timeframe of their PhD. Out of these, 7.6 % claimed negative experiences with regards to parental leave.

The ones claiming negative experiences were asked to provide a short description of their experiences. The full text responses, which may be found in section 6.1.1.1, were analyzed in order to identify patterns/major issues. 50 % of the negative experiences were made by Norwegian PhDs and 50 % by non-Norwegian PhDs.

The responses received may be categorized as follows:

- **Work history:** Previous work history in Norway determines parental leave compensation (see e.g. 6.1.1.1. #1).
- **Lack of university-wide policy:** The university does not have a general framework guiding the parental leave compensation for international researchers. More so, all the compensation follows the national program offered by NAV. However, some researchers, after filing complaints, get compensation through their departments while others get through NAV, which leads to unequal opportunities (see e.g. 6.1.1.1. #4, 6, 7, 10).
- **Labour unions:** The lack of a defined framework has also led to some people being accused of “exploiting the system” while in the real sense they were asking for their rights. Such cases have been resolved through consultations with labour unions (see e.g. 6.1.1.1. #5).
- **NAV:** Difficulties in processing the parental leave compensation from NAV. It might be that most of the foreign researchers do not know the system, and never manage to send in their applications in order to get the payment in time (see e.g. 6.1.1.1. #10).
- **Lack of awareness of family supports:** Lack of information about various situations where parents are eligible to compensation, for instance the breastfeeding at work (see e.g. 6.1.1.1. #9 and 10).
- **Efficiency loss:** Another important topic regarding parental leave is the additional effort required to catch up with the PhD project after being away for a long time. An extension of the PhD contract in order to compensate for this so-called “gjenoppstartsstipend” is already common practice at the Faculty of Humanities at NTNU ([Innsida](#)) as well as other universities such as e.g. the law faculty at UiB<sup>2</sup> (see e.g. #42 in 6.1.1.2 and #61 in 6.1.1.3).

#### 3.3.2 Sick leave

The question of sick leave was unfortunately not explicitly addressed in the survey. However, DION case experiences as well as the full text responses provided in section 6.1.1.2 (#31, #48, #51, #60) and section 6.1.1.3 (#21, #48, #61) indicate that the practice of granting extensions to the PhD contract due to extended sick leave is in most cases limited to sick leave of the PhD candidate and not their children. Sick leave due to illness of the child is ignored by most institutes/faculties. #61 in section 6.1.1.3 provides a good discussion and suggestion of this issue: “Regular practice is a quota of 10 days per year for staying home with sick children. In average, that is 40 days in the course of a 4-year PhD for a candidate who has children from the beginning (...). The same rights for staying home with children should be granted for PhD parents.”

<sup>2</sup> Gjenoppstartsstipend was enacted 1 February 2007 at the Faculty of Humanities, NTNU. Gjenoppstartsstipend is offered to PhD candidates with 100% sick leave or parental leave for more than 6 months coherently, and gives the candidate one month extension of contract. The extension presupposes that the candidate has a satisfactory progress in the PhD project. Gjenoppstartsstipend has been discussed twice in Universitetsavisa: [Busterud foreslår gjenoppstartsstipend for alle midlertidig vitenskapelig ansatte](#) and more recently “[Midlertidig ansatte med små barn behandles ulikt på NTNU](#)”. The situation at UiB and UiO is discussed [here](#).

### 3.3.3 Kindergarten availability

80.4 % of the respondents did not have any difficulties to find a suitable kindergarten or childcare arrangement. Only 3 % met difficulties and 17.1 % of the respondents said it was somehow difficult.

However, the full text responses provided in sections 6.1.1.1 - 6.1.1.3 indicate that some PhDs have to accept kindergarten places which are not close to work resulting on long commuting times. In addition, many PhD candidates have an issue with kindergarten opening hours and holiday periods (see e.g. 6.1.1.2 #28, and 6.1.1.3 #13, #26).

## 3.4 Additional points of interest

62 full-text responses to the question “I have had the following bad experiences related to having kids and working conditions at NTNU”, which may be found in section 6.1.1.2. These were analyzed and sorted into relevant categories as provided in section 3.4.2.

Furthermore, 63 full-text responses were received to the subsequent question “This would really improve my life...”, which may be found in section 6.1.1.3. Again, these were analyzed and sorted into relevant categories as provided in section 3.4.3.

### 3.4.1 Perception of the impact on PhD studies of having kids

A vast majority of respondents feels that having kids imposes an additional burden to their PhD studies. While 58.3 % stated that having kids leads to some additional burden, 17.3 % of them feel a considerable burden.

Female candidates are much more likely to perceive kids as considerable burden on PhD studies but at the same time are more likely to not perceive them as a burden at all, as depicted in Figure 20.

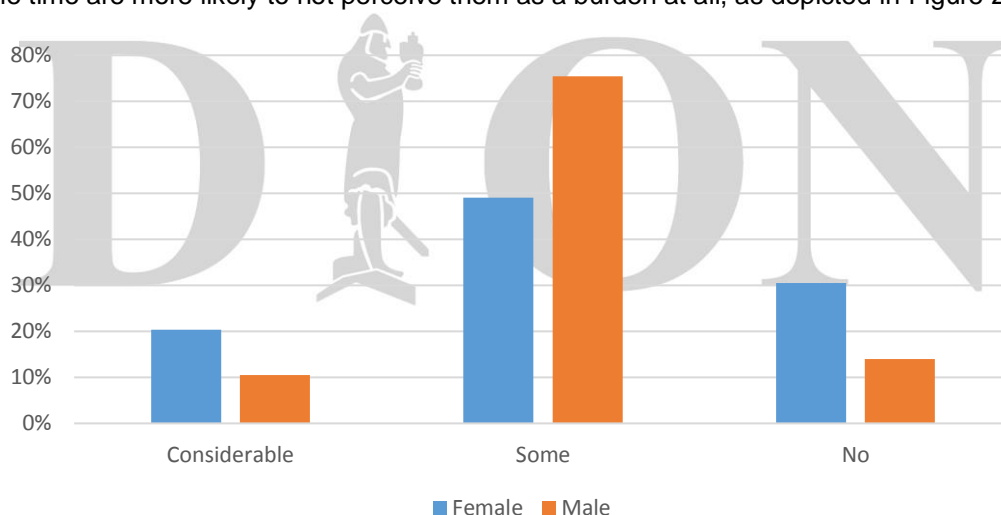


Figure 20: Perceived impact of kids on PhD studies vs. gender

Figure 21 shows the distribution of kids perceived as burden on PhD studies vs. current year of study.

The higher the year of study the more likely kids are perceived as burden. This becomes clearer when replotting the data as relative perception, as depicted in Figure 22.

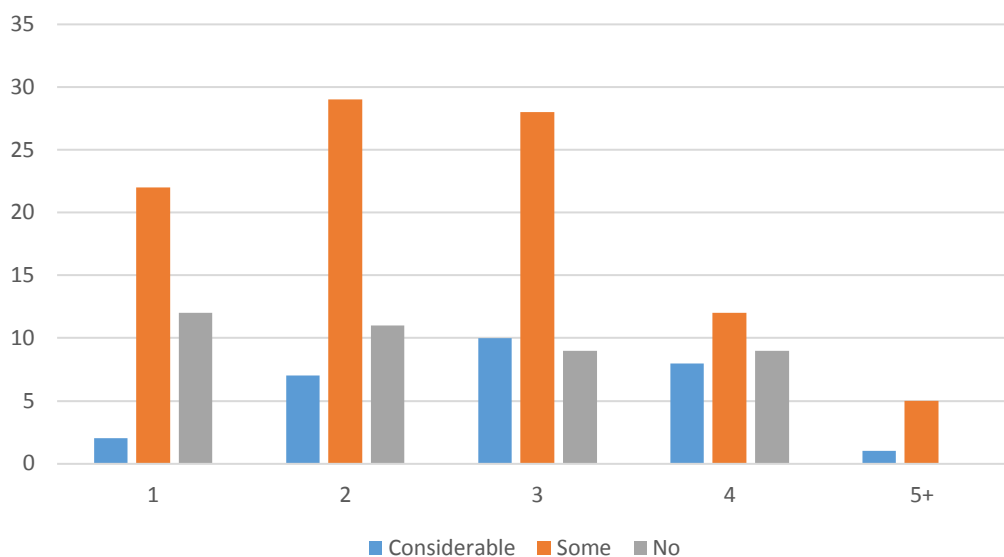


Figure 21: Perceived impact of with kids on PhD studies vs. current year of study

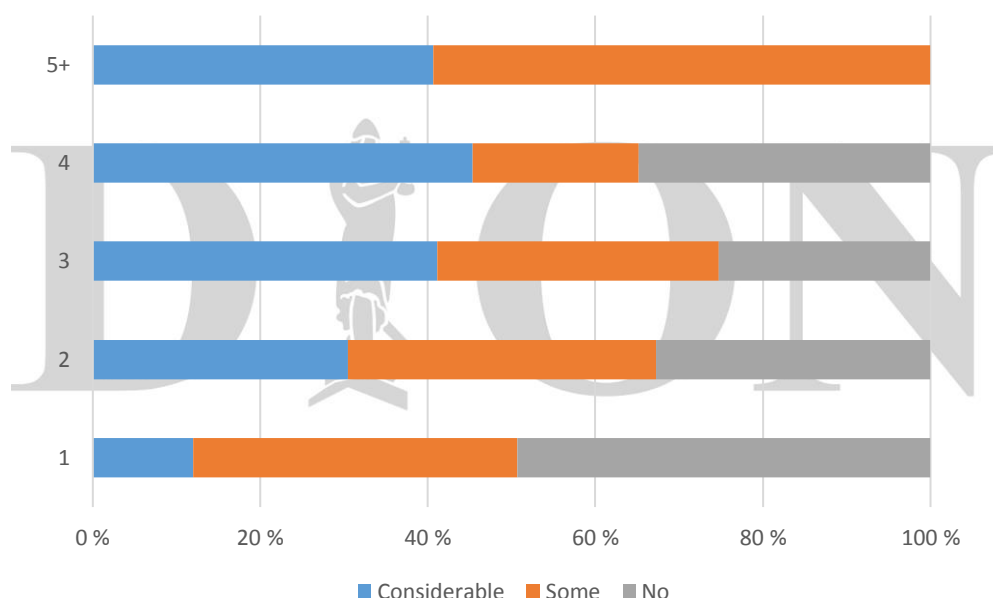


Figure 22: Relative perceived impact of with kids on PhD studies vs. current year of study

### 3.4.2 General issues experienced as a PhD with kids at NTNU

We received a variety of descriptions about how having kids relates to PhD working conditions. Many perceived the PhD working conditions at NTNU very suitable, and that they treat their candidacy as a normal 8-16 job. More so, some respondents feel that the social and employment laws in Norway are good.

The individual issues faced by PhDs as fully described in section 6.1.1.2 may be categorized as follows:

- **Travelling** for conferences, business related matters, and for those who do not live in Trondheim, meeting working groups is challenging especially those organized after normal working hours (see e.g. 6.1.1.2 #2, 6, 14, 27 and 6.1.1.3 #36).
- **Limited time** for extra working hours and social events (see e.g. 6.1.1.2 #24, 49,).
- PhD candidates **staying alone with kids** have extra logistic challenges (see e.g. 6.1.1.2 #15).
- **Sick leave:** Extension of the PhD contract is very often not granted for the considerable number of days PhDs have to take off in order to care for sick children (see e.g. 6.1.1.2 #43, 45, 48, 51).

- Difficulties to get **kindergarten** and child care centers close to working places (see e.g. 3.3.3).
- Expectations from supervisors has caused some PhDs to **work during leave periods** (see e.g. 6.1.1.2 #44).

### 3.4.3 Improvements suggested by PhDs

The individual improvements proposed by PhDs as responses in section 6.1.1.3 may be categorized as follows:

- **Social events** should either be family-friendly to enable most people to bring their kids, or alternatively happen during conventional working hours. Funding for extra babysitting required may be beneficial (see e.g. 6.1.1.3 #2, 19, 21, 35, 36, 48, 51).
- **Kindergarten and child care** should be available for NTNU employees. These ideally offer time plans that fit the workers with kids, i.e., flexible opening hours and flexible holidays should be available. Extra payment for female candidates with kids (see e.g. 6.1.1.3 #31, 34, 43, 45, 48, 51).
- **Accommodation** offered by NTNU for PhD candidates with families may especially improve the situation for international researchers. (see e.g. 6.1.1.3 #16, 33).
- **Duty work** needs to be handled more correctly with regards to actual hours spent, e.g. certain meetings and seminars should be counted as duty work. More time flexibility is required to account for family matters. Less duty work in the sense of a reduced work load and better office facilities (see e.g. 6.1.1.3 #7, 12, 62).
- **Academic training** should be more flexible in order to account for family matters, for instance, options for online learning rather than required in-person lectures, or work at home. On the other hand, a fixed schedules for courses would facilitate better planning for PhDs having family (see e.g. 6.1.1.3 #9, 18, 20, 37, 38, 42, 45, 48, 51).
- **Sick leave regulations** should be amended such that the cumulated amount of days PhDs have to take off in order to care for sick children is granted as an extension to the PhD contract. Generally, sick leave should be compensated with extra days rather than economically (see e.g. 6.1.1.3 #21, 43, 45, 48, 51, 58, 59, 62).

## 4 Discussion

### 4.1 Demographics & cross-correlations

Compared to male respondents, female respondents were more often parents. PhD candidates with increasing age and at a more advanced year of study are more likely to have kids. We also saw that Norwegians are slightly more likely to have kids than non-Norwegians, which can be explained by them being more settled into their situation.

The analyses presented here provide a rough estimate of the demographic breakdown of PhD parents at NTNU. The anonymized raw data is enclosed in sections 6.2 for the convenience of other researchers and/or NTNU to do further investigations, for example more granular dependency tests for e.g. working hours with respect to gender of those with or without children. Additionally, our analysis of the raw data is enclosed in section 6.3.

### 4.2 Quality- and time-affecting aspects of PhD project

#### 4.2.1 Working hours

Regardless of whether working overtime is socially or healthily beneficial, PhDs with kids are working fewer hours per week than their peers without kids. While the reasons may be manifold, it clearly means that having kids is associated with spending relatively fewer hours on the PhD project.

PhD candidates having small children are facing a double issue: The required time to care for small kids is even higher and lack of sleep may decrease academic performance (see e.g. #54 in 6.1.1.2, #51 in 6.1.1.3),

DION feels that the quality of academic work may be maximized if the time challenges of PhDs with kids are considered and possibly accounted for. Free-text feedback suggested an allowance of for instance 20 to 30 days per year added to the PhD project/an extension in order to compensate for increased care requirements and lack of sleep. However, we feel that in terms of treating all PhDs equally and not rewarding extra hours purely because of being with kids, an on-campus kindergarten as discussed in 4.3.3 is much better suited in order to improve on the time issue.

#### 4.2.2 Conferences

Interestingly, the data shows that PhDs with kids do not lag behind when it comes to the amount of conferences visited. In fact, PhDs with kids overall seem to be more likely to attend conferences than the other two groups, as the average conference visits per PhD candidate is highest for PhDs with kids (4-5 during the PhD). It is likely that for the large majority of parents with partners, the partner and/or relatives enable PhD candidates with kids to attend conferences no less than their non-parent counterparts. However, since only about 25% of all PhD candidates at NTNU responded to the survey, the numerical survey results most likely do not represent the true relations.

One would expect that traveling for a certain period of time is not easy for PhDs with kids. Note that Figure 13 does not account for the fact that candidates are more likely to have children if they are older and later in their studies. Hence, PhDs with kids may have attended more conferences early in their studies and equal or less than the non-kids peers later in their studies.

Also note that Figure 13 does not account for the location of conferences, which may be an important factor as Norwegian conferences are more accessible since they involve less traveling time.

Overall, the data indicates that PhDs with kids are not attending less conferences than their peers without kids. However, a different result may well be obtained if the population was larger and/or if additional factors such as time and/or location are taken into consideration.

#### 4.2.3 Research stay abroad

PhDs with kids tend to show less interest in a research stay abroad than PhDs without kids. This is in accordance with the reasons provided, where the number two reason is kids. Note that "Missing support from NTNU", "Lack of funding" and "Additional work involved" are also stated very often. It may well be that having kids is not the only explanation for why PhDs with kids are less interested in going abroad. For instance, case 30 in section 6.1.1.2 cites lack of support from NTNU and lack of funding. Providing more relocation support, and additional funding in order to cover the intense costs required for family relocation, and granting a reasonable extension of the PhD contract in order to compensate for the

additional workload involved with going abroad may lead to more PhDs with kids considering and effectively doing a research stay abroad.

Please note, that some local rules for compensation for the additional workload involved exist, e.g. AD, HF, MH and NT (Research stay abroad, Innsida). However, a unified and NTNU-generic compensation policy would certainly back the 40 % PhD research stay goal of [NTNUs International Action Plan 2014-2017](#).

The result is also in line with only 6 % stating that the university supports PhDs with kids to travel abroad for extended periods, e.g. research stays. Another important point is the vast majority stating “Maybe, I do not know” (71.3 %), which implies that these people do not know about the support for international research currently available.

[NTNUs International Action Plan 2014-2017](#) states that 40% of all PhD candidates are expected to have a research stay abroad. A total of 52.3 % of all respondents stated an interest in a research stay abroad, compared to 24.3 % explicitly stating “No”. Given the family and financial complications, it seems evident that PhDs with kids are less likely to do a research stay abroad. Hence, improving on compensations as mentioned above as well as making information on support more accessible will make the goals of 40 % much more likely (see e.g. 6.1.1.3 #28).

DION feels that a research stay is something very valuable which should be done by as many PhDs as possible. We therefore encourage NTNU as a whole to

- unify and disseminate the regulations in the form of an informational brochure at the start of the PhD project and reference that document in the PhD handbook,
- provide additional financial and administrative relocation support specifically for PhDs with kids,
- evaluate whether to specify a reasonable extension of the PhD contract in order to compensate for the additional workload involved with going abroad.

#### 4.2.4 Academic training

The majority of PhDs with kids seem to manage the mandatory academic training well. However, 39.1 % are facing difficulties, the most important one being to complete readings and doing homework. This number seems to be in accordance with the many full text responses regarding that topic (see 6.1.1.2 and 6.1.1.3). Some challenges of rigorous coursework at the doctoral level are expected for all PhD candidates. However, offering extended or flexible deadlines for instance in case of sick children as well as ensuring that exercise sessions and lectures are scheduled during working hours may improve the current situation for PhD parents.

Feedback given in the full-text responses suggested more opportunities to follow courses online (especially for the PhD candidates not living in Trondheim), either as direct stream or via e.g. YouTube or Vimeo (See e.g. #37, 38, 43). However, it seems that it is essentially the respective professor who has to decide whether to enhance his/her course with such a feature or not.

DION feels that the current situation may be improved with some minor organizational changes. We therefore encourage NTNU as a whole to evaluate the possibility of providing more flexibility regarding deadlines and plan academic training including exercise sessions fully within working hours.

#### 4.2.5 Networking

Obviously, having kids imposes considerable limitations as to whether PhDs are able to attend events of any kind outside kindergarten/school opening hours. Many social events are scheduled towards the end of the work day, thus conflicting with kindergarten pick-up and therefore effectively excluding PhDs with kids.

While it is clear that not all events may be scheduled within working hours, it may nevertheless be very beneficial for all employees with kids if scheduling social events at work times is considered and also actively promoted by NTNU.

With reference to section 4.3.3, if an NTNU on-campus kindergarten offering extended opening hours was available then attending social events and hence networking would become much easier for all scientific staff. In fact, a large number of full-text responses in section 6.1.1.3 state exactly this.

DION feels that networking may improve the academic quality of a PhD project and/or raise the efficiency. We therefore encourage NTNU as a whole to actively promote scheduling social events within

working hours as well as establishing an on-campus kindergarten (see also 4.3.3). Furthermore, we encourage departments and faculties to schedule social events within working hours whenever possible.

## 4.3 Kids-specific special topics

### 4.3.1 Parental leave

While parental leave is regulated by law in Norway, many full-text responses indicate that PhD candidates have difficulties with both NTNU and non-NTNU entities when it comes to administrative issues.

Furthermore, the efficiency loss resulting from being absent from one's research topic for the duration of the parental leave is an issue. This could easily be accounted for by introducing a general "gjenoppstartsstipend" at NTNU for temporarily employed scientific staff.

In general, unified, clear and binding regulations regarding parental leave valid on all campuses, faculties and departments would lead to a lot less trouble for PhD candidates when it comes to administrative matters. A guiding document, explaining the parental leave process at NTNU and highlighting the specific matters of both Norwegian and non-Norwegian PhD candidates, could present those unified regulations. Ideally, this guiding document would also provide an overview of the non-NTNU administrative topics such as NAV. Some information is already available on Innsida ([Types of leave](#) and [Parental leave](#)); however, it does not cover many of the aspects mentioned in 3.3.1. This document could be made available to all PhD candidates at their start or it could be added as a section to the [PhD handbook](#) or relevant Innsida pages such as [PHD 1-2-3](#).

DION feels that a clear and straightforward parental leave process ensures a higher academic quality as the PhD candidate does not need to spend time on administrative issues. We therefore encourage NTNU as a whole to

- unify parental leave processes throughout the university,
- evaluate the introduction of a "gjenoppstartsstipend" throughout NTNU,
- and compile and disseminate the process description and relevant regulations in the form of an informational brochure at the start of the PhD project and reference that document in the PhD handbook.

### 4.3.2 Sick leave

The handling of sick leave for parents at NTNU does not seem adequate. Sickness during childhood is a fact of life, and young children in particular depend on their parents' care. Children of PhD candidates tend to be in early childhood, see section 6.1.1, and question 2. However, this is not compensated for, unless kids are sick for more than 14 days.

[Regular practice](#) for all employees is a quota of 10 days per year for staying at home with sick children. This makes 40 days in the case of a 4-year PhD for a candidate who has children from the start. Hence, such a candidate loses one-and-a-half months of research compared to a PhD without kids. In its own interest (supporting PhDs as much as possible in order to successfully finish on time) but also regarding equal rights, NTNU should grant extensions of the PhD contract for all cumulated days a PhD has to stay home due to sick kids.

DION feels that all PhD candidates and employees should be treated equally with regards to sick days. An improved treatment of sick leave with respect to children as described above will improve the academic quality of PhD projects and ensure that more PhD finish on time. We therefore encourage NTNU as a whole to specify extensions based on the accumulated sick days without any minimum threshold.

### 4.3.3 Kindergarten availability

As kindergarten availability is quite high in Norway in general, it is not surprising that 80.4 % of the respondents did not have any difficulties finding a suitable kindergarten or childcare arrangement.

However, a lot of the full text responses in section 6.1.1.3 indicate that life would be substantially improved if on-campus kindergartens were available that also offered extended time-flexibility (e.g., longer than office hours, weekends) in order to account for needs such as attending social events, conferences and/or exercises/lectures/exams.



DION feels that limiting the daily commuting time and ensuring more time flexibility for PhDs with kids will improve the academic quality of PhD projects and ensure that more PhDs finish on time. In the light of the Dragvoll campus relocation to Gløshaugen, we therefore encourage NTNU to consider and plan an on-campus kindergarten for all NTNU employees with the following features:

- open throughout summer and holiday periods on a limited basis,
- open on weekends throughout exam periods,
- extended daily opening hours, e.g. to account for social events in the evenings,
- an English speaking group, as some researchers are here temporarily.

We acknowledge, that strictly speaking this is not the responsibility of NTNU as an employer. However, given the limited and fixed timeframe of a PhD project it may be very reasonable and commercially beneficial for NTNU to support PhDs in order to finish their work in the given timeframe. Furthermore, it will be a relevant asset for NTNU when trying to recruit researchers (especially from abroad) and as NTNU strives to stand out as a top university in a country known for its gender equity and quality of life.

#### 4.4 Additional points of interest

Given the responses presented and discussed so far in this report, it comes as no surprise that the vast majority feels that having kids imposes additional burden to their PhD studies. The fact that kids are relatively more perceived as an additional load with increasing year of study is most likely because of the increased relative number of PhDs with kids for higher years of study (see Figure 6).

The reasons for perceiving kids as a burden to PhD studies may be manifold. However, we feel that many of the aspects discussed in sections 4.2 and 4.3 may explain this perception. Potential measures to decrease the burden kids may represent are also discussed in sections 4.2 and 4.3. They include unified and well-communicated guidelines and regulations regarding parental leave and sick leave, the possibility to follow courses online, the increase of social events during work hours, as well as a kindergarten on campus offering flexible childcare options.

These potential measures accurately reflect the full-text responses received (See sections 3.4.2 and 3.4.3).

## 5 Conclusion

In this report, we have identified a number of reasons which may effectively shorten the time available of the PhD project for PhDs with kids. In the discussion section, several potential measures were identified which may help to decrease the additional burden kids may impose on the PhD project.

In line with the campus merger, DION believes it is a good moment to consider the current situation of PhDs with kids within the new structure of NTNU, including the new entities at NTNU of the former HiST and at the campuses in Gjøvik and Ålesund.

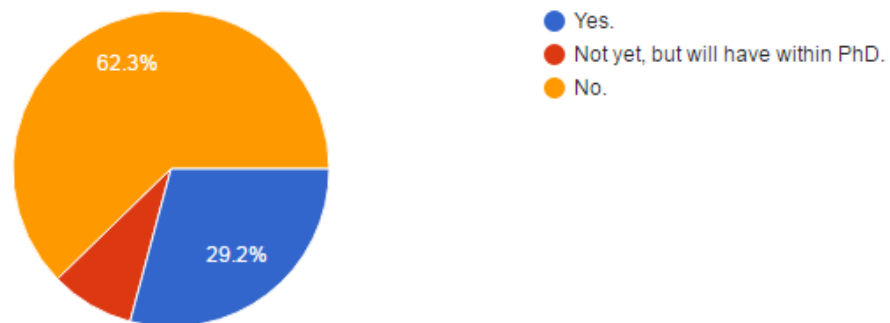
In order to improve on some of the issues that came forward from our analysis, DION proposes the following measures:

#	Issue	DION proposal	Who
1	Working hours	See point 7.	
2	Research stay abroad	Unify and disseminate the regulations in the form of an informational brochure.	NTNU rector
		Provide additional financial and administrative relocation support.	Departments/Faculties
		Evaluate whether to specify a reasonable extension of the PhD contract.	NTNU rector
3	Academic training	Evaluate the possibility of providing more flexibility regarding deadlines and plan academic training including exercise sessions fully within working hours.	Departments/Faculties
4	Networking	Actively promote scheduling social events within working hours and establishing an on-campus kindergarten (see also 4.3.3).	NTNU rector/Faculty
		Encourage departments and faculties to schedule social events within working hours.	Departments/Faculties
5	Parental leave	Unify parental leave processes throughout the university.	NTNU rector
		Evaluate the introduction of a "gjenoppstartsstipend" throughout NTNU.	NTNU rector Departments/Faculties
		Compile and disseminate the process description and relevant regulations in the form of an informational brochure.	NTNU rector
6	Sick leave	Specify extensions based on the accumulated sick days without any minimum threshold.	NTNU rector
		Grant extensions based on the accumulated sick days without any minimum threshold.	Departments/Faculties
7	Kindergarten availability	Consider and plan an on-campus kindergarten for all NTNU employees accommodating an academic career.	NTNU rector

## 6 Appendix

### 6.1 Survey questions and answers

Do you have kids? (583 responses)

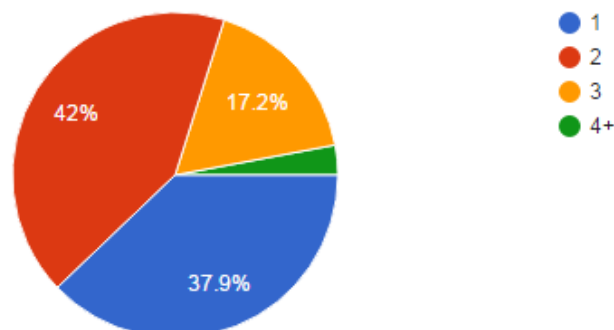


Depending on the response provided, the survey participant was redirected to on the sections 6.1.1, 6.1.2, or 6.1.3

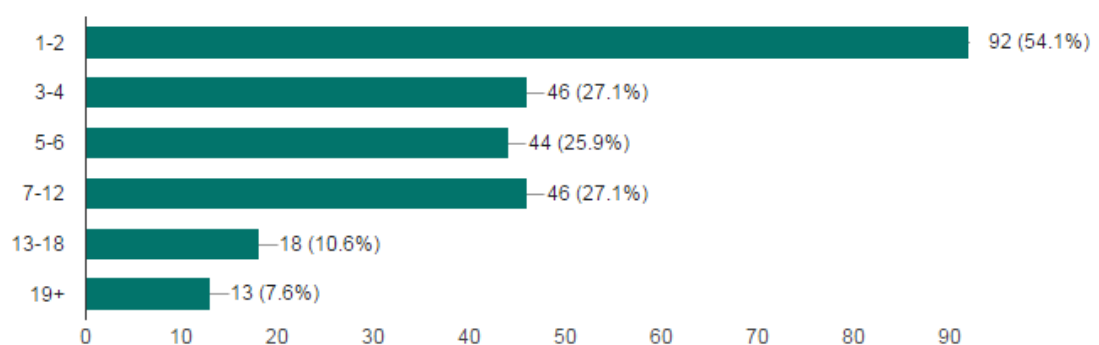
Sections 6.1.4 and 6.1.5 were equal for all participants of the survey.

#### 6.1.1 PhD students with kids

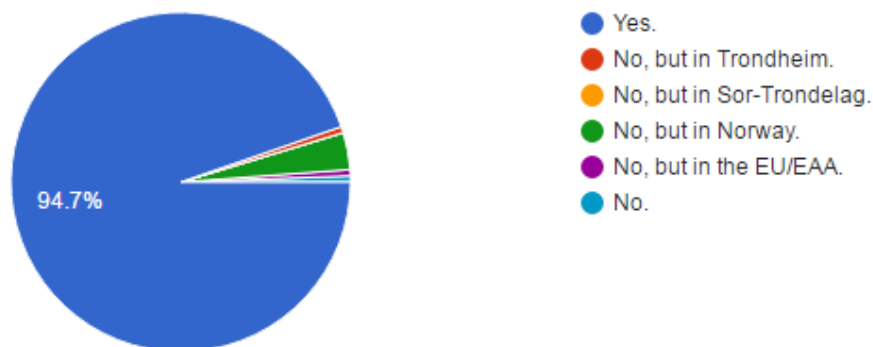
How many kids do you have? (169 responses)



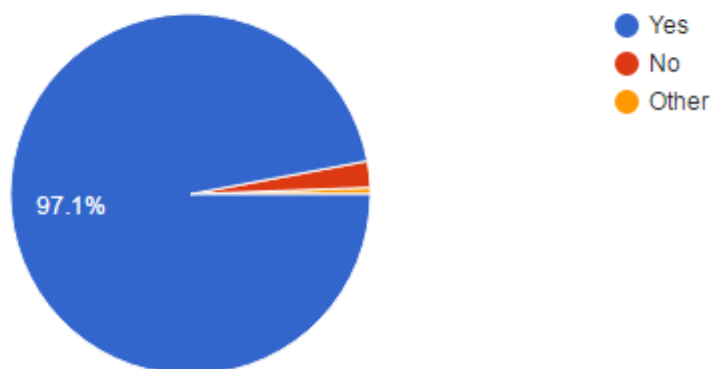
How old are your kids? (170 responses)



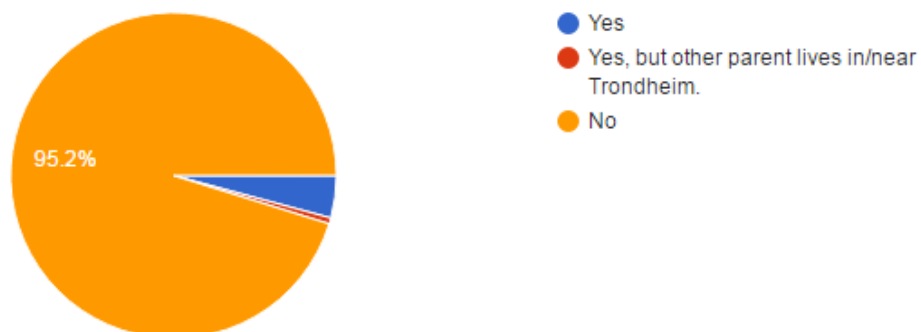
Is/are your kid/your kids living with you? (170 responses)



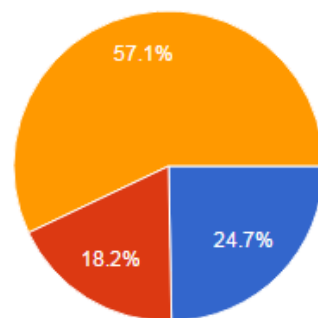
Are you in a relationship? (170 responses)



Are you single-parenting? (167 responses)

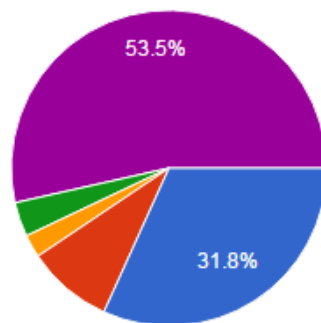


Do you have relatives (parents/brother/sister/...) in Trondheim? (170 responses)



- Yes, and they are great with helping out/taking care of the kids sometimes.
- Yes, but they are no big help / do not take care of the kids.
- No.

Have you taken parental-leave so far during your PhD studies? (170 responses)

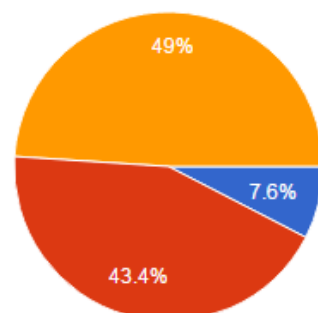


- Yes, once.
- Yes, twice.
- Yes, more often.
- No, but I am planning to.
- No.



If so, have you had any bad experience(s) regarding parental leave, e.g. with regards to application/extension/...?

(145 responses)



- Yes.
- No, everything went smoothly.
- No, have not had parental leave yet.

### 6.1.1.1 Parental leave issues

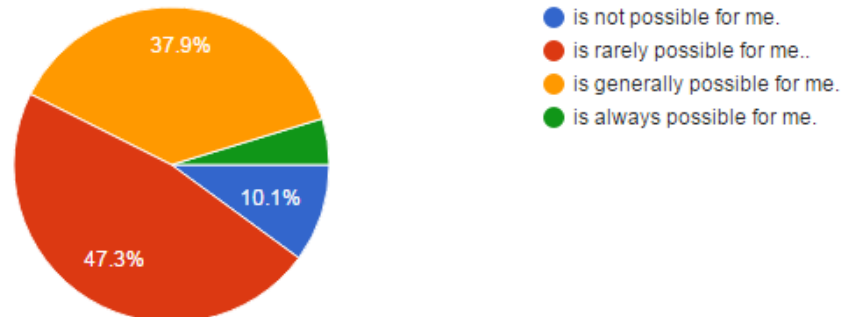
Question: "Please provide a short description of the issues you have faced."

Note, that all responses have been edited with regards to incorrect spelling to improve readability.

#	Issue
1	For fathers in Norway, the right to take parental leave is restricted by the requirement that the mother has to be in a full-time job. As we moved to Norway from abroad, my wife did not find a job immediately (not least because she was pregnant). Therefore, I had no right to take parental leave. I guess especially international researchers are affected by this rule.
2	Applied for four extra weeks of leave in addition to the ordinary two weeks in connection with the birth of my triplets, but this was initially declined. After writing a letter to the dean, I received ten days of compassionate leave.
3	I had to change my PhD topic and the second time lost an authorship on a paper because I couldn't finish my work.
4	My application had been extensively delayed due to incomprehension with NAV although my application was very clear since the beginning and nothing has really changed in my applications in the whole time. Specifically, they were first asking for a certificate which was already included in the application and, after having made clear this, my applications was archived without any notice although they had my contacts information. Also the request of the extension has not been easy task.
5	Håper det er greit at jeg tar dette på norsk. Jeg har fått tre barn mens jeg har vært stipendiat og har dessverre hatt en del negative erfaringer med oppfølgingen, der jeg blant annet ble anklaget for å "utnytte systemet" fordi jeg søkte om de forlengelsene jeg hadde krav på, og jeg har hele tiden blitt møtt med en negativ holdning og fått følelsen av at jeg er et problem for dem. Videre sakk jeg veldig akterut lønnsmessig (dette ble til slutt ordnet etter en lang runde med fagforeningen), og jeg mistet omtrent et halvt år av tiden som skulle gått til forskning. Jeg har gjort meg en del tanker om dette, og kan gjerne møte dere for å fortelle om mine erfaringer dersom det skulle være ønske om det.
6	Troubles with how NTNU handles extension of your PhD contract after 2 maternity leaves of 10 months each when it comes to how they subtract the weeks you had vacation during those weeks. You end up with shorter work time (for me minus 10 weeks) than. This is different from other universities in Norway (UiO and UiB) where they also extend the contract with vacation days according to the parental leave length. I also have an issue with extensions when it comes to absence with sick children as it seems that some faculties gives extension on a day-to-day basis while others don't.
7	The differential between my salary and the "parental leave" NAV-salary was covered by my operating/laboratory-funds (driftspenger).
8	It took a very long time before my contract was extended with the time for the parental leave.
9	I had no information about the practice of breastfeeding at work, so I had to apply for compensation instead of doing it in advance. HR also lost my personal file with all the documents, so I had to reconstruct my sick leaves and parental leaves. It took a while to get everything right, since I had several periods of part-time parental leave.
10	It didn't go quite smoothly either time with filling out the forms. Second time I had to call NAV because I started filling out the wrong form as a result from asking for advice at NTNU. Also, I think my maternity leave was not registered, as there was an issue with one of the salaries. It seemed as if I owe NTNU a certain amount of money, due to my maternity leave, and I got no salary. I realized this while on vacation, where I had limited internet, that I have no available money to pay for accommodation, and that my house loan was not paid (it is automatic). They solved this issue immediately after I complained, and I got double salary the following month. It was an honest mistake, but in smaller companies I guess you have a different approach to registering these kinds of forms, and in a big enterprise such as NTNU these things are bound to be missed sometimes.

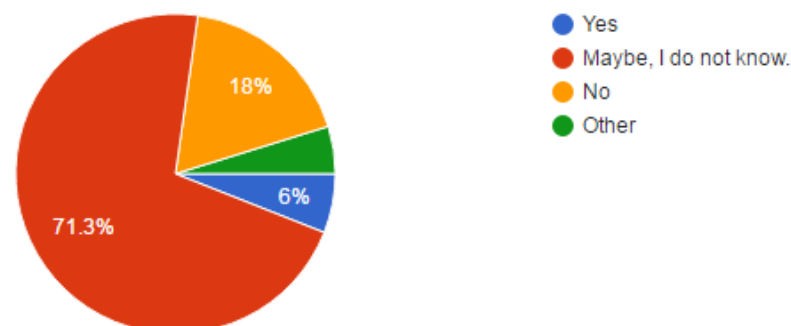
### Attending social events of my group/my department/NTNU /DION/... later than 1600...

(169 responses)



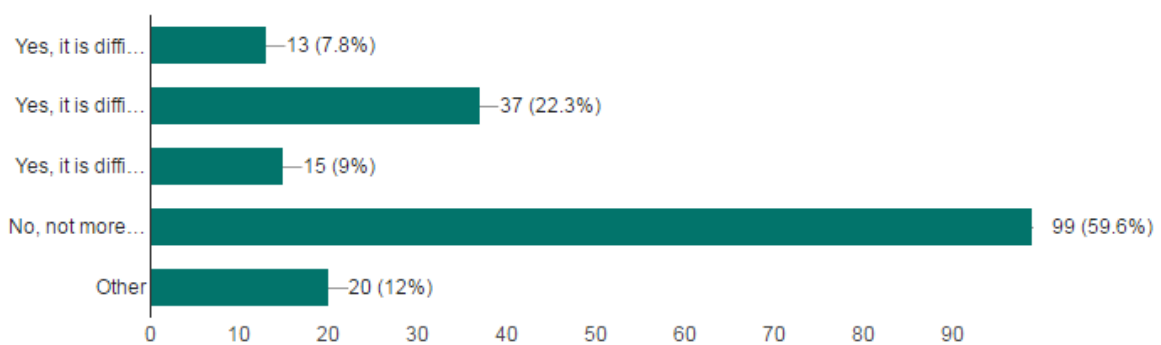
### Do you feel the university supports PhDs with kids to travel abroad for extended periods, e.g. research stays abroad?

(167 responses)



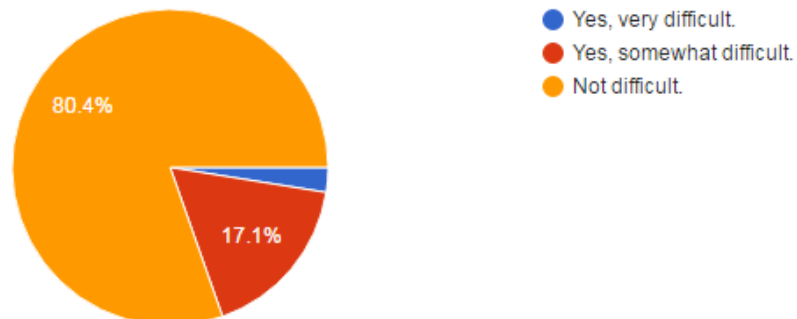
### Does having kids make it more difficult for you to complete the required 30 ECTS coursework?

(166 responses)

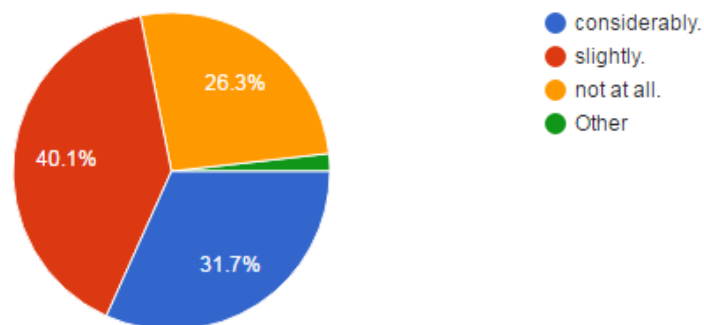


### Did you have difficulties finding a suitable kindergarten/child care arrangements for your kid(s)?

(158 responses)



### Having kids affects my career planning after the PhD... (167 responses)



### Overall, I feel that having kids imposes ... (168 responses)





### 6.1.1.2 Bad experiences

Question: "I have had the following bad experiences related to with kids and working conditions at NTNU:"

Note, that all responses have been edited with regards to incorrect spelling to improve readability.

#	Issue
1	C
2	Going on business trips or attending conferences is very difficult
3	Nothing much yet, but more planning and concentration during working hours is required. I cannot plan on working more than 40 hours a week (at least not now in the beginning).
4	spend little time on working
5	Asked during job interview if I planned on having more kids.
6	I live in Oslo and have traveled to Trondheim to attend courses, seminars and meetings. I have friends and family who babysit, but surely it is challenging some times to be away from the kids that much.
7	I sometimes have to stay in the office until 7-8 pm, which takes from the time I should spend with my son
8	Difficult to find time after normal working hours for exercises and group work in courses. Exercise hours are sometimes starting after 4 pm.
9	For the record, I do not live in Trondheim, but Fredrikstad. Living outside Trondheim makes a greater impact on the planning of lectures and activities than what my kids does!
10	Expectations to go abroad for longer period of time
11	I feel I'm supposed to work more than 40 hours per week, which I won't be able to do. But this is no formal pressure, only a felt pressure. However, this is also a great aid to me, as it teaches me that everything can't be perfect and what good enough is. That 40 hours per week is enough for me, and everything that my PhD gets.
12	None. On the contrary. They help me discipline my work, since working nights and weekends is no option.
13	I have had a four months parental leave and will have four more next year, and have taken it for granted the my employment period will be extended. Shouldn't I?
14	My office is in Levanger, but my research group is in Trondheim. I used to live in Trondheim, but as my employer couldn't find a more proper office (I shared with five), I moved to Levanger. Kinder garden is in Levanger and this makes it a bit more difficult to meet the research group on other occasions than formal meetings.
15	My husband work in Tromsø, so I look after my kid by myself. I feel time is not enough for me. I cannot join activities after 4 pm; I have to give up my Norwegian course; I have many absence of work because of baby sick. My research progress is very low. All these things make me fell guilt and stressful.
16	It was not a working condition at NTNU, but last month i need to go to Oslo for visa and come back same the same day. Unfortunately at the mean time my child had fever the same day, my husband was abroad. I left my child at kindergarten early morning, then after a while when i reached Oslo i got call from kindergarten to pick my child because i do not have possibility to have child when she is ill. Then it was a problem....
17	None
18	The division between work/free-time/home is virtually non-existent. Maybe self-imposed. Also difficult to do a "clean cut" during the parental leave. I did my part-time in order to not loose all progress/momentum. Parental leave (as a dad) is also during a shorter period, so that it might be in the middle of a semester. This means that we have to be a bit flexible wrt. teaching duties during parental leave. The consequence is that one is never really away from work. In my situation this was handled quite OK, and in cooperation with NTNU and my girlfriend, so the

#	Issue
	situation should benefit all. My department gave me nearly full freedom to organize everything to fit my own needs. So it's not a very bad experience, but the idea of staying at home for 10+ weeks with kids is almost not possible when working at NTNU. The period is too short to really put everything aside, and too long to stay away...
19	Supervisor told me I have to work during parental leave
20	Attending meetings, seminars or any other arrangements of different kind after regular "office hours".
21	Having kids means I can only work a maximum of 37.5 hours a week. As a PhD you are (not explicitly, but still) expected to work a lot more than full time. The systematic and increasing encouragement/pressure to finish the project within the stipulated three years is an extra psychological burden on my shoulders. I would not work less if the focus on finishing the PhD on estimated time was less, I would work with more confidence.
22	Both my children has chronic diseases, and that takes a lot om work and worry. NTNU has been really good about giving me freedom to plan my work.
23	None
24	Generally none. However, some events are arranged to START at 16:00 at regular basis - this is impossible for me. Otherwise - the flexibility is excellent and colleagues are very supportive.
25	I am quite overloaded but I think everything goes well :)
26	Impossible to work full hours each week. Duties for the children (school meetings, picking up from school, household work, shopping) are very difficult to manage with just one parent. Duties take up considerable time, more than the few hours in the afternoon available after work.
27	The pressure for doing international longer term stays.
28	It is difficult to find a kindergarten close to the hospital that has places left.
29	NTNU is wonderful. Kids impact a scientific career by making it more difficult to travel for extended periods, which is often necessary career wise. Also, working long hours and in the afternoon (before the kids go to bed) cannot be prioritized. There is nothing wrong with NTNU or the system taking care of mothers in Norway. What is difficult is the amount of work that goes into a scientific career, and the amount of time and work needed to take care of 3 kids. Changing this however, is neither possible nor desirable. Both will and should take up a lot of time.
30	I had great difficulties having a Research stay abroad. Very little support from NTNU, supervisors, and generally few funding opportunities. Very hard to Complete the necessary work abroad With kids and husband had to stay home.
31	My three two-year-olds started kindergarten at the same time this fall, and they have naturally been sick a lot. However, since they are never sick more than two weeks continuously, I do not automatically get a postponement of my deadline.
32	Having enough time for the research work over all, and planning the meetings/study
33	None
34	No bad experience so far.
35	none so far
36	My bad experiences is not because of kids, but because I do not live in Trondheim and have to travle a lot to Trondheim. It is expensive and not good for family life.
37	Obligatory course (MN8000) are to be followed in Trondheim during one month meaning I'll be away from my family during this period. Besides I have no financial support that covers my travel and hotel expenses.
38	The flexibility makes it easier to work as a parent, than it was in consultancy.

#	Issue
39	I sometimes feel that I should have worked more and longer days to follow the planned progress.
40	My employer at NTNU Ålesund have been very understanding and helpful, no bad experiences.
41	In my opinion and given my previous experiences (working in another country in the Financial sector) the conditions in Norway and especially as PhD at NTNU are extremely great for families with young children!! I am surprised with the negative phrasing of this question.
42	I don't have enough time to read. And I have to hurry in the lab all the time with almost no breaks to eat something. Because of that many mistakes happen that would not happen without that much time pressure. In addition it took me at least 3months after each maternal leave to catch up again and to be able to continue where I left. Lost time that makes it very difficult to complete the PhD. To be social at work is almost impossible for me. Plus all the sick days that I have to take. And the point that all PhD students without kids who finish work much more then 37,5h a week. And have the possibility the read in the evenings.
43	Sick days are not taken into account when it comes to an extension.
44	I have experienced comments and expectations from my counsellor about working during my leave of absence (which lasts about 9 months), which I found inappropriate.
45	Staying at home with sick kids gives no extension of PhD. Although up to 15 days per year would mean 45 days or the number of workdays in two months over a three year period. When all 3 had chickenpox...
46	I treat my PhD work like i would any other job. I work 8-16. The main problem with kids is that it is tougher to meet hard deadlines that require effort beyond regular hours.
47	decisions being made regarding my PhD project while on maternity leave (resulting in considerable additional work load)
48	It is a problem that the 10 days (which de facto always extends the ten days) does not get added to the PhD time. We've gotten two children since I started, and with children of the ages 1 and 3 it is problematic to loose so many days without them getting added to the end date.
49	stay to work until 1600 is ok, but if you have experiments- you have to stay longer, or even come on the weekends
50	I have to spent time in supporting their homework.
51	When my child is sick sometimes I have to take a couple of days to care for her and sometimes the whole week off. This is time that is simply logistic from the PhD contract time and my experience unfortunately is that it adds up to many months of PhD time. Not to mention the flow that it breaks and the time to get the mind back on the PhD. I wish there was some provision, similar to sick leave that took into account the time that parents especially of small children must dedicate to caring for them.
52	I have a husband that works a lot, and I take more responsibility at home than him. That affect my PhD. I want to spend the time I do With my kids, and they are more important than my PhD.
53	Do not recall any bad experiences
54	No direct bad experiences, just that it is much harder to concentrate due to lack of sleep etc. It is also hard to work full days due to drop off and pick ups at nursery and I rarely have time or energy to work in the evenings.
55	I think NTNU and Norwegian social laws provide the best conditions and support to PhD's with kids.
56	Dette har allerede beskrevet tidligere. I tillegg mistet jeg alle driftsmidlene mine etter den første permisjonen og forlengelsen, og har siden det måttet stå med lua i hånda for den minste ting jeg ønsket å bruke penger på.

#	Issue
57	Difficult to stay home with sick kids, since there will be no additional time added to you PhD. Same when sick during pregnancy
58	I only have issues with NTNU when it comes to the contract extensions after paternity leaves. Also the amount of time you use on applications of extensions, this should be automatic as the paternity leave etc. is already registered in PAGA, still they make you fill in an application where you need to calculate your new end date. When it comes to working conditions, I think the burden for parents are that we can rarely work more than the regular hours, especially for us that don't have any relatives or other that can take care of our kids after kindergarten is closed.
59	I am very happy for the possibility to reduce working hours for this period. However, I do experience some conflicts regarding reduced work-percentage (80%) and how this is handled in regard to "working duty".
60	Sick leave practice for parents is not good enough. During their first years (kindergarten age) children are frequently sick. This is not compensated for, unless they are sick for more than 14 days. In practice, this is a considerable number of days lost in the course of a 4-year PhD period (average 10 days per year). Compared to candidates without children, parents also have less flexibility to work over-time and in evenings/weekends.
61	Very limited time to work outside working hours
62	<p>Having kids and working on a PhD is quite different than with kids and doing "normal" work. My husband works as software developer. He has concrete tasks at work, due to the nature of his work, and it makes it far easier to focus and complete them. At his company they are aware that he has children, and he gets to adjust his work to his current possibilities, of being a parent of a 1year old and a 2year old.</p> <p>When doing your PhD you are often alone, and only answer to yourself and your own pace. This can make it much more difficult to focus and do good work! There are no limits to how much I can read or write, and I tend to be stressed far more than I probably should, because I constantly feel like I am falling behind my own schedule.</p> <p>Since my "time is endless", I tend to take upon myself all of the kids' appointments, and this brings up the problem of working when kids fall asleep. That means that I sleep even less (my kids sleep very badly, especially in the winter due to stuffy nose), and that I am less focused and stressed additionally at work. I also breastfeed the younger one (until summer it was both of them), and this makes me even more fatigued...</p> <p>All PhDs I know who have small children have similar or same issues as me. Everyone is far more stressed, tired and sick more often than those with no kids, and doing a PhD is a very special kind of stress anyway. We at least own our own apartment and our kids go to kindergarten we like.</p>

### 6.1.1.3 Suggested improvements

Question: "This would really improve my life"

Note, that all responses have been edited with regards to incorrect spelling to improve readability.

#	Issue
1	C
2	Being able to bring mt child to social events (this would involve making some events "family-friendly")
3	More money
4	the happiness of having a kid
5	To get the contract extended when home with sick children
6	Extra funding for babysitters.

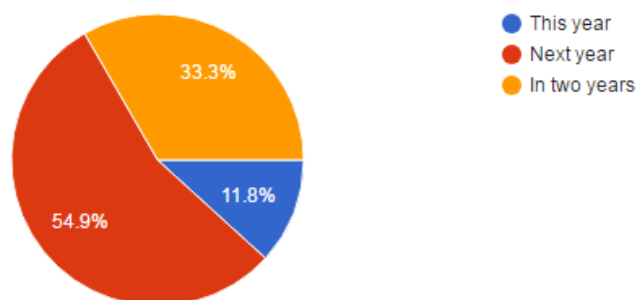
#	Issue
7	If the PhD program will take longer than 4 years (I have teaching duties as well), in such a way that we should not have to work more than 8 hours per day. Or our duties should be lowered, and still keep the 4 year contract.
8	Less courses
9	Increasing the use of online tools to follow lectures and meetings at the faculty
10	I'm overall really happy.
11	Flexibility in time schedule
12	Better office facilities. I work in a shared office where there is often noise and disturbances. Since I have little time to spend on the PhD during evenings, I need to work undisturbed during the day. This is now impossible with the current arrangement. I therefore often sit at home.
13	kindergarten for children of NTNU employees
14	Time off to breast feed, has worked excellent.
15	If my husband can live with me in Trondheim.
16	If NTNU could assist me in finding accommodation whilst studying abroad
17	Have possibility to keep my child if she is ill but not serious ill....
18	Better equipment for working from home (extra computer, screen etc.)
19	Having meetings, seminars and other arrangements of different kind within regular "office hours".
20	Flexibility on working from home at times.
21	If every day of leave because of sick children was added to my project period in the end. I would much more prefer to be compensated with extra days than economically. It would not matter to me if my salary was less for months when I was home with sick kids, as long as my project period was extended.
22	If my children were healthy. Since this is the only place to comment: Do remember that NTNU is more than Trondheim. There are PhD - candidates at Gjøvik and Ålesund as well.
23	If someone moved some mountains to Trondheim...
24	...if the NTNU workout at Gløshaugen Idrettsbygget on Tuesdays started at 14:30 instead of 15 :-)
25	I do not have too much spare time now and fully occupied by child caring and research. However it is amazing to spend your time with a little angel at home and have too much to do at work :) I feel quite effective now :)
26	Possibly of finding a kindergarten close to the institute
27	Extra time (one extra year to complete the PhD for example) for single parents (not shared because these parents get to work longer hours on the days when they don't have to care for the kids) with same salary.
28	A more nuanced conceptualization on mobility, internationalization and how it relates to "excellent" research. Also, more financial support for whole family stay abroad research visits.
29	More flexible start at the kindergarten (not only 1st of August)
30	If my colleagues understood what it implies to have kids. If I didn't need to sleep. Sorry for being unhelpful (though honest), but really, maternity privileges in Norway (and NTNU) are the best in the world.
31	It would be easier if there was more support for female PhD candidates With kids ie, career advice, Financial support for abroad stays and maybe longer time to finish the thesis for parents With small kids

#	Issue
32	More personal engagement from the school/institute in this problem
33	Not directly related to having children, more like having family here: Better accommodation upon arrival to Trondheim with the family (and maybe more cheap). Until now I managed to find ok place to live. Also, better support for integration in the society (i.e. the department is not covering for the language course, making it even more expensive since we cannot then have NTNU language course). Now, me nor my wife speaks Norwegian, but my daughter does.
34	A kindergarten on campus and with sufficient vacancies for PhD's and Postdocs and probably with a somewhat international focus. This kindergarten could be something like those åpen barnehage but with some minimum staff just to keep the kids safe and occupied. They could offer also partial time vacancies.
35	barnehager som ikke stenger 2-3 uker i en bestemt periode i sommerferien, men som har "fritt" uttak av 3 ferieuker i løpet av sommeren. I tillegg synes jeg det er et problem at barnehagene er stengt i romjul, i arbeidsdagene mellom palmesøndag og skjærtorsdag, i tillegg til 2 dager høstferie og vinterferie.
36	A baby-sitter
37	More digital teaching so I don't have to travel to Trondheim so much.
38	If I could follow the obligatory course by Skype as I did for other courses
39	Taking a PhD improves life, is a fantastic flexibility as compared to real-life jobs :-)
40	More time
41	To have a kindergarten that is closer to work
42	More intensive and online PhD-courses! I'm working and living in Ålesund, so PhD-courses in Trondheim that last a semester are difficult for me. I've become good at shopping courses from all other universities.
43	Better remote/from home participation possibilities in attendance - both courses, supervision, cross-campus research sharing and meetings. More relevant courses that fit my schedule. More collaboration.
44	Moving to Norway and starting as PhD really improved my Family life.
45	To get some additional months for each kid I have.
46	Subjects for PhD students (the 30 ECTS) need to have a fixed schedule months in advance. Changing days and times on short notice makes it impossible when you have to juggle a clinical study, 3 kids and additional job.
47	More money. Less fat and more muscles.
48	Sick days added to the contract time.
49	Being done with PhD
50	???
51	It would definitely ease my mind a bit if there was a provision for a more substantial amount of time dedicated to parents of small children. For instance, an allowance of 20 to 30 days per year added (if need be...which it is) to the contract time of PhD students with children under 5. It would also be helpful if it was encouraged that PhDs took a longer break during the workday, for instance to go for a walk, to the gym, or to yoga. Beyond encouragement, allowing for 4 to 6 hours per week for this (these could be added time so long as it could be document edited the use of those hours for that purpose). I think a mind-body balance is extremely important and that this would have immediate and long-term positive results.
52	Reduce work load, work 'officially' 80%
53	Extended time (e.g. + half a year) of the PhD project to complete the course work

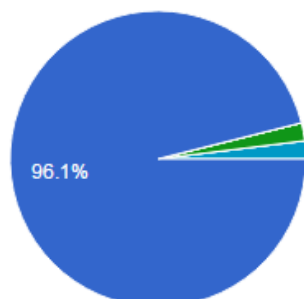
#	Issue
54	Getting a place in a kindergarten close to where I live or work.
55	Improved salary
56	Longer deadlines for essays/homework in the phd courses, or flexible deadlines. It is much harder to plan the work when you have kids as you suddenly have a week off with sick kids or need to prioritise other things etc.
57	A kindergarten at university with English speaking teachers for all international and temporary researchers at NTNU, like PhD's who have kids.
58	At alt det praktiske og formalitetene rundt forlengelser o.l. skulle gått problemfritt, uten at jeg måtte sende en drøss med mailer og bli møtt med mistroiskhet på fakultetsnivå (unntaksvis også på instituttnivå)
59	Get NTNU to change its rules of extensions as has been done in UiO and UiB to accommodate parents with young kids. I mean this rules should be common for all of Norway. As it is now, I will not recommend any PhD students to have children during their PhD period at NTNU.
60	To have a kindergarten-place near me
61	Regular practice is a quota of 10 days per year for staying home with sick children. In average, that is 40 days in the course of a 4-year PhD for a candidate who has children from the beginning, as was the case when I started. The same rights for staying home with children should be granted for PhD parents. In addition, I support the idea of the "gjenoppstartsstipend", since it does take time to get back into the flow of research.
62	An extension on the time-frame of my position/scholarship for about three months because of time spent on child-care
63	Good guidance for parents doing PhD - how to make it more efficient. Perhaps some help, time-wise. Our "endless" time is ticking, and that makes it a huge difference comparing to every other job! Far more stress!

### 6.1.2 PhD students planning to have kids

When are you planning to/will you have kids (51 responses)

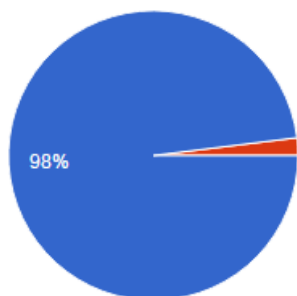


Will your kid be living with you? (51 responses)



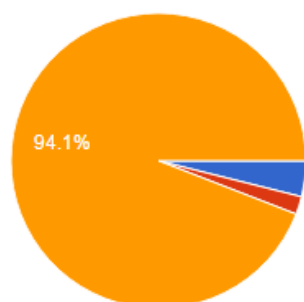
- Yes.
- No, but in Trondheim.
- No, but in Sor-Trondelag.
- No, but in Norway.
- No, but in the EU/EAA.
- No.

Are you in a relationship? (51 responses)



- Yes
- No
- Other

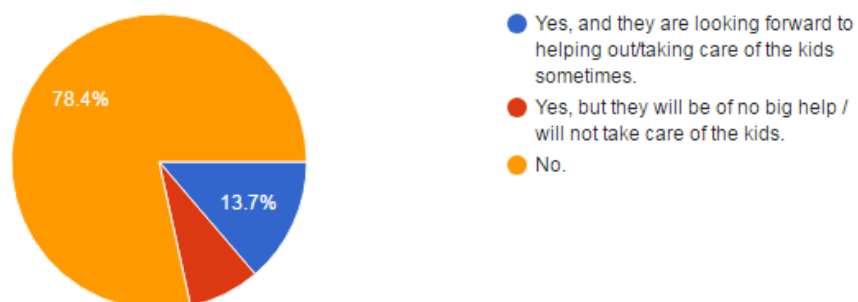
Will you be single-parenting? (51 responses)



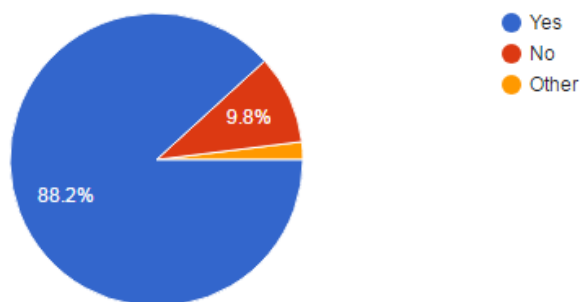
- Yes.
- Yes, but other parent lives in/near Trondheim.
- No.



Do you have relatives (parents/brother/sister/...) in Trondheim? (51 responses)

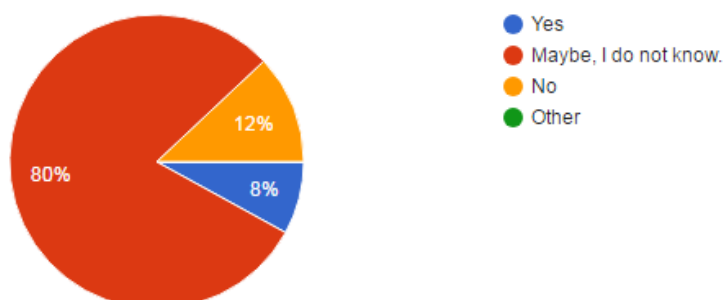


Are you planning to take parental leave during your PhD studies? (51 responses)



Do you feel the university supports PhDs with kids to travel abroad for extended periods, e.g. research stays abroad?

(50 responses)



## I think that having kids will impose (50 responses)



## 6.1.2.1 Bad experiences

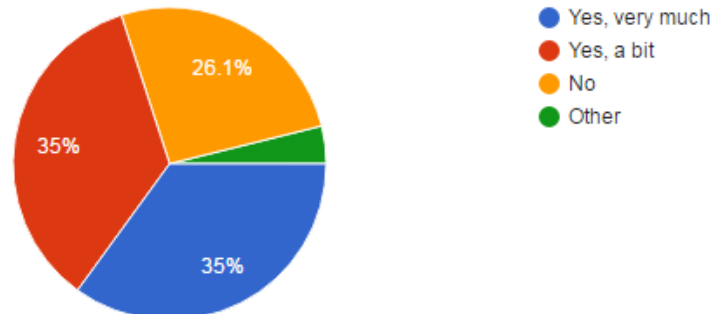
Question: "I have had the following bad experiences related to getting kids and working conditions at NTNU"

Note, that all responses have been edited with regards to incorrect spelling to improve readability.

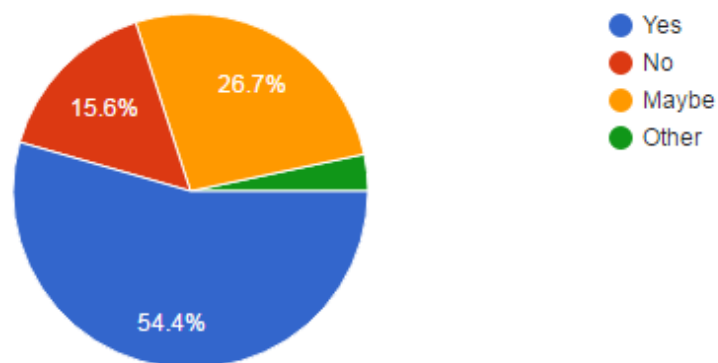
#	Issue
1	I do not know.
2	No bad experience. I am currently pregnant and have no bad experience at work with that.
3	Yes, I think it's really difficult, especially the first kid.
4	Bad
5	Unknown
6	Oppfølgingen fra instituttet har vært mangelfull, jeg har savnet at noen har tatt initiativ til å gi meg informasjon om hvilke rettigheter og plikter jeg har som gravid arbeidstaker, hvem jeg skal henvende meg til om jeg har spørsmål og lignende. Jeg har funnet ut alt på egenhånd, men har fått god hjelp fra fakultetet da jeg har kommet dit med spørsmålene mine. Det hadde vært en bedre opplevelse å være gravid arbeidstaker om man følte at noen "brydde seg".
7	No
8	Scientific staff still believes that PhD is something that should out-conquer all other activities and social life. Mind set often anchored to 1950s view with a man all at work, wife and kids home and away.

### 6.1.3 PhD students without kids

Does your employer's policy on parental leave matter to you? (360 responses)



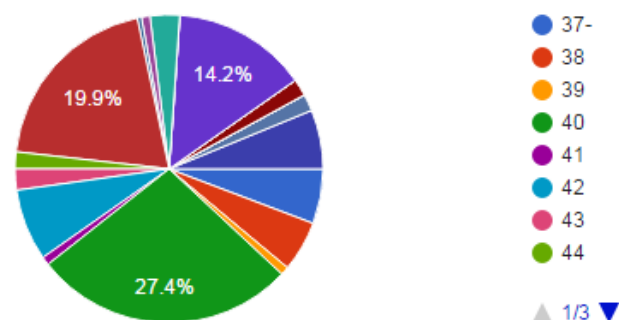
Have you thought about having kids in the future? (360 responses)



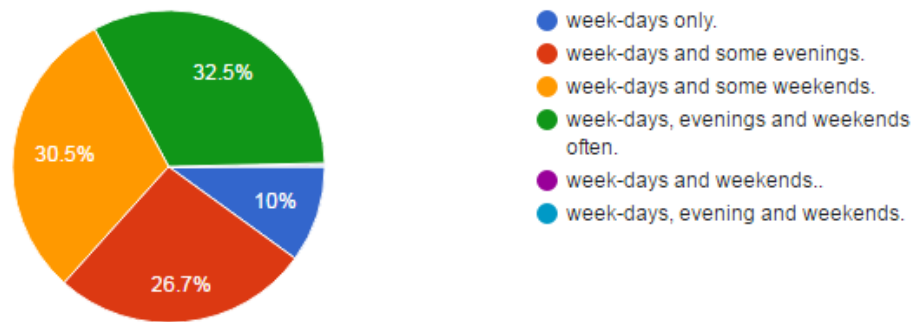
### 6.1.4 Work situation (All groups)

Whats your estimate of your total (including evenings and weekends) weekly work hours?

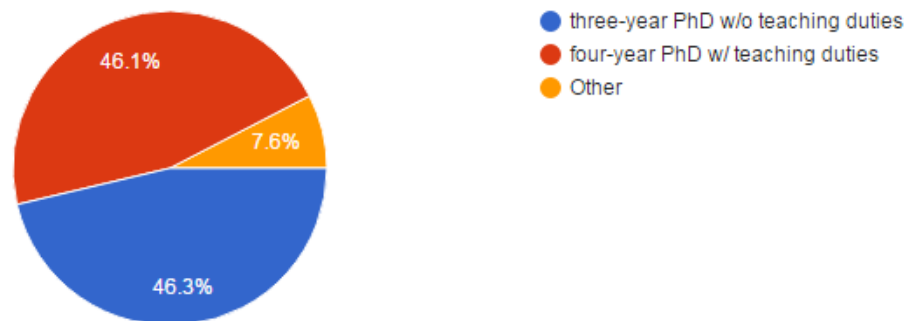
(226 responses)



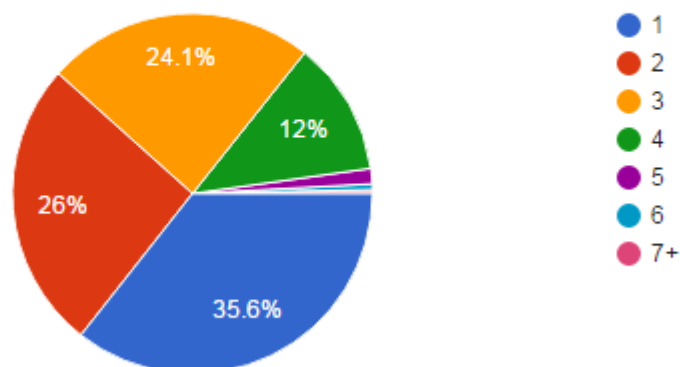
I work on... (581 responses)



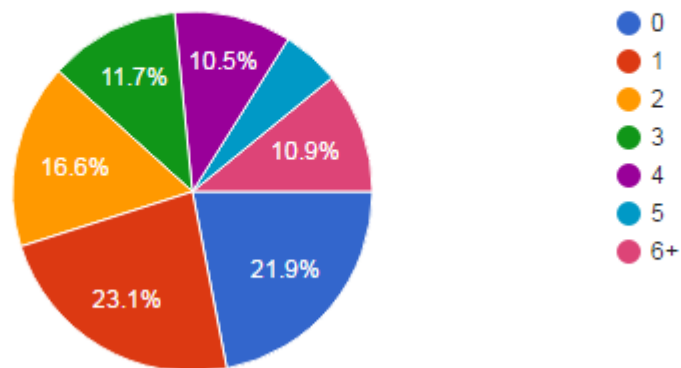
I have a... (579 responses)



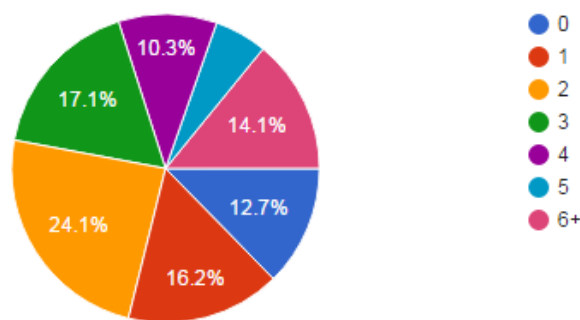
Which year are you in your PhD? (581 responses)



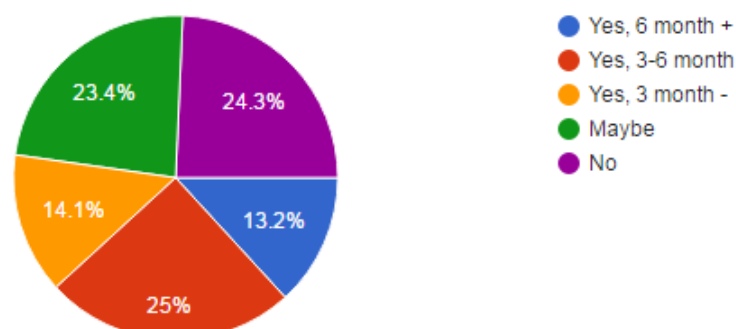
How many conferences have you attended so far? (579 responses)



How many conferences are you planning to attend in the future? (561 responses)

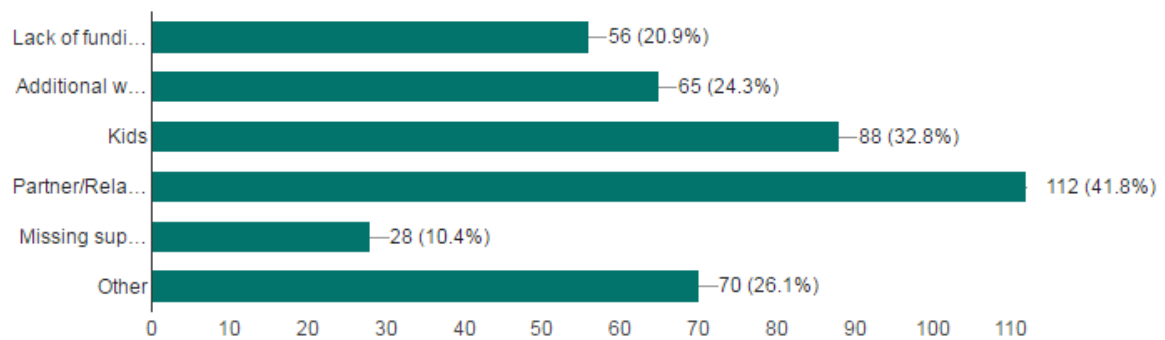


Are you interested in doing a research stay abroad during your PhD?  
(576 responses)

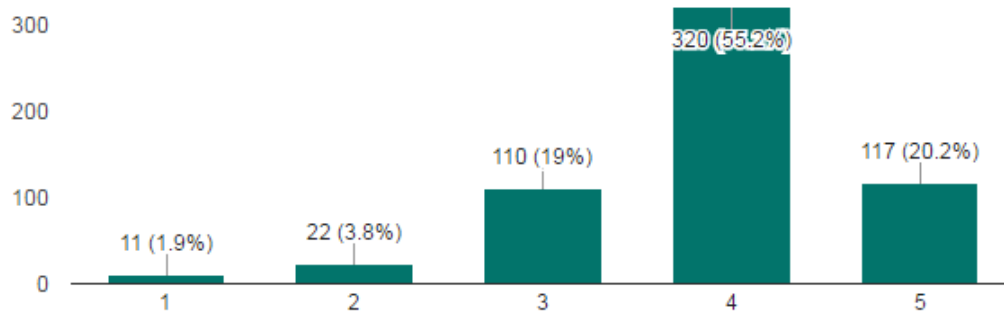


### If not, why? , because of funding, because of relatives/partner, other...?

(268 responses)

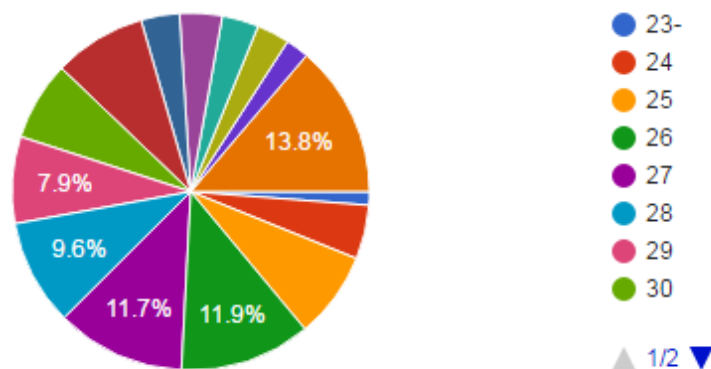


### I rate my work situation/working conditions at NTNU... (580 responses)

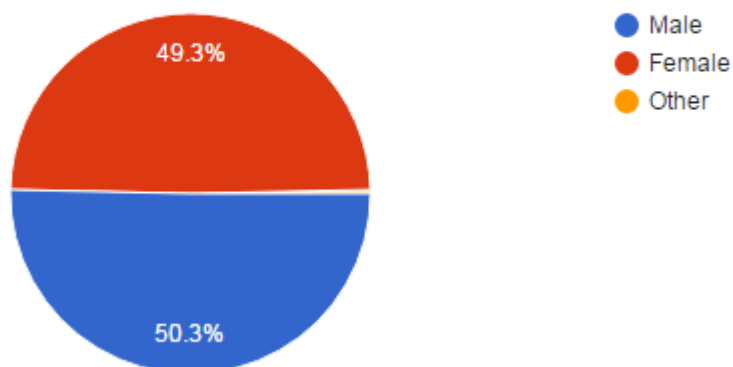


## 6.1.5 General information

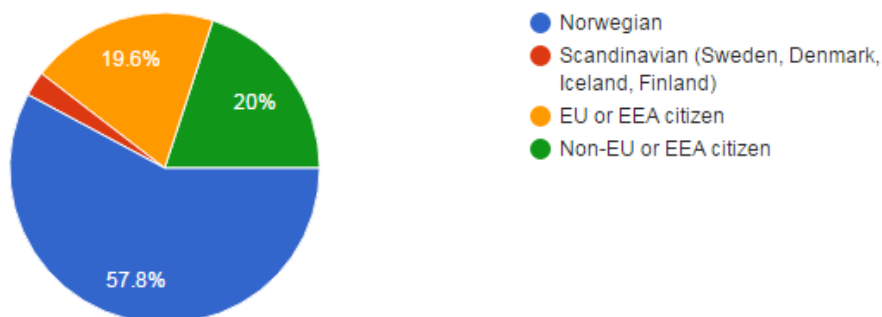
### What is your age? (573 responses)



### What is your sex? (580 responses)



### What is your nationality? (581 responses)



## 6.2 Raw data



PhD\_with\_kids.csv



PhD\_with\_kids\_Graphs.pdf

Please see attachment section in the sidebar.

## 6.3 Analyzed data



Analysis\_PhD\_with\_kids.xlsx



Analysis\_PhD\_with\_kids.ods

Please see attachment section in the sidebar.