



Results PhD Survey 2021 Leiden University & LUMC

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Universiteit
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Results PhD Survey 2021

Report for

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Executive summary

In order to monitor the experiences of PhD candidates at Leiden University and LUMC, a survey study was conducted in 2021. The results of this study are presented in this report and can be used to learn about PhD experiences but also to further improve supervision, facilities and regulations. Most questions were adopted from the national PhD survey 2021, which has also been conducted at other Dutch universities. The most important result are summarised below.

Profile

In total, 624 PhD candidates from all graduate schools responded to the questionnaire. This represents 17% of the total PhD population at LEI and LUMC. Most (65%) respondents were internal PhD candidates with an appointment at LEI/LUMC. 15% were contract PhDs who receive a grant or scholarship in their country of origin which enables them to conduct their PhD research. 20% were external PhDs who do not in principle receive any funding. They write their thesis (often alongside their regular work) under the supervision of a supervisor from LEI/LUMC.

Research facilities (pre-COVID period)

The majority of the PhD candidates were generally satisfied with the research facilities, e.g. library, workplace, computer & software. A small percentage of the PhD candidates, mainly external PhD candidates, did not have access to a workplace, computer & software, or research facilities.

Supervision

A supervisory team generally consists of 2 or 3 people. Almost half of the PhDs consider their co-supervisor, or one of their co-supervisors, and not their PhD supervisor as daily supervisor. Internal and contract PhD candidates receive on average 6-6.5 hours/month of supervision from their supervisory team. External PhD candidates receive less supervision, on average 4 hours/month. Overall, 3 out of 4 PhD candidates are satisfied or very satisfied with the supervision they receive.

Training activities

95% of the PhD candidates have access to at least one type of training activity. With regard to career orientation activities, one third are not aware that these activities are organised by the university or the graduate schools. In general, the majority are satisfied with the activities that are offered. However, PhDs sometimes lack time to participate in training activities.

Teaching duties

Most internal PhD candidates have teaching responsibilities. On average they spend 2.8 hours/week on teaching (e.g. lectures, practicals) and 2.6 hours/week on supervision of students. However, only 1 out of 3 internal PhD candidates have access to teacher training.

Support structures & wellbeing

86% of the internal PhD candidates indicate that they have yearly R&O interviews with their supervisor(s). In contrast, 1 out of 3 PhDs has been invited for annual or biannual monitoring process meetings with an independent staff member or PhD coordinator from their institute or department. With regard to progress, 4 out of 10 PhD candidates indicate that they have fallen behind schedule, with an average delay of 6 months. The majority of the PhDs experience a high workload. Internal PhD candidates experience on average a higher work load compared to contract and external PhDs. The impact of the PhD track on the wellbeing of PhD candidates shows mixed results. External PhDs experience on average a more positive impact compared to internal and contract PhD candidates. The majority of the PhD candidates feel that a psychologist for PhD candidates is needed to support them.

Career ambitions

After completing their PhD, half of the candidates would like to continue their research career within academia. Contract PhD candidates are most interested in an academic research track.

COVID-19 pandemic

Overall, the pandemic has had a negative impact on both the PhD track and the mental health of the PhD candidates. They have experienced various disruptions to the usual research practices, e.g. data collection. Also, they reported fewer (opportunities, both formal and informal, to present, discuss and disseminate their research findings. In addition, there is limited scope to build networks. Regarding mental health, PhDs reported higher perceived stress levels due to the negative impact of the pandemic on their PhD track.

General Satisfaction with PhD track

The average satisfaction score is 6.5 on a scale from 0 to 10. There are no differences in satisfaction among internal, contract and external PhD candidates

Recommendations

The survey outcomes resulted in recommendations on six themes aimed at further improving supervision, facilities and regulations: engagement of external PhD candidates, teaching skills, transferable skills, career development, monitoring meetings and mental health.

1. Introduction

In order to monitor the experiences of PhD candidates at Leiden University and LUMC, a survey study was conducted in 2021. The results of this study are presented in this report and can be used to learn about PhD experiences but also to further improve supervision, facilities and regulations. Most questions were adopted from the national PhD survey 2021, which has also been conducted at other Dutch universities. However, we also formulated 5 specific LEI/LUMC questions.

We invited graduate school coordinators, deans and the Strategy and Academic Affairs Department to give their input to the design of these LEI/LUMC-specific questions. The final questionnaire consisted of 47 questions and it took 10-15 minutes to complete. In order to reach the PhD candidates, a news item about the PhD survey with the link to the online questionnaire was included in the March 2021 newsletter for PhD candidates. In total, 624 PhD candidates responded to the questionnaire, which represents 17% of the total PhD population at LEI and LUMC (n=3,750).

2. Results

2.1 Profile of PhD Candidates

Among the respondents participating in the survey, 61% were women and 37% men (5 respondents described their gender as ‘non-binary’ and 8 respondents preferred not to give their gender). The average age of the respondents was 31 years (range 22-75 years). 28% (n=171) of the respondents were in the first year of their PhD when answering the questionnaire. 59% (n=363) had Dutch nationality, 16% (n=99) were international PhD candidates from EER countries and 25% (n=154) were non-EER PhD candidates. As shown in Table 1, PhDs from all the graduate schools responded: LUMC (31%, n=193), science (27%, n=166), humanities (15%, n=91), social and behavioural sciences (13%, n=82), legal studies (7%, n=43), Governance and global affairs (4%, n=24) and archaeology (3%, n=21).

Graduate School	Number of respondents	Percentage	Percentage of total PhD candidates
LUMC	193	31.1%	35% (n=1312)
Science	166	26.8%	24.5% (n=917)
Humanities	91	14.7%	18.4% (n=690)
Social and Behavioural Sciences	82	13.2%	7.4% (n=282)
Legal Studies	43	6.9%	9.4% (n=352)
Governance and Global Affairs	24	3.9%	2.9% (n=107)
Archaeology	21	3.4%	2.4% (n=90)
Total	620	100%	100%

Table 1: Overview of responding PhD candidates (question 12). 4 out of 624 did not answer this question.

Most (65%, n=404) respondents were *internal PhD candidates* with an appointment at LEI or LUMC. 15% (n=94) were *contract PhDs* who receive a grant or scholarship in their country of origin which enables them to conduct PhD research at LEI/LUMC. 20% (n=126) were *external PhDs* who conduct their PhD research in their own time and with their own means or partly during working hours for their external employer.

74% (n=457) of the respondents were working full-time (36 hours per week or more) on their PhD project, 18% (n=112) were working part-time between 12 and 36 hours and 4% (n=27) were working less than 12 hours per week on their PhD project. Most PhD candidates (69% n=429) agreed at the start on an official duration of 4 years.

However, 10% (n=67) had a PhD track of less than 4 years. 8% (n=50) agreed on a duration of more than 4 years. 60 PhD candidates (10%) did not have an official duration for their PhD track as they work on their PhD project in their own time.

2.2 Research Facilities

The questions in this section were only asked of respondents who started their PhD before the COVID-19 pandemic. 2 out of 3 respondents were working on their PhD project in this period. Before the pandemic, all PhD candidates, apart from 4, had gained access to the library and the majority were satisfied or very satisfied with the library facilities. Around 10% of the PhD candidates, mainly external PhD candidates, did not have access to a workplace, computer & software, or research facilities. The majority of those that did have access were generally satisfied with the facilities (see Figure 1). Satisfaction with computer and software facilities received the lowest scores: 15% of the respondents were not satisfied with these facilities.

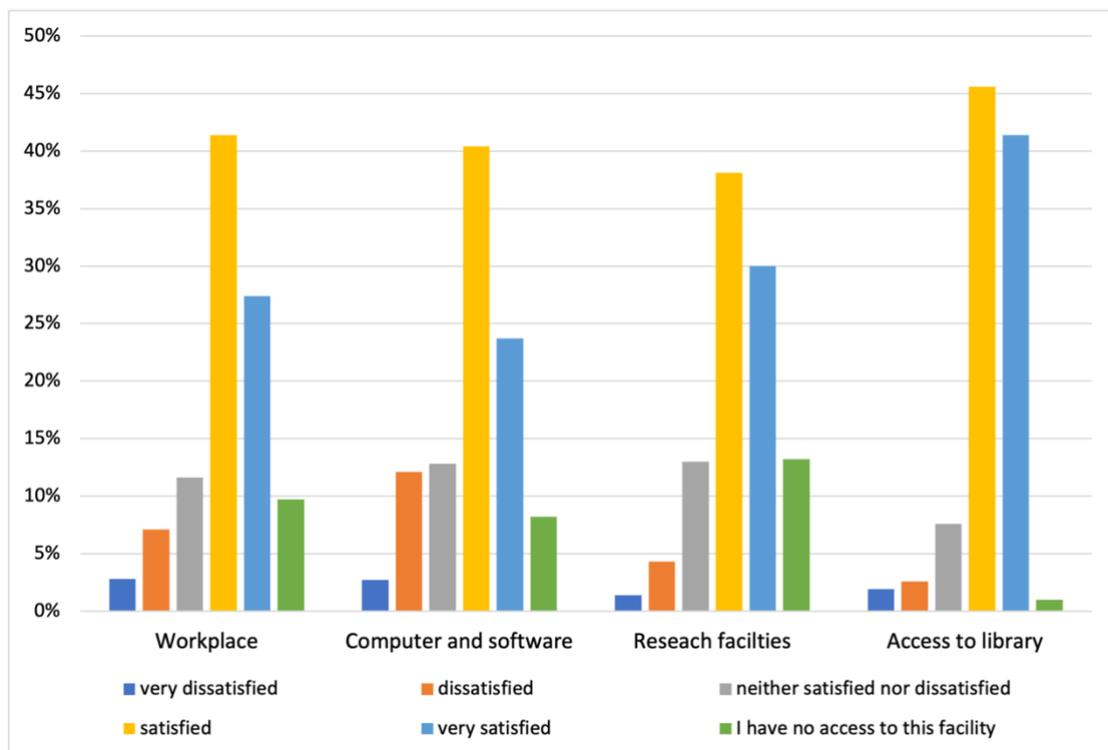


Figure 1: Satisfaction with facilities before the COVID-19 pandemic (question 15)

2.3 Supervision

A supervisory team generally consists of 2 or 3 people. In 21 PhD tracks there is only 1 supervisor assigned. 12 respondents reported that their supervision team was not officially documented at the time that they responded to the questionnaire. 14 respondents did not know the official size of their supervisory team. 96% (n=598) of the PhDs knew who was officially assigned as supervisor. In 18 PhD tracks this had not yet been decided and another 7 respondents did not know. 55% of the PhD candidates do not consider their supervisor as their daily supervisor. 47% consider their co-supervisor or one of their co-supervisors as their daily supervisor. 22 PhD candidates responded that someone from outside the supervisory team (e.g. a postdoc) acts as a daily supervisor.

Internal and contract PhD candidates receive in general 6-6.5 hours of supervision per month from their supervisory team. External PhD candidates receive less supervision, on average 4 hours/month. Overall, 72% of the responding PhD candidates are satisfied or very satisfied with the supervision they receive (see Figure 2). In contrast, 14% are dissatisfied or very dissatisfied. No differences were found in the type of PhD candidate. As shown in Table 2, we did find small differences among graduate schools.

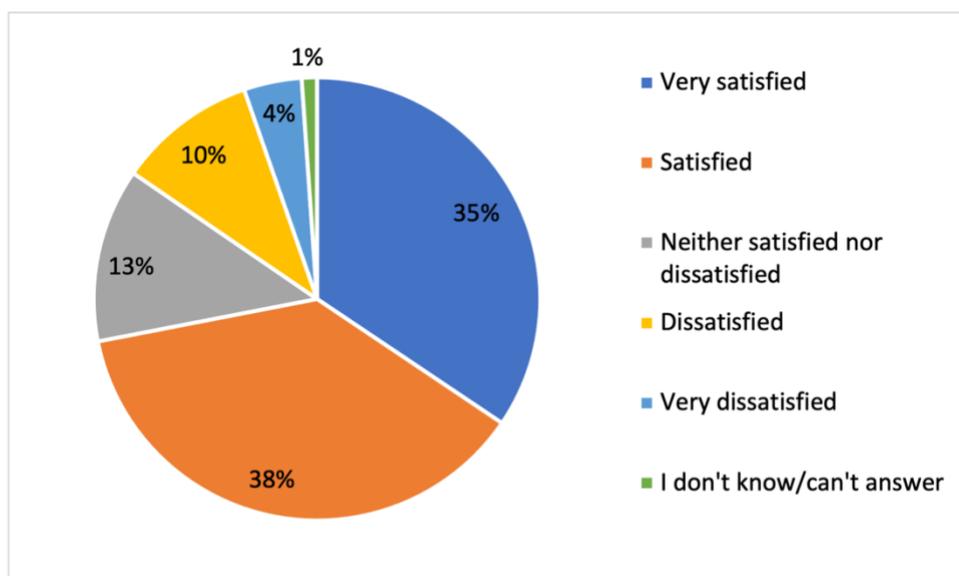


Figure 2: Satisfaction with supervision (question 21)

Graduate School	(Very) dissatisfied	Neutral	(Very) satisfied	Number of respondents
LUMC	19 (10%)	26 (14%)	148 (77%)	193
Science	32 (20%)	27 (16%)	106 (64%)	165
Humanities	19 (21%)	8 (9%)	62 (70%)	89
Social and Behavioural Sciences	9 (11%)	8 (10%)	63 (78%)	80
Legal Studies	5 (12%)	6 (15%)	30 (73%)	41
Governance and Global Affairs	1 (4%)	2 (8%)	21 (88%)	24
Archaeology	4 (19%)	2 (10%)	15 (71%)	21
Total	89 (15%)	79 (13%)	445 (73%)	613

Table 2: Satisfaction with supervision by graduate school (question 21)

2.4 Education and Training

95% of the PhD candidates have access to at least one type of education and/or training activity. The majority have access to skills courses and workshops (87%), seminars and conferences (82%) and discipline-specific courses and workshops (70%). Fewer than half of the responding PhD candidates (45%) indicated having access to career orientation activities. The phase of the PhD is important here as 65% of PhD candidates in their first year responded that they have no access compared to 51% of the senior PhD candidates. Teacher training is less often accessible for PhD candidates (29%) compared to other training activities. External PhD candidates have the lowest percentages: 20% have access to teacher training, compared to 33% of the internal and 28% of the contract PhDs. The lack of teacher training is remarkable as the majority of PhD candidates indicate that they are involved in teaching activities (see section 2.5).

The 'Scientific Conduct' course is compulsory for PhD candidates to attend as part of their PhD education programme. In addition, the majority of the respondents (67%) indicate that they have to participate in obligatory courses such as discipline-specific courses/workshops or general skills courses/workshops as a part of the PhD training.

Most internal PhD candidates (78%) indicate that they never have to pay a fee themselves to attend education and/or training activities. This is related to the type of PhD candidate as 33% of the contract PhDs and 43% of the external PhDs do have to pay fees in this regard.

As shown in Figure 3, the majority of PhD candidates are satisfied with the education and training that are offered. Looking at career orientation activities, one third of the respondents are not aware that those kind of activities are organised by LEI/LUMC and/or their graduate schools. Availability is sometimes a problem as almost 20% of

the PhD candidates indicate that they lack time to participate in education activities/training.

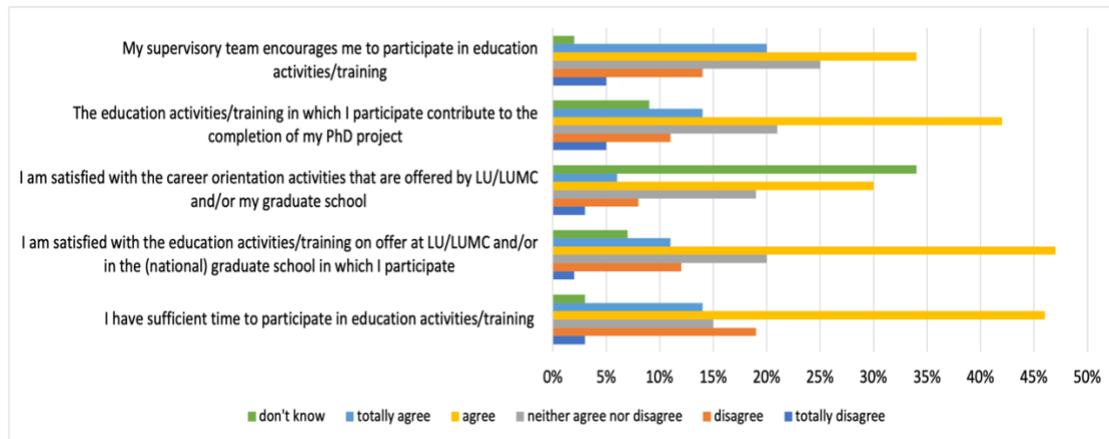


Figure 3: Satisfaction with education and training (question 26)

2.5 Teaching Duties

72% (n=442) of the PhD candidates are currently involved in teaching and/or supervising students or are planning to do so in the near future at LEI/LUMC. The type of PhD is important as 84% of the internal PhDs have teaching responsibilities compared to 63% of the contract and 40% of the external PhDs. 180 out of 442 PhD candidates indicate that they carry out teaching activities although those tasks are not part of their employment contract with LEI/LUMC or agreements with their supervisory team. 145 (24%) PhD candidates are not involved in teaching activities, of whom 84 indicate that they are not allowed to teach. 8 respondents have teaching aspirations but explain that this is unfortunately not possible within the research group/department.

PhD candidates with teaching tasks spend on average 2.8 hours per week on teaching (e.g. lectures, practicals) and 2.6 hours per week on supervision of students (e.g. bachelor's/master's thesis supervision). As shown in Figures 4a and 4b, there is a huge variation among PhD candidates in the number of hours that are spent on teaching.

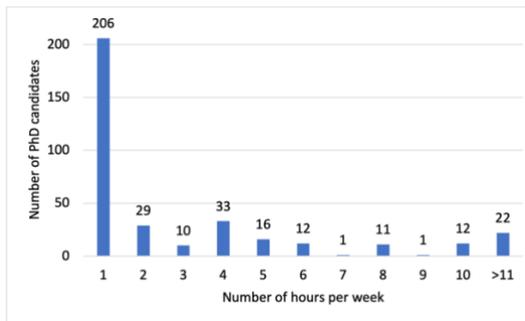


Figure 4a: Number of teaching hours/week (question 28)

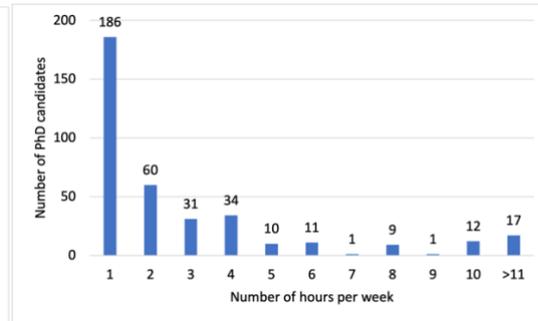


Figure 4b: Number of hours on supervision /week (question 29)

2.6 Support Structures and Wellbeing

3 out of 4 PhD candidates are familiar with the LEI/LUMC PhD organisations, e.g. LEO, LAP, and faculty PhD councils. However, only 66 (11%) of the respondents participate on a regular basis in activities that are arranged by these organisations.

R&O interview

77% of the PhD candidates (n=465, see figure 5) indicate that they have a performance and development (R&O) interview with their supervisor(s) on an annual basis. 14% (n=84) do not have annual R&O interviews and 9% (n=55) indicated they do not know. The type of PhD candidates is important as 30% of the external PhDs do not have R&O interviews compared to only 8% of the internal PhD candidates. The percentage of contract PhDs who do not have R&O interviews is 19%.

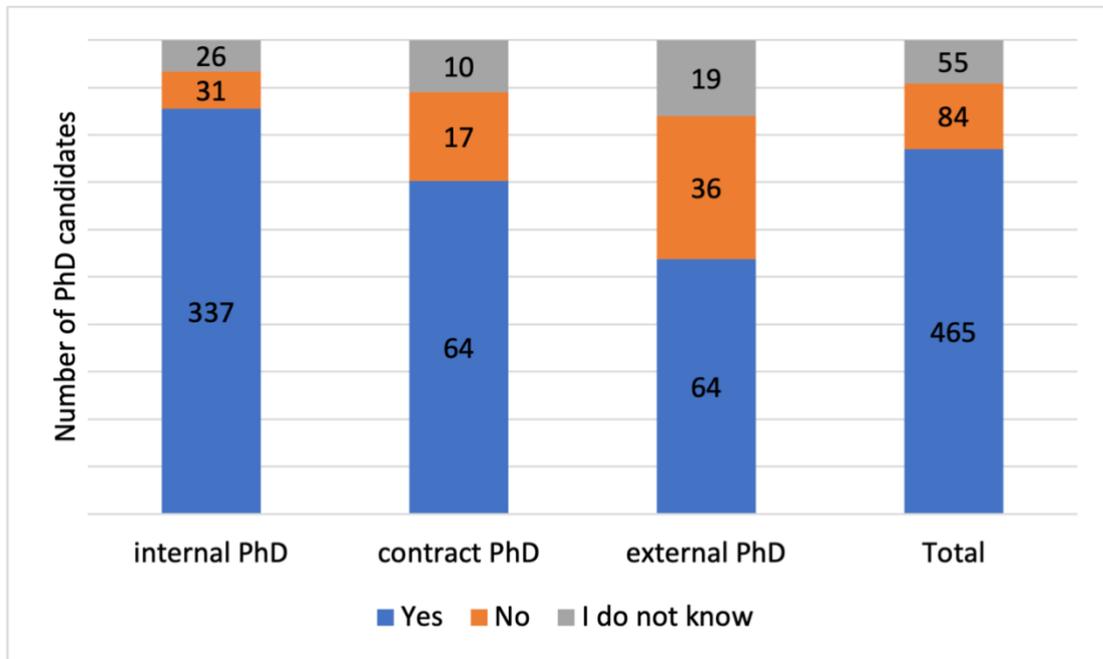


Figure 5: Annual R&O interview by type of PhD candidates (question 31a, number respondents)

In total, 230 PhD candidates responded to the open question regarding experiences of R&O interviews (see Figure 6).

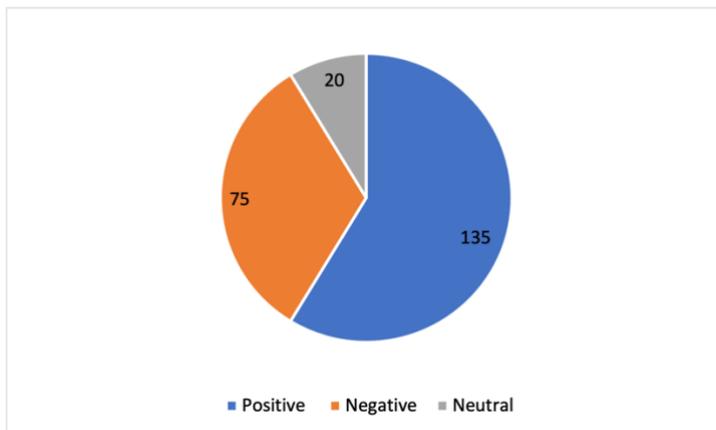


Figure 6: The experiences of PhD candidates regarding R&O interviews (question 32, number of respondents)

Three examples of positive experiences:

'My annual R&O meetings are going well, I can reflect on my experiences within the past year, what I liked and disliked, what went well and what I found more difficult.'

Also I receive constructive feedback about which things are going well, and what can be improved for the next years. We also discuss my dissertation planning and plans for personal growth and training/courses options.'

'It gives a nice overview of my own development and an opportunity to discuss supervision or other non-scientific related subjects. I think it is of added value and helps me in my development'.

'...useful to receive and provide feedback and share expectations with supervisor...'

Three examples of negative experiences:

...'uncomfortable! I don't enjoy these meetings, they feel like an interrogation and I can never do enough. A lot of attention to negatives'.

'Very narrow assessment of students with no attention to good scientific practices (e.g. FAIRness) or other scientific activities beyond teaching and research. Also, the 4 paper quotas for graduation are very arbitrary and do not take into consideration quality and time investment. I feel a bit like a number that needs to produce papers rather than being stimulated toward quality research and high scientific standards.'

'In general, I don't find these meetings useful. There is limited feedback and it feels more like a thing that needs to be checked off the list.'

Monitoring meeting

Only 1 out of 3 PhD candidates (n=194) have been invited for an annual or biannual monitoring process meeting with an independent staff member or PhD coordinator from their institute or department. Half of the respondents did not yet have a monitoring meeting and others (18%, n=106) did not know. As shown in Figure 7, no differences in the type of the PhD candidate was found.

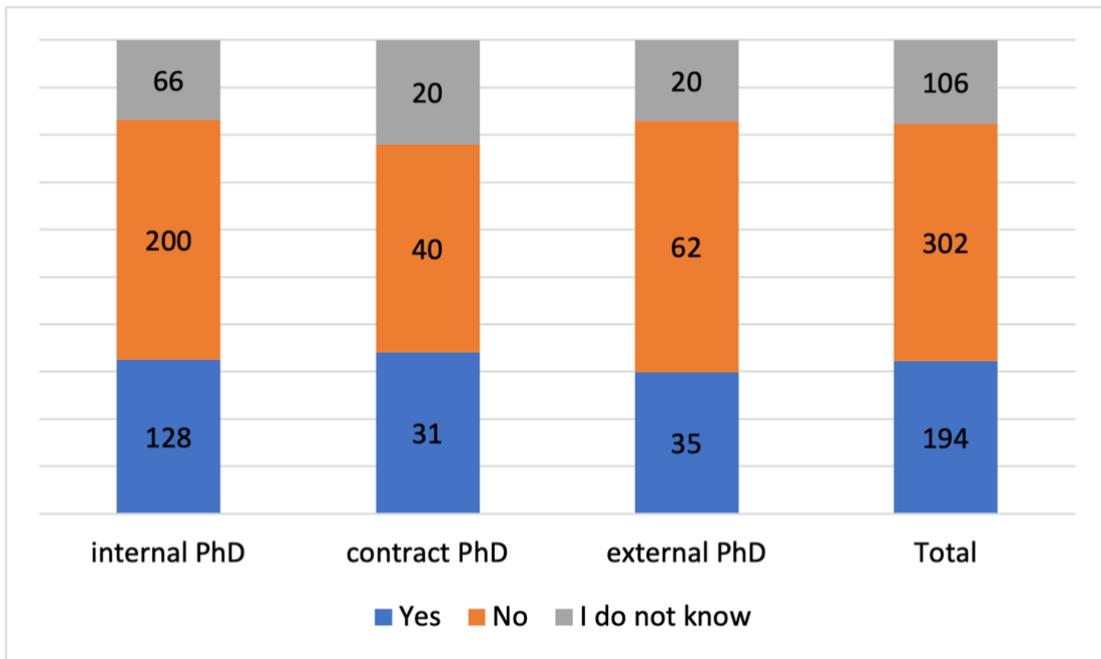


Figure 7: Monitoring meetings by type of PhD candidates (question 31b, number of respondents)

In total, 104 PhD candidates responded to the open question regarding experiences of R&O interviews (see Figure 8).

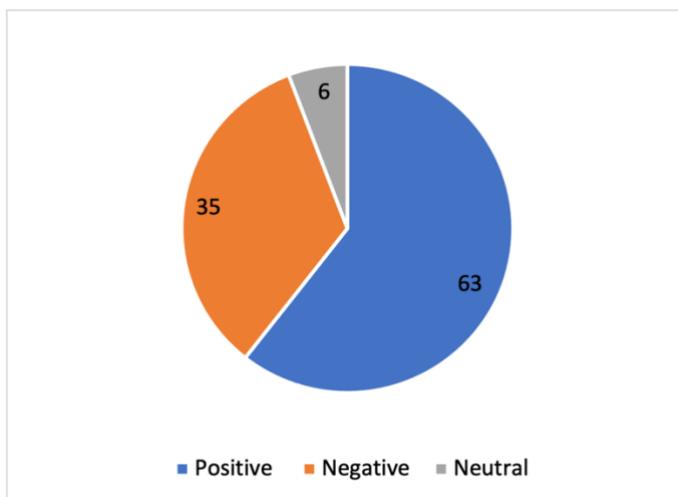


Figure 8: The experiences of PhD candidates regarding monitoring meetings (question 32, number of respondents)

Three examples of positive experiences:

'Very useful meeting to get a good overview..., check whether I am on schedule, new insights, need to think already about further career steps, and reflection on training, courses and conferences'

'Introduced me to the regulations and supervision and training plan'

'Constructive, supportive, experienced'

Three examples of negative experiences:

'awkward, not sure how much I can/should tell the PhD coordinator'

'Very useless, coordinator is not independent, so the topics that can be discussed are limited'

'I don't find them useful. The independent staff member does not have a good overview of the student's work/personal situation, and the meetings are far too brief (20 minutes) to really help the student'

As shown in Table 3, there are differences across graduate schools regarding support structures. The percentages of internal PhD candidates from the Graduate school of Humanities (79%) and Legal Studies (81%) that had an R&O interview are lower compared to the other graduates schools. With regard to monitoring meetings, PhD candidates from the graduate school of Legal Studies have the lowest percentages, only 12% reported having been invited for a monitoring meeting. In contrast, 86% of the responding PhD candidates from the graduate school of Archeology had a monitoring meeting(s).

Graduate School	R&O interview with internal PhDs	Monitoring meetings
LUMC	84%	31%
Science	84%	26%
Humanities	79%	37%
Social and Behavioural Sciences	91%	36%
Legal Studies	81%	12%

Governance and Global Affairs	100%	43%
Archaeology	100%	86%
<i>Total Average</i>	<i>86%</i>	<i>33%</i>

Table 3: Support structures, percentage of PhD candidates by graduate schools

Progress

43% of the PhD candidates report that they are on schedule. Almost the same percentage of PhD candidates (42%) indicate that they have fallen behind schedule (see Figure 9). A few candidates do not know their progress (5%) or do not - yet - have a schedule for their PhD track (8%). There are only very small differences in the progress experienced among the types of PhD candidates.

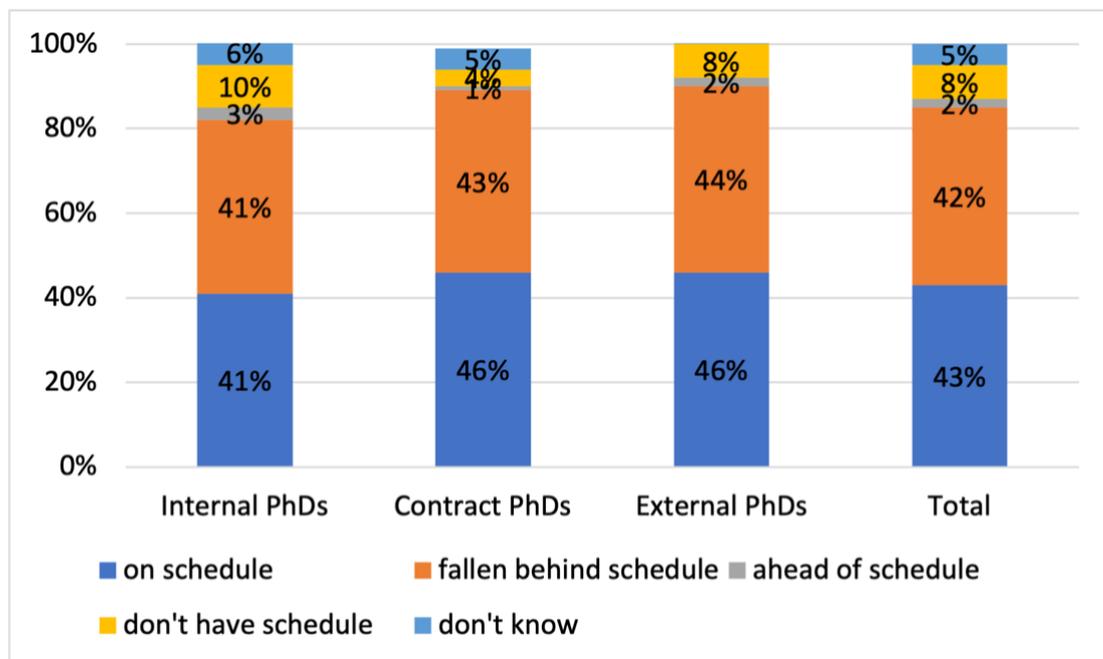


Figure 9: Progress of the PhD project/track (question 33)

The length of the expected delay is shown in Figure 10. 1 out of 3 respondents (33%, n=84) believe that the length of their delay is somewhere between 3 and 6 months. Almost 1 out 4 respondents (22%, n=57) anticipate on a long or longer delay of more than 9 months. Over half of the delayed PhD candidates (52%) are of the opinion that they need an extension because of the impact the COVID-19 pandemic has on their PhD project. 26% do not yet know whether their PhD track needs to be extended.

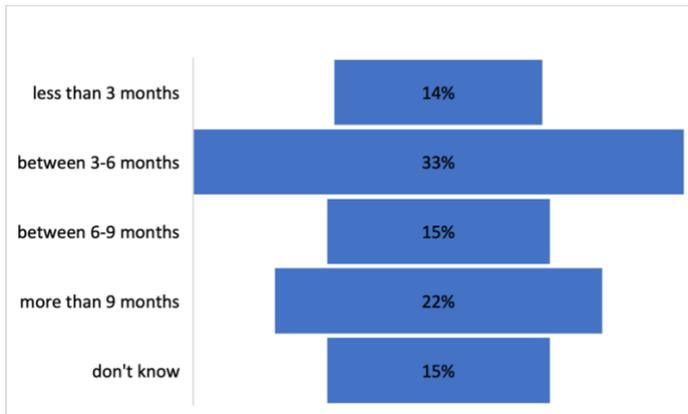


Figure 10: Expected delay of the PhD project/track (question 34)

Workload

Half (50%) of the respondents experience the workload in their PhD project as high, and a further 13% as too high. 35% of the PhD candidates describe their workload as normal. A low or too low workload is hardly experienced. Internal PhDs experience on average a higher workload compared to contract PhDs and external PhDs (see figure 11).

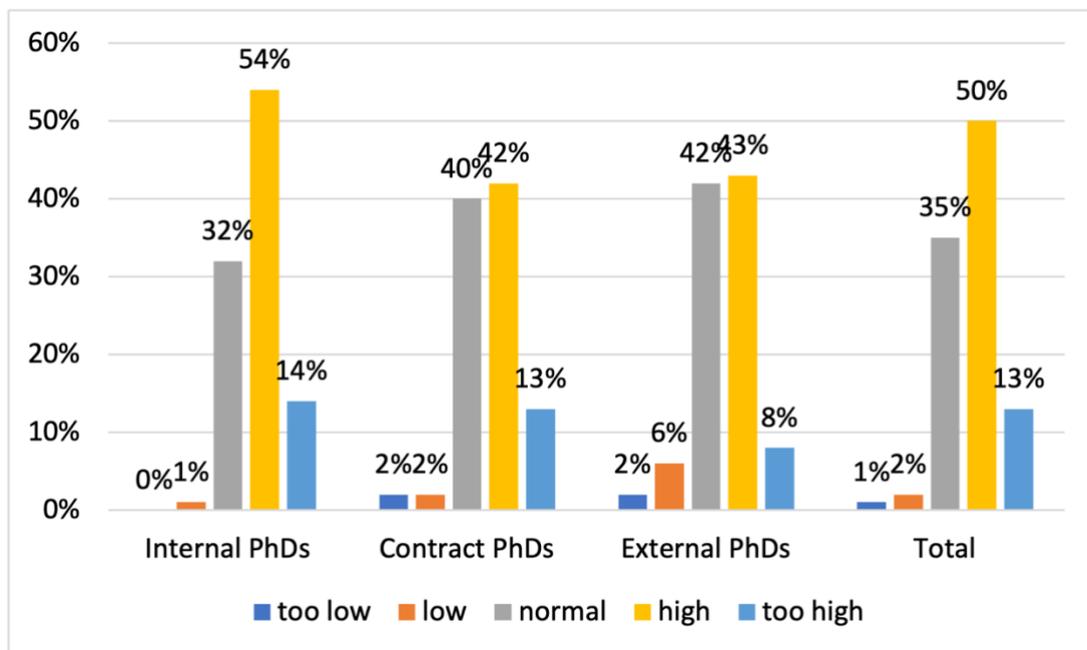


Figure 11: Workload in the PhD project (question 36)

Wellbeing

When asking about the impact of the PhD track on the wellbeing of PhD candidates we received mixed results (see Figure 12). 29% of the external PhD experienced a positive impact; this is a much higher percentage compared to internal (9%) and contract (14%) PhD candidates.

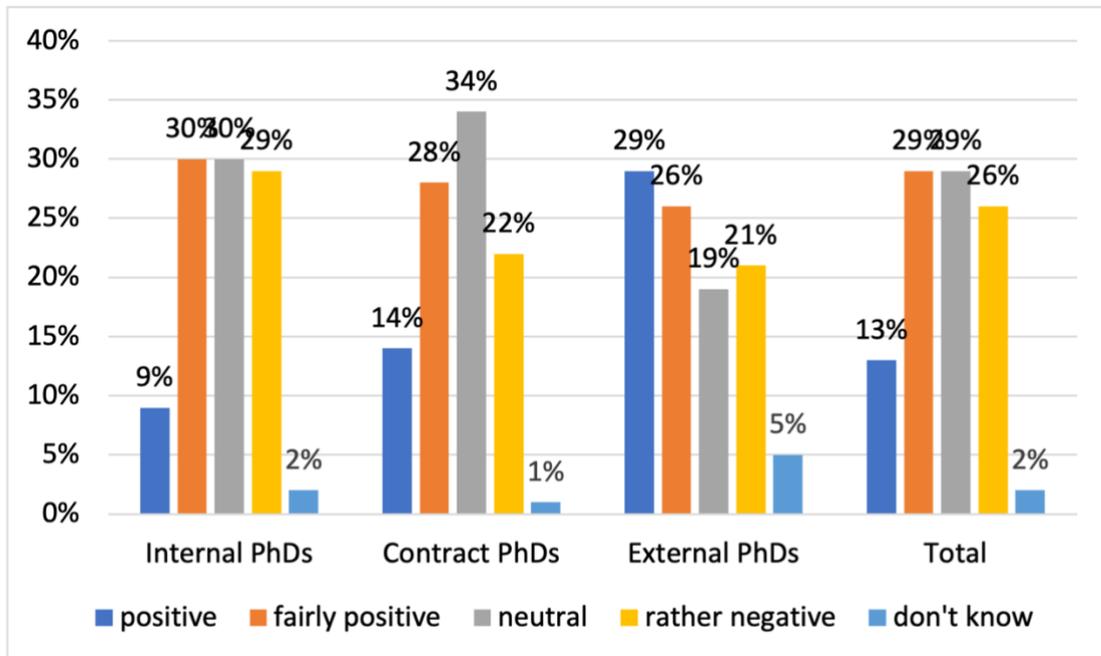


Figure 12: Impact of the PhD track on wellbeing (question 37)

Confidential Counsellor

69% of the PhD candidates are aware of the existence of a confidential counsellor at LEI/LUMC to whom they can go to in case of problems encountered related to wellbeing, social safety issues, or problems with supervisor(s).

PhD Psychologist

The majority (68%) of the PhD candidates feel that a psychologist for PhD candidates is needed at LEI/LUMC. Only 9% explicitly answered that this is not necessary. The remaining respondents (24%) did not know at the time they answered the survey. Looking at the respondents by nationality, we see that international PhD candidates from both EER and non-EER countries (respectively 81% and 84%) are more in favour of hiring a PhD psychologist compared to Dutch PhD candidates (58%). Small differences

appear as we take into consideration the graduate school in which the PhD candidate is registered (see table 4). We also find differences by gender: females are in general more positive compared to males. No differences in the type of the PhD candidate and PhD phase were found.

Graduate School	Yes
LUMC	63%
Science	71%
Humanities	73%
Social and Behavioural Sciences	69%
Legal Studies	70%
Governance and Global Affairs	60%
Archaeology	75%
<i>Total Average</i>	<i>68%</i>

Table 4: Opinion of PhD candidates regarding hiring a PhD psychologist at LEI/LUMC (question 39)

2.7 Finishing PhD & Career Ambitions

Most PhD candidates (82%) have discussed the scientific requirements of their PhD thesis with the supervisors. Half of them assess the PhD requirements as rather clear. However, for almost 1 out of 3 the requirements are unclear.

Career perspectives after graduation

After completing their PhD, half of the respondents would like to continue their research career within academia (see Figure 13). Almost 40% aspire to a research position outside academia. In contrast, one quarter of the PhD candidates would opt for a non-research position. Another 1 out of 4 PhD candidates do not know whether or not they want to pursue an academic or non-academic career. Contract PhD candidates are most interested (73%) in an academic research track.

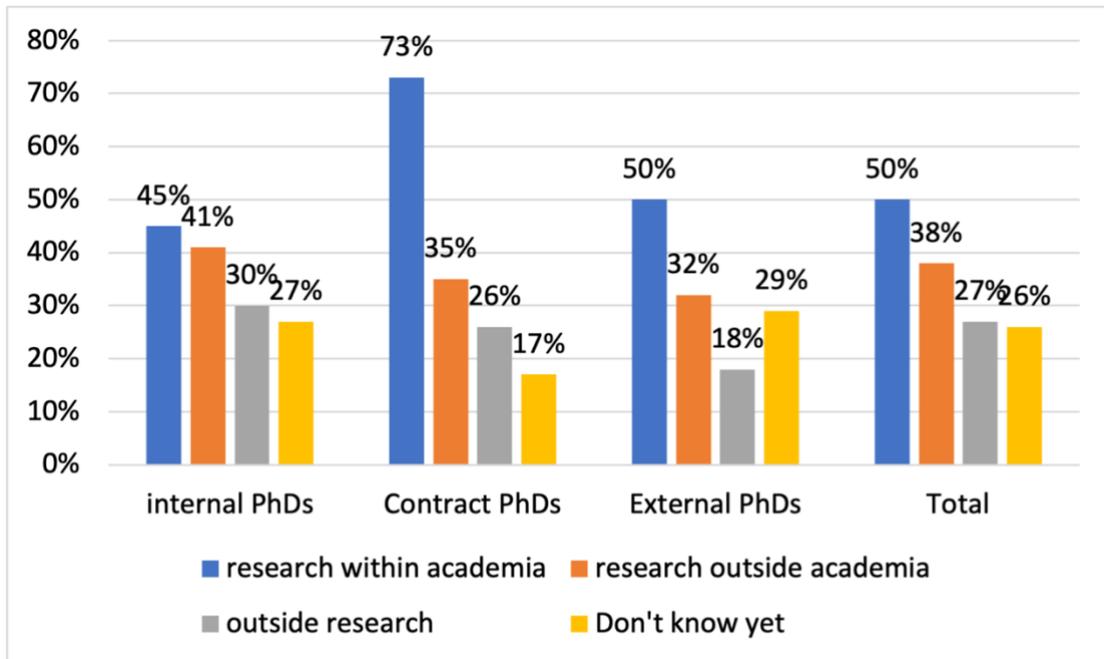


Figure 13: Future career perspectives of PhD candidates (multiple answers were possible, question 42)

As shown in Figure 14, the most popular future employment sector for PhD candidates is, not surprisingly, a university or other higher education institute. The next most popular sectors are industry, government and NGOs or other non-profit organisations.

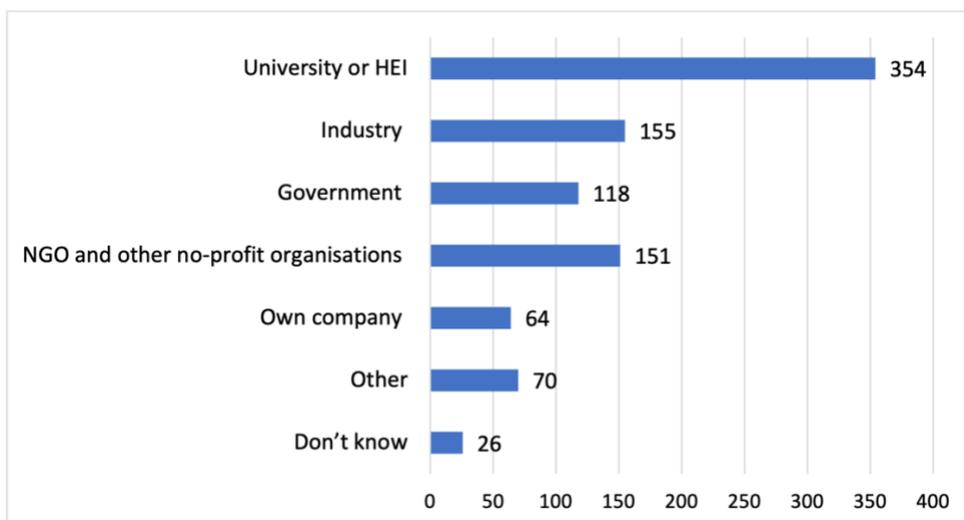


Figure 14: Preferred future job sector of PhD candidates (no. of PhD candidates; multiple answers were possible, question 43)

2.8 COVID-19 Pandemic

PhD candidates were asked a series of questions exploring the impact COVID-19 pandemic has on various aspects of their PhD project, motivation, mental health and wellbeing and future career prospects.

Overall, the pandemic has had a negative impact on PhD tracks. PhD candidates experience various disruptions to the usual research practices (see Figure 15). Due to the pandemic, they have limited opportunities to collect new data, including that caused by restricted possibilities to conduct field work, inability to conduct experimental laboratory work or restricted access to human participants. PhD candidates also reported fewer formal and informal opportunities to discuss their research ideas as well as research findings with their supervisors and colleagues. Conferences are important events for PhD candidates to share and disseminate their research findings and to build networks. However, due to the pandemic, most in-person conferences and scholarly events were cancelled. Online conferences appear to function to some extent differently compared to conferences attended in-person, and generally PhD candidates find it more difficult to engage online.

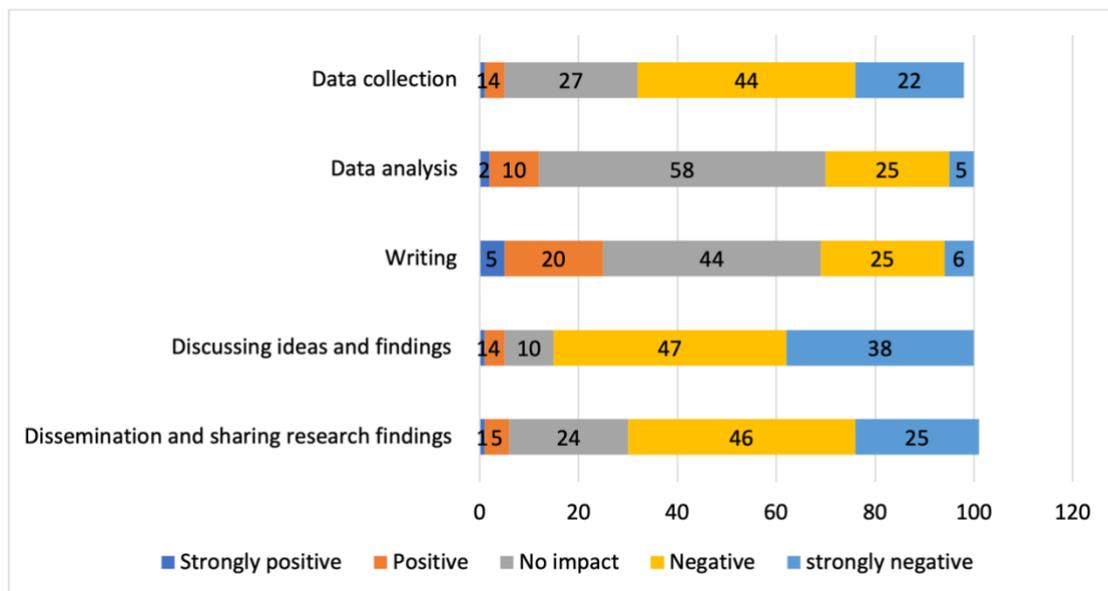


Figure 15: Impact of COVID-19 on research activities in PhD project (question 44)

In addition, as shown in Figure 16, the pandemic has had a negative impact on the mental health (74%) of the PhD candidate, the experienced PhD progress (66%) and their motivation to work on the PhD project (58%).

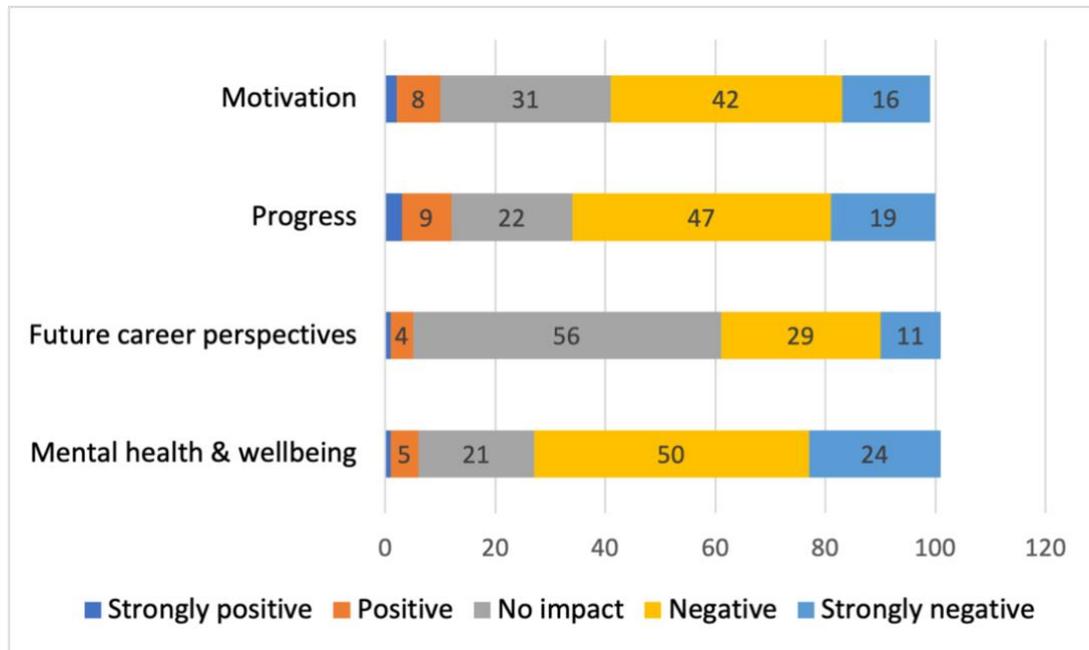


Figure 16: Impact of COVID-19 on PhD candidate (question 45)

The open answers generally show that PhD candidates reported higher perceived stress levels due to the negative impact of the pandemic on their PhD track. Two examples are given below.

'I lost a lot time due to child care during the lockdowns and this can't be taken back. I still hope for the best but have no confirmation that I will have an extension of contract that I asked for. So I don't know if I can finish in time but I don't even know what "in time" means as long as I don't know if I have the extension. Online conferences hindered my networking capabilities and I fear that the lack of face-to-face contact will make it harder for me to find a postdoc position later. Work has been slow due to symptoms of depression, mainly linked to Covid but exacerbated by work pressure. In a nutshell, it is hard for me to see whether I can expect to have a satisfactory thesis in the future or not because is still depends on a few projects and my contract finishes in 8 to 14 months.'

'Unfortunately, suddenly switching to working from home has strongly disrupted our department. Sometimes weeks went by without any contact, which was fairly

depressing. Since September, the situation has significantly improved but last summer (2020) I was seriously considering quitting.'

2.9 General Satisfaction

At the end of the PhD survey, PhD candidates were asked to indicate their general satisfaction with their PhD track as a whole, on a scale from 0 to 10. The average satisfaction score is 6.5. Not surprisingly, junior PhDs (within their first year) are more satisfied (mean 7.0) compared to senior PhDs (mean 6.4). As shown in Figure 17, more than half of the respondents (55%) give a score of 7-8 which indicates that they are overall satisfied with their PhD track. In contrast, 15% give a very low score of 0-4. There are minor differences in satisfaction among internal, contract and external PhD candidates. There are also small differences among graduates schools (see Figure 18). PhD candidates from the Governance and Global Affairs (GGA) graduate school are most satisfied with their overall PhD track (mean score 6.96). PhD candidates from the graduate school of Science as well as the graduate school of Legal Affairs give an average score of 6.3, which is slightly below average.

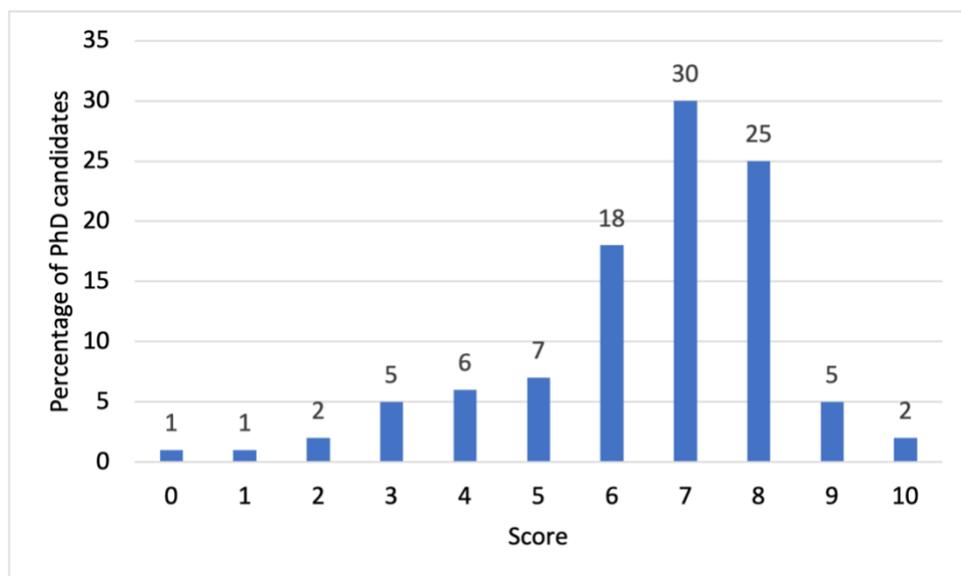


Figure 17: General satisfaction with PhD track (question 46)

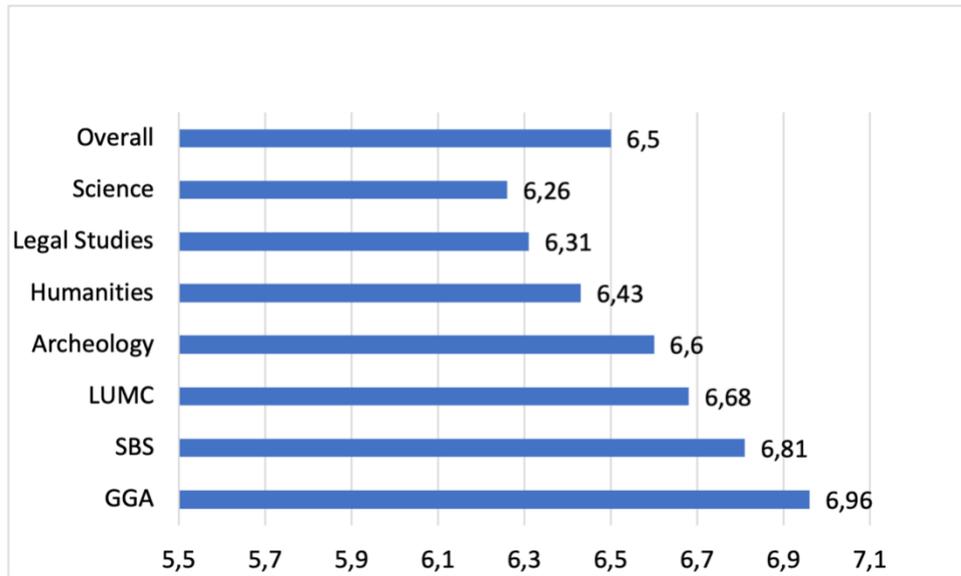


Figure 18: General satisfaction with PhD track by graduate school

3. Recommendations

- **Engagement External PhD Candidates**

Put additional effort into monitoring the experiences of external PhD candidates. As the response rate of external PhD candidates (12%) to this survey is low compared to the responses of internal (38%) and grant PhDs (28%), we have limited information. In this respect, the recently established 'Beurs en Buitenpromovendi' (Grants and external PhD candidates) taskforce is an important initiative to get an overview of the current situation including perceived bottlenecks and opportunities.

- **Teaching Skills**

Encourage PhD candidates to obtain the partial University Teaching Qualification. This certificate provides recognition that a PhD candidate has gained knowledge and experience as a teacher. To obtain the partial certificate, PhDs are required to teach a small-scale course, take the ICLON Delivery of Education module and submit a portfolio. Both the module and the teaching hours could be included in the training plan of the PhD candidate. Encourage PhD supervisors and the PhD coordinators to discuss the development of teaching skills with their PhD candidates.

- **Transferable Skills**

Stress the importance of the development of transferable skills during the PhD track. The PhD coordinator should address the importance of training activities focusing on transferable skills in the annual or biannual monitoring meetings. Both PhD candidate and PhD supervisors should be jointly responsible for updating the training and supervision plan on a regular (e.g. annual) basis. This could be discussed in the annual performance and development review.

- **Career Development**

As currently 50% of the responded PhD candidates aspire to a career outside of academia, career events that are organised by the Graduate school(s) to explore labour market prospects should be promoted among PhD candidates, PhD supervisors and PhD coordinators. In developing and organising the career events, both the various job opportunities outside of academia and the transferable skills

that are required should be taken into account. Also, alumni holders of doctorates could be invited to participate (e.g. in speed date session or debates) in career events. To this respect, graduate schools should be encouraged to build and maintain an alumni database.

- **Monitoring Meetings**

Evaluate the monitoring meetings with PhD candidates, PhD coordinators/staff members and graduates schools in Q4 2022. For a few years, internal PhD candidates have had a yearly monitoring meeting with the PhD coordinator of the institute or with (1-2) impartial staff members. From 2021 onwards external PhD candidates will also be invited for a monitoring meeting twice a year.

- **Wellbeing and Mental Health**

Continue to recognise mental health issues and symptoms among PhD candidates and pro-actively support and communicate about change initiatives and interventions. The appointment of a PhD psychologist, Caring Universities, HR courses on personal development (e.g. mindfulness, work-life balance, project ME) are a few examples. Address wellbeing in doctoral and staff professionalisation. Collect systematic and structured data collection for evidence-based policymaking (e.g. by participation in REMO COST-Action)

Annex A: Survey Questions

Welcome to the Leiden PhD Survey 2021!

Leiden University and LUMC would like to monitor the experiences of their PhD candidates to further improve supervision, facilities and regulations. This survey addresses several topics associated with your PhD project. It is important that as many PhD candidates as possible complete this survey, so that we can obtain a comprehensive picture of the opinions and experiences of different PhD types in different fields and situations. Most questions in this PhD survey 2021 are the same as in the PhD surveys conducted at other Dutch universities. We greatly value your opinion and experience.

The data gathered in this Leiden PhD survey 2021 will be handled with great care and confidentiality. It will take you approximately 10 minutes to complete the survey.

To start the survey, please indicate that you consent to the information you provide being used for the following two goals:

- To improve PhD programmes at Leiden University
- To gain insight into the experiences of PhD candidates at the national level

- I give my consent (1)
- I do not give my consent (2)

Question 1 What is your year of birth?

Question 2 What is your gender?

- Male
- Female
- Non-binary / third gender
- Prefer not to say

Question 3 What is your nationality (as indicated on your passport?). If you have more than one, choose the one that you feel is most relevant.

- Dutch
- Nationality from EEA country (Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden)
- Other nationality

Question 4 In what year and month did you officially start your PhD project?

- Year -----
- Month -----

Question 5 What is the official duration of your PhD project as agreed at the start?

- 36 months (3 years)
- 48 months (4 years)
- Other, namely _____
- Not yet determined
- There is no official duration since I work on my PhD project in my own time and/or in time of my employer

Question 6 How many hours per week do you have to work on your PhD project, according to your contract or your training and supervision plan?

- Full-time (>36 hours per week)
- Part-time (between 12-36 hours per week)
- Part-time
- Other, namely _____

Question 7 Do you receive salary, funding and/or hours to conduct your PhD project?

- Yes
- No

Question 8 Do (or did) you have an employment contract with Leiden University or Leiden University Medical Center (LUMC)? *Note: employment contracts from small part-time jobs to earn some extra money are excluded.*

Yes (1)

No (2)

Question 9 Is *PhD candidate* your primary academic job classification (UFO code)?

Yes (1)

No (2)

I do not know (3)

Question 10 Do you receive a scholarship / grant (e.g. CSC, LPDP)?

Yes (1)

No (2)

Question 11a Do you have an employer other than Leiden University or LUMC?

Yes (1)

No (2)

If yes:

Question 11b Are you allowed to work on your PhD project during your working hours?

- Yes (1)
- No (2)

Question 12 At which graduate school are you conducting your PhD project?

- Graduate School of Archaeology (1)
- Graduate School of Humanities (2)
- Graduate School of Legal Studies (3)
- Graduate School of LUMC (4)
- Graduate School of Science (5)
- Graduate School of Social and Behavioural Sciences (6)
- Graduate School of Governance and Global Affairs (7)

Question 13 In which academic field are you conducting your PhD?

- Education (1)
- Arts and Humanities (2)
- Social Sciences, Journalism and Information (3)
- Business, Administration and Law (4)
- Natural Sciences, Mathematics and Statistics (5)
- Information and Communication Technologies (6)
- Engineering, Manufacturing and Construction (7)
- Agriculture, Forestry, Fisheries and Veterinary (8)
- Health and Welfare (9)
- Services (10)

Question 14 Did you start your PhD project before the start of the COVID-19 pandemic (March 2020)?

- Yes (1)
- No (2)

If yes:

Question 15 How satisfied were you with the following facilities before the COVID-19 pandemic?

	very dissatisfied (1)	dissatisfied (2)	neither satisfied nor dissatisfied (3)	satisfied (4)	very satisfied (5)	I have no access to this facility (6)
My workplace (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My computer and software (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research facilities (e.g. lab instruments, field work, databases) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to libraries (e.g. journals, books, other information) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 16 To what extent do you have contact with other researchers when working on your PhD project?

- (Almost) Every day (1)
- Regularly (2)
- Rarely (3)
- Only when I meet my PhD supervisors (4)
- Other, namely (5) _____

Question 17 Please state the number of people who are officially part of your supervision team

- Number: (1) _____
- My supervision team has not been officially documented yet (2)
- I do not know (3)
- Other, namely (4) _____

Question 18 Do you know who is/are officially assigned as your PhD supervisor(s)?

- Yes (1)
- No, not yet (2)
- I do not know / cannot answer (3)

Question 19 Who do you consider your daily supervisor?

- (one of) My PhD supervisor(s) (1)
- (one of) My co-supervisors (2)
- Someone else, namely (3) _____

Question 20 In an average month, how many hours of supervision do you receive, from all of your supervisors combined?

Question 21 Are you, in general, satisfied with the supervision you receive?

- Very dissatisfied (1)
- Dissatisfied (2)
- Neither satisfied nor dissatisfied (3)
- Satisfied (4)
- Very satisfied (5)
- I do not know / cannot answer (6)

Question 22 To which educational activities / training do you have access? Please tick all that apply

- Discipline-specific courses and workshops (1)
- General skills courses and workshops (2)
- Seminars and conferences (3)
- Teacher training activities (4)
- Career orientation activities (5)
- Other educational activities (6)
- I do not have access to education activities (7)

Question 23 Do you have to pay for education activities / training yourself?

- No (1)
- Sometimes (2)
- Always (3)
- Other (4) _____

Question 24 Do you have to participate in obligatory courses, except for Scientific Conduct, as part of your PhD education training?

- Yes (1)
- No (2)
- I do not know (3)

Question 25 Please indicate which type of courses / training are obligatory.

- Discipline-specific courses and workshops (1)
- General skills and workshops (2)
- Seminars and conferences (3)
- Teacher training activities (4)
- Career orientation activities (5)
- Other educational activities (6)
- I do not know (7)

Question 26 To what extent do you agree the following statements

	Totally disagree	Disagree	Neither agree nor disagree	Agree	Totally agree	I do not know / can not answer
I have sufficient time to participate in educational activities / training (e.g. courses, seminars)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I am satisfied with the educational activities / training on offer at Leiden University, LUMC and/or in the (national) graduate school in which I participate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the career orientation activities that are offered by Leiden University, LUMC and / or my graduate school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The educational activities / training in which I have participated contribute to the completion of my PhD project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisory team encourages me to participate in education activities / training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 27 Do you teach and / or supervise students (or are you planning to do so)?

- Yes, it is part of my contract / agreement (1)
- Yes, however it is not part of my contract / agreement (2)
- No, I am not allowed to teach (3)
- No, I am allowed to teach but I don't (4)
- Other, namely (5) _____

Question 28 How many hours per week do you, on average, spend on teaching (e.g. lectures, practicals)?

- Hours per week (1) _____
- I do not know / cannot answer (2)

Question 29 How many hours per week do you, on average, spend on supervision of students (e.g. bachelor's / master's thesis)

- Hours per week (1) _____
- I do not know / cannot answer (2)

Question 30 Are you familiar with PhD organisations (e.g. LEO, LAP or faculty PhD councils) at Leiden University and/or LUMC?

- Yes, and I regularly participate in activities they organise (1)
- Yes, but I do not (often) take part in activities (2)
- No I am not familiar with PhD organisations at Leiden University and/or LUMC (3)

Question 31 Please respond to these two questions about support structures.

	Yes	No	I do not know
Do you have an annual performance and development (R&O) interview with your supervisor(s)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have an annual/biannual review or monitoring meeting with an independent staff member or PhD coordinator from your department or institute?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 32 Could you share your experiences with us?

- Performance and Development Interview (R&O gesprek) (1)

- Annual review / monitoring meeting (2)

Question 33 Are you currently on schedule with your PhD project planning?

- Yes (1)
- No, I am ahead of schedule (2)
- No, I have fallen behind schedule (3)
- I do not have a schedule (4)
- I do not know (5)

Question 34 How long is the expected delay?

- Less than 3 months (1)
- Between 3 and 6 months (2)
- Between 6 and 9 months (3)
- More than 9 months (4)
- I do not know (5)

Question 35 Do you need an extension of your PhD project because of COVID-19?

- Yes (1)
- No (2)
- I do not know (yet) (3)

Question 36 How would you describe the workload / time pressure in your PhD project?

- Too high (1)
- High (2)
- Normal (3)
- Low (4)
- Too low (5)

Question 37 In general, what impact does your PhD project have on your wellbeing?

- Positive (1)
- Fairly positive (2)
- Neutral (3)
- Rather negative (4)
- I do not know / I do not want to answer (5)

Question 38 Do you know whether there is (are) a confidential counsellor(s) available at Leiden University / LUMC to whom you can go if you encounter

problems (e.g. related to your wellbeing, social safety issues, or problems with your supervisor)?

- Yes, I am aware of the available confidential counsellor(s) (1)
- No I do not know (2)

Question 39 Do you feel that a psychologist for PhD candidates is needed at Leiden University and/or LUMC?

- Yes (1)
- No (2)
- I do not know (3)

Question 40 Have you discussed or will you discuss the scientific requirements (e.g. quality and quantity of publications and scientific integrity) of your PhD thesis?

- Yes, with (one of) my supervisor(s) (1)
- Yes, with other people (e.g. PhD counsellor graduate school, PhD coordinator) (2)
- Yes, with both my supervisor(s) and other people (3)
- No, not yet (4)
- Other, namely (5) _____

Question 41 To what extent are the requirements of your PhD thesis clear to you?

- Very clear (1)
- Rather clear (2)
- A bit unclear (3)
- Rather unclear (4)
- Very unclear (5)

Question 42 What career perspectives do you aspire after your PhD graduation?

Please tick all that apply.

- In research within academia (1)
- In research outside academia (2)
- Outside research (3)
- I do not know yet (4)

Question 43 In which sector do you aspire to pursue your career after completing your PhD project? *Please tick all that apply.*

- My own company (1)
- Industry (2)
- Government (national, regional, local) (3)
- University or other higher education institute (4)
- NGOs and other non-profit organisations (5)
- Other, namely (6) _____
- I do not know yet / I do not want to answer (7)

Question 44 What impact has COVID-19 had on your ability to engage in these aspects of your PhD project

	Strongly negative (1)	Negative (2)	No impact (3)	Positive (4)	Strongly positive (5)	n/a (6)
Data collection (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data analysis (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussing ideas and findings with colleagues and peers (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissemination and sharing research findings with stakeholders and other researchers (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 45 What impact has COVID-19 on your:

	Strongly negative (1)	Negative (2)	No impact (3)	Positive (4)	Strongly positive (5)	n/a (6)
Motivation to work on my PhD project (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Progress of my PhD project (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Future career prospects (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental health and wellbeing (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 46 On a scale from 0-10, how satisfied are you in general with your PhD track?

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Question 47 If you would like to elaborate on your general satisfaction with your PhD track, please use the text box below. This is the final question of the survey!
