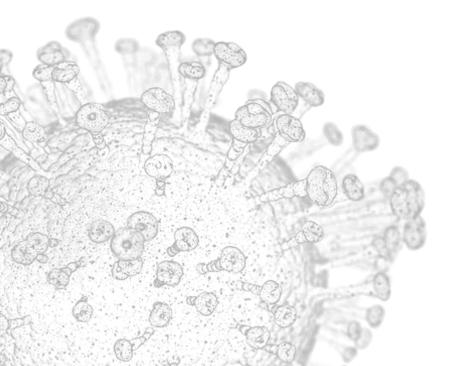


COVID-19 IMPACTS ON DOCTORAL CANDIDATES OF THE UNIVERSITY OF TWENTE

INDEPENDENT SURVEY RESULTS AND RECOMMENDED ACTIONS

P-NUT, the PhD Network University of Twente. July 2020



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Summary

From 18th of May to 9th of June 2020, two months into quarantine, P-NUT conducted an independent survey on the impact of COVID-19 on the mental health and working conditions of PhDs and PDEngs at the University of Twente (UT). The survey was circulated four times amongst all PhD and PDEng candidates for which we had contact information and a total of 238 responses were obtained.

We found that 63% of participants expected a delay to their projects of two months or more, while 14% expected a delay of six months or more. Alarmingly, 50% of respondents indicated that they expected delays due to mental health issues caused or exacerbated by the pandemic, while 60% expect delays due to cancelled lab- or fieldwork. Furthermore, 75% responded that they are less productive working from home.

In the short term, we recommend that the university implements communication tailored to doctoral candidates because of the unique nature of their position. Additionally, doctoral candidates should be involved in the decision making process, ensuring that their perspective is taken into account. For the mid-term, we recommend that the UT provide courses on crisis management. The results of the survey and the collective recommendations highlight the need for cohesive action from the UT regarding PhDs in times of COVID-19, as well as pointing to more substantial and structural issues that should be addressed over a longer timeframe.

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Introduction

The COVID-19 pandemic has had sudden and disruptive consequences for the University of Twente (UT) as a whole, but also for doctoral candidates (both PhD and PDEng candidates), affecting their mental health, schedules, workload and quality of work.

The university has reacted to this difficult situation in a number of ways. It has put a lot of effort into maintaining education for Bachelor and Master students. While communication and messaging for employees has been less frequent, it has been clear and continuous. The message being that everyone's safety comes first and research activities take a back seat until this can be guaranteed. We want to acknowledge initiatives aimed at doctoral candidates such as the UT Emergency Fund, implemented for those who face financial constrains due to not being employed by the UT. We also recognize the various efforts put forward by the Twente Graduate School (TGS).

However, we have observed a lack of sufficient and meaningful input from doctoral candidates, hereafter referred to as PhDs, to the UT executive bodies. This has resulted in cases of miscommunication and lack of focus on specific issues that directly affect us. With the hopes of supporting the efforts of the UT executives and improving the quality of their actions, P-NUT conducted an independent survey among PhDs two months into lock down.

In the period from 18th of May 2020 until 9th of June 2020 P-NUT circulated an online survey four times among all PhDs who started their projects before February 2020. Out of about 1200 recipients, 238 responded. The survey asked about the impacts from COVID-19 on PhDs' life and research as well as individual recommendations on ways to improve the situation.

The next section of this report will present the results of the survey, and the impacts of COVID -19 on UT PhDs, while the last section will draw conclusions and give some recommendations on actions P-NUT, as representatives of the PhD community, would like to make towards the UT executive.

238 responses to the P-NUT survey out of about 1200 PhDs

Results¹

The respondents were spread over the standard four years of a PhD (see Figure 1). In addition, the survey collected responses not only from employed PhDs but also from those on scholarships or employed by external partners (see Figure 2). Unfortunately, the number of PDEng students that answered the survey was insufficient to draw meaningful conclusions for this sub-group. Their answers were incorporated into the group of UT contract PhDs (employed) where appropriate. The respondents were not asked to which faculty they belong for reasons of anonymity.

Those who started after February of 2020 were excluded from the survey because they were not yet added to the mailing list. Thus, the impact of COVID-19 on this group is unknown. However, it is not unreasonable to assume that the reported issues also apply to their situation.

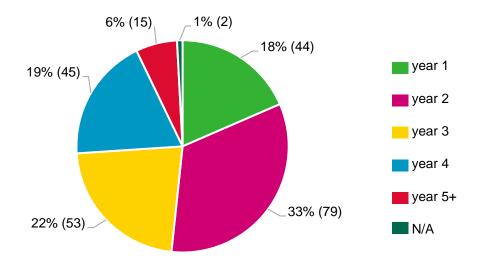


Figure 1: Response of the PhDs to the question: "Which year of your PhD/PDEng are you in?"

The majority (73%) of the PhDs are directly employed by the UT (see Figure 3), with the majority of the remainder group consisting of PhDs with external contracts (13%) and scholarships (9%). The statistics from TGS report PhD financing to be distributed as 60% UT contracts, 20% external contracts, 10% scholarships and 10% self-funded. Thus, our survey sample is reasonably representative.

¹ All results are displayed as percentages with no decimals. Due to the rounding Excel applied because of this individual numbers might not add up to 100% in the figures.

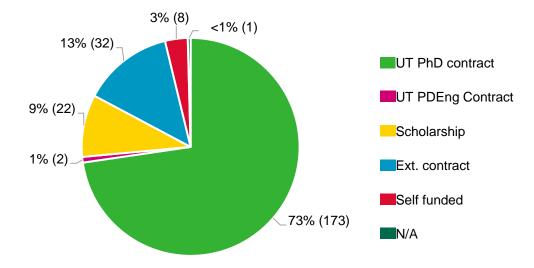


Figure 2: Response of the PhDs to the question: "How is your contract financed?"

Within the group of doctoral candidates with externally funded positions, around 22% (14) of the respondents reported experiencing payment and funding delays, including four (4) reported cases of complete funding collapse.



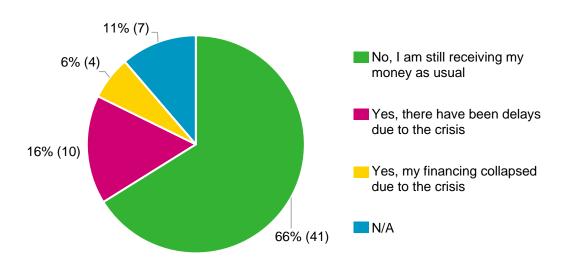


Figure 3: Impacts on funding - Response of the PhDs to the question: "With an externally funded position, have you experienced difficulty in receiving your salary/ stipend due to the Corona crisis?"

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Home office

Before delving into the issue of delays and productivity, we wanted to know how well PhDs were able to set up their home office. We asked them whether they agreed, mostly agreed or disagreed with four statements (see Figure 4). Luckily, most (89%) PhDs reported that they have a suitable place to work and that they have the necessary equipment (91%). Most also agreed or mostly agreed with the statement that they are still meeting regularly with their supervisor (92%). In addition, 82% felt mostly supported by their departments in this process. However, only half (50%) of self-funded PhDs reported that they felt supported by their departments to set up their home office. Although this number of PhDs is relatively small overall, this is still disconcerting as these PhDs are lacking support from other organizations as well, making them especially vulnerable.

Only 50% of selffunded PhDs felt supported by their departments in setting up a home office.

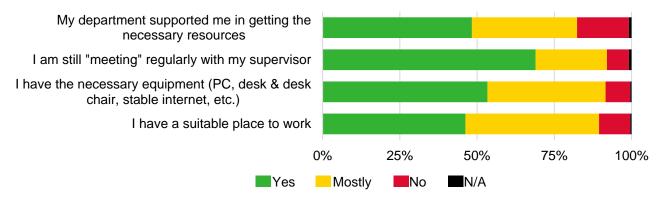


Figure 4: How well were you able to set up a home office?

Project delays

While most PhDs were able to set up their home office fairly well, 83% of respondents expect a delay for their project (see Figure 5). There is some variation across project progress, with PhDs in their 3rd year most often expecting a delay whereas 1st year PhDs least often expect a delay at the moment. While 38% of PhDs do not anticipate that the delay will be problematic, 63% of PhDs expect a delay of two months or more, with 14% anticipating a significant delay of six months or more. This jumps to almost 20% for PhDs in their 3rd year or further along. This makes sense considering that the beginning stages of the PhD allow for more flexibility in the planning whereas latter stages are less flexible.

More than **80%** of PhDs expect **delays** for their projects **due to Covid-19**.

63% of PhDs expect delays of 2 months or more.

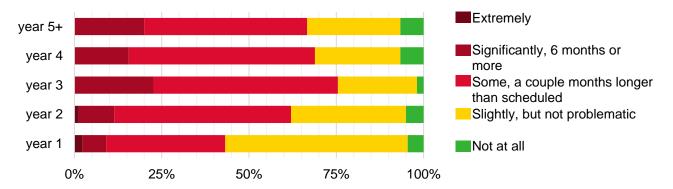


Figure 5: Expected delay for PhD projects - Response of the PhDs to the question: "How long do you currently estimate that your project will be delayed due to the COVID-19 lockdown?"

Reasons for delays

Through conversations with peers, colleagues, and supervisors, we identified a number of reasons for delays when we were setting up the survey (see Figure 6). Around 75% of PhDs reported being delayed because they were less productive at home. 60% agreed with a delay caused by cancelled fieldwork or lack of lab access. Of those 40% completely agreed with the statement, the highest percentage for this category for any of the statements. Alarmingly, 50% of PhDs also agreed with delays due to mental health issues, such as anxiety, stress, or isolation, and almost 20% completely agreed with this. Around 45% anticipate a delay due to cancelled courses or conferences and a quarter of all respondents

75% of PhDs expect a delay because they are **less productive.**

60% expect a delay due to cancelled fieldwork or lack of access to laboratories.

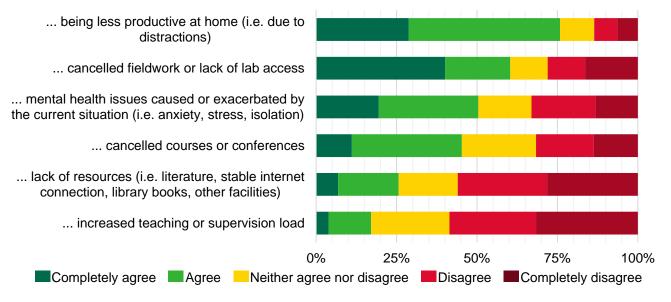


Figure 6: Reasons for delays – Response of the PhDs to the question: "How much do you agree or disagree with the following statements? I expect a delay of my project due to..."

agreed with delays due to a lack of resources. While only about 1 in 6 PhDs anticipate a delay due to increased time commitment for teaching and or supervision, those that had to teach in the 3rd or 4th quartile felt this strongly, as they had to dedicate considerably more time in migrating teaching and supervision work online. We have talked to several PhDs in this situation who reported spending at least three times as much time on teaching, as they would have otherwise.

As can be expected, some causes for delay were reported more in certain phases of the PhD project, whereas increase in teaching, lack of resources, and being distracted were reported equally over the course of the project. Cancelled courses and conferences were most strongly felt during the earlier stages of the PhD and played hardly any role during the last phase (see Figure 7). This seems logical as most PhDs do the bulk of their course work in the first year and are mostly done with conferences and course work in their last year. Lack of access to labs and cancelled fieldwork did not vary quite as much. Nevertheless, almost 75% of third year PhDs agreed this would delay their project whereas the average for all respondents was 60%. Additionally, the severity of this problem seems to increase with progression of the project. Again, this relates to the structure of most PhD projects where a lot of the first year is spent on planning, theory, as well as course work, and in addition, the remaining project period is long enough to reschedule some aspects. Most notable is the difference in mental health as a cause for delay.

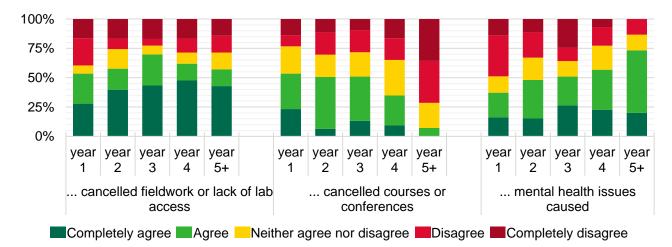


Figure 7: Differences in cause of delay by project year. – Response of the PhDs to the question: "How much do you agree or disagree with the following statements? I expect a delay of my project due to..."

50% expect delays due to mental health issues

1st year PhDs are impacted the most by cancelled courses.

Impacts on mental health increase over the course of PhD projects. Here a marked increase from 35% in first year PhDs to 55% and more than 70% in the last stages can be observed. In our opinion, this points to underlying issues PhDs face with regard to their mental health, which only increase as the PhD progresses and which have been exacerbated by the current crisis.

Looking at differences across types of PhD financing, UT contracts reflect the average described above. As they make up the largest number of responses by far, this is unsurprising. In addition, while there are some differences across types of contract, the number of responses is too low to make definitive statements about those groups. However, some tentative insights can be garnered, especially with regard to lack of resources. As discussed above this was reported as causing a delay by around a quarter of PhDs. Among scholarship PhDs this increased to more than 40% though. On the other hand, this seemed to be even less of a problem for self-funded PhDs than for their peers.

Recommendations

The survey contained an open question asking for input and recommendations from the participants. We obtained a total of 57 responses and have summarized them into categories. Based on these responses and our own experiences, we have distinguished three categories of actions because we recognize the need to prioritize and to be constructive in our feedback. The first category contains short-term, necessary and easy to implement actions. The second contains mid-term actions for which some of the groundwork has already been laid. The last outlines bigger, structural improvements that need to be addressed in the long-term.

Short-term actions

- Further evaluations to learn about COVID-19 consequences on PhDs.
- Improve first-line communication channels for PhDs.
- Clear and more frequent information on contract extension possibilities and the process for application.
- Clear and frequent lab policy communication regulations about working hours, working days, schedules and priorities.
- More clarity on what the Emergency Fund can be used for health insurance, remuneration, etc.
- Stronger communication from deans, group leaders, HR managers, and secretaries to support and promote university-wide policies and decisions such as the Emergency Fund.

Mid-term recommendations

- Training programs for supervisors and PhDs about how to deal with crisis management.
- Involving PhD students in the design of online or blended modality courses or programs, utilize existing experience.
- Increased autonomy and support for HR departments, with a focus on promoting mental health wellbeing (e.g. a PhD buddy program).
- New or updated courses that adjust to the new reality (e.g. Taste of "Online" Teaching course).
- Centralization of relevant PhD information for ease of access.

Structural issues and long-term goals

- A crisis management plan, which is regularly updated. The plan should include, amongst others, an effective communication protocol and scenario analysis to anticipate potential future crisis situations.
- Include Leadership and Management courses for supervisors for UTQ.

Additional helpful measures

- More than 50% of doctoral candidates would find more PhD specific information from the UT to be helpful.
- 40% of doctoral candidates would find more information from TGS about extra or online courses to be helpful.
 10% of doctoral candidates would find more online social activities from P-

NUT to be helpful.

Appendix – Survey Questions

The full survey can be found here:

https://forms.office.com/Pages/ResponsePage.aspx?id=oUYycvXDxUOs3EOttA SsTeCeCswO4vVDvaNy0CNvYOBUMkIFUFNWOUEzNTFVSk5YVDRHNIVFT0t WSy4u

- 1. Which year of your PhD/ PDEng are you in?
- O 1st year
- C 2nd year
- O 3rd year
- 4th year
- 5th or later year
- 2. How is your PhD/ PDEng position financed
- O UT PhD contract
- O UT PDEng contract
- Contract with an external party
- scholarship
- Self funded

3. With an externally funded position, have you experienced difficulty in receiving your salary/ stipend due to the Corona crisis?

- No, I am still receiving my money as usual
- Yes, there have been delays due to the crisis
- Yes, my financing collapsed due to the crisis
- Not applicable

4. How well were you able to set up a home office?

I have a suitable place to work	0	0	0
I have the necessary equipment (PC, desk & desk chair, stable internet, etc.)	0	0	0
I am still "meeting" regularly with my supervisor	0	0	0
My department supported me in getting the necessary resources	0	0	0

Yes Mostly No

5. How much do you agree or disagree with the following statement?

	Completely agree	Agree	e Disagree	Completely disagree
The Covid-19 lockdown cause a delay for my project	will O	0	0	0

6. How how long do you currently estimate that your project will be delayed due to the Covid-19 lockdown?

	Not at all	Slightly, but not problematic	Some, a couple months longer than scheduled	Significantly, months o more	Extremely, 6 complete or restructuring of the research is necessary
The Covid-19 lockdown will cause a delay for my project	0	C	0	0	C

7. How much do you agree or disagree with the following statements? I expect a delay of my project due to:

	Completely agree	Agree	Neither agree no disagree	r Disagree	Completely disagree
cancelled fieldwork or lack of lab access	° O	0	0	0	0
cancelled courses of conferences	0	0	0	0	0
being less productive at home (i.e. due to distractions)	0	0	0	0	0
mental health issues caused or exacerbated by the current situation (i.e. anxiety stress, isolation)		0	0	0	0
increased teaching of supervision load	0	0	0	0	0
lack of resources (i.e literature, stable internet connection, library books other facilities)	¹ 0	0	0	0	0

8. Which of the following measures would you find helpful in the current situation (more than one possible)?

- More PhD specific information from the UT
- More information from TGS about extra or online courses
- More online social activities from P-NUT
- Other:

9. Has your defense been impacted by the lockdown? If yes, has adequate replacement been found?

10. Do you have any other questions, suggestions or struggles due to the current situation? Please share your situation with us!