Delays of doctoral education due to the corona pandemic

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2. Summary of the current doctoral situation

A doctoral education consists of many components. It of course consists of the course work and the research doctoral students do, but it most certainly also consists of the environment the education is carried out in. This environment is what we throughout this report call the research environment, and it embeds every aspect of doctoral education. It is about learning how to become a researcher within a given field, and while there are differences from field to field, there are also similarities. It is when the doctoral student meets with their supervisor, when they are in the office bouncing ideas on other doctoral students, when they are presenting research on seminars in the department, and in many other places, but most notable it is through interactions with other researchers.

When the pandemic first hit the Swedish higher education system, doctoral education did not receive a lot of attention - there were other more pressing matters. There was also a hope that it would be back to normal after the summer of 2020, this turned out not to be the case. A year has almost passed, and we now start to see the long term effects on doctoral education. Doctoral students in Sweden have to a large degree carried out their education remotely since March 2020, with little attention to the consequences. This has meant a lack of the research environment described above, a lack of information and structure around the doctoral students, deteriorating mental health for many doctoral students and that some doctoral students have seen their research projects fall apart. All of this has caused delays for essentially all doctoral students.

But how much have doctoral students been delayed? That is of course the real question. In the weeks between the meeting and the publishing of this report, the annual statistics of how many research publications came out of the Swedish universities were published by <u>UKÄ</u>. It showed that the number of research publications produced in Sweden had decreased from roughly 65.000 in 2019 to 55.000 in 2020. The full impact of the pandemic on Swedish research will not be known for years, and the number of publications is only one aspect, but it is concerning that we already now see such a huge impact.

It is of course not only doctoral students whose research has been affected by the pandemic. All levels of Swedish research have been affected. But what makes doctoral education special is that it is an education. The doctoral education is a four year education. Delays in research and other set-backs in the education process effectively mean that, without prolongation, doctoral students should meet the learning goals of the education in less time than it is designed for. In a landscape, where even before the pandemic, many doctoral students worked overtime, the number of stress related sick leaves were worrisome, and the expectations of doctoral students were already rightfully high. This is simply not doable.

We therefore see the issue of prolongation for doctoral students to be extremely important for both the individual doctoral student and for all of Swedish research society. The consequences of not prolonging doctoral students will very likely lead to

doctoral students being forced not to complete their doctoral education or severely lowering the quality of the work produced. This will both affect the influx of new researchers in the Swedish research system but also the total research quality, as a large part of research in Sweden is carried out by doctoral students.

Regarding delays that have already happened, there is only one measure - and that is to prolong the doctoral student. While we argue that prolongation is key to solving the delays doctoral students have already encountered, we wish to stress the importance that doctoral students do not continue to accumulate delays! To avoid this, much of this report focuses on what measures can be taken by the universities to ensure that doctoral students are delayed as little as possible. Some measures are best implemented at department level and others at university level, and some require cross university collaborations. We hope many of these suggestions and others are implemented.

The detailed descriptions of the delays and the accompanying measures are based on discussions from the meeting "The doctoral education in the corona pandemic" held on 2nd of February 2021. The meeting was organised by the Swedish national union of students (SFS) and its doctoral committee (SFS-DK). At the meeting there were more than 100 participants, ranging from doctoral students to university management. A vast majority of the Swedish universities with doctoral education were represented. The aim of the meeting was to discuss how doctoral education is affected by the corona pandemic, specifically how it is delayed, and what can be done to counteract these delays.

While the report centers about delays and measures, we want to stress that it is absolutely crucial that the consequences of the pandemic on doctoral education and the quality of this continues to be monitored, and it should be monitored on all levels, meaning department, university and national level.

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3. Summary of recommended measures

3.1. Prolongation

For delays that have already happened, the only possible measure is prolongation. While it varies from field to field how doctoral students have been affected, all doctoral students who have been enrolled through the entire period have been affected in some way. Some doctoral students have seen their research project fall apart and the effect has been even greater. Many doctoral students who have started their doctoral education after April 1st 2020, have also been affected. It is also important that they are not forgotten. Therefore we recommend that

- all doctoral students who were enrolled before April 1st 2020 and are still enrolled by April 1st 2021, receive 2 months of prolongation,
- this is supplemented by an individual assessment for those doctoral students whose research projects need to be entirely replanned,
- individual assessments are made for those doctoral students who have started after April 1st 2020.

In the cases where prolongation is granted based on an individual assessment, we want to stress the importance of the process being as transparent and equal for all doctoral students as possible. This means that guidelines for how to apply for prolongation should be provided at central university level, and the granting of prolongation should also be done as central as possible by an assessment group.

The central question is of course where the money for prolongation should come from. Many departments, especially in social science and humanities, do not have the money to prolong doctoral students. It is important that prolongation is transparent and equally available for all doctoral students no matter what research field they come from. Therefore, the administration and financing of prolongation should be handled at central university level. However it is important that prolongation of doctoral students should not affect other universities' tasks negatively, and a question that needs to be addressed is who should actually pay as the universities do not have the necessary money.

We therefore suggest that the state should finance a broad prolongation for doctoral students. With around 17 000 doctoral students and a median salary of 30 000 SEK per month what is needed is a sum in the order of 1000 million SEK. This should be paid to the universities directly proportional to the amount of doctoral students they have enrolled and should be clearly marked for the purpose of prolongation. We acknowledge that it should be left for the universities to decide how the money is distributed more specifically and grant prolongation of its doctoral students. However we want to stress that the money should be distributed such that it ensures fair and transparent

prolongation of all doctoral students due to the delays caused by the pandemic. Even though all doctoral students have been affected by the pandemic in some way it is our understanding that some have been hit harder than others. Thus the universities should have influence over the exact distribution to ensure an equitable compensation but we firmly believe all PhD students should receive some prolongation.

3.2. Quality of education

Doctoral education is an education, and the quality of the education should receive the proper attention. This is why we recommend that

- the quality of doctoral education is monitored at all relevant levels.
- the universities are responsible for monitoring how the doctoral students are affected by the pandemic through the individual study plan (ISP). It should not be left for the doctoral students and the student unions that represent them to monitor the situation.
- doctoral students are given guidelines for how to report the consequences of pandemic in their ISP.

3.3. Highlighted measures to avoid further delays

This report is filled with a lot of good suggestions on how to avoid further delays in doctoral education. However we can not highlight them all here. Instead we have chosen to highlight four types of delays, which we identify as the areas which the universities should address first. This regards lack of information, lack of structure, mental health and lack of research environment.

- **Information** is key to avoid further delays. Doctoral students are both researchers and students. Acknowledge this when it comes to information and create a central university level source of information for doctoral students. Specific suggestions for such a source of information can be found in section 4.1.
- Help doctoral students to create **structure** in an otherwise structureless workday. There are many different approaches to this, we wish to stress that the aim here is to **help** doctoral students help themselves. Specific suggestions for measures can be found in section 4.2.
- Doctoral students' **mental health,** or the lack of the same, was worrisome even before the corona pandemic. Therefore it is necessary to intensify the work: specific suggestions for measures can be found in section 4.3.
- It cannot be stressed enough how important the **research environment** is for the progress in doctoral education. Specific suggestions for measures can be found in section section 4.7.

4. The question of prolongation

4.1. Prolongation

For delays that have already happened there is only one good measure and that is prolongation. However the question of how much prolongation, if any, a doctoral student will get due to the delays they experience as a consequence of the corona pandemic is one that is still unanswered and concerns many doctoral students. Not knowing how long you have financing for your education makes it difficult to plan how to handle the delays and setbacks the doctoral student has already experienced.

A main issue experienced by doctoral students is that the availability of prolongation varies a lot even within the same university. To put it as plainly as one participant did during the meeting on the 2.nd of February, the sentiment is that doctoral students in departments with financial muscles are more likely to get prolongation, than those who are from departments with less financial muscles.

Doctoral risks students experience a Catch 22 situation. They are told that they are strongly recommended to work from home, and they do so. However if they are delayed they risk being told that they should just have worked from their office. The delays of the doctoral education are caused by a myriad of things, but the full responsibility of the situation is still put on the doctoral student's decision to follow the recommendations.

4.1.1. Who to prolong and how

All doctoral students who have been enrolled through the entire period have been affected, and it is important that prolongation is handled as transparently and equally as possible. Therefore we recommend

- that all doctoral students who were enrolled before April 1st 2020 and are still enrolled by April 1st 2021 receives 2 months of prolongation,
- that this is supplemented by an individual assessment for those doctoral students whose research projects have fallen apart,
- that individual assessments are made for those doctoral students who have started after April 1st 2020.
- Depending on the further development of the situation this prolongation might need to be supplemented with further prolongation. However we want to stress that a lot can actually be done to prevent further delays.

Grant the prolongation as early as possible.

• The earlier prolongation is granted, the more the doctoral student can take it into account. Ensure that doctoral students can apply for prolongation as early as possible. Deal with delays that have already happened now.

Assessment of prolongation applications.

• Have an **assessment group** at central or faculty level that evaluate whether the student has grounds for extension or not. Such assessment groups should have a broad constellation (head of departments, administrative personnel, doctoral students etc.)

4.1.2. Financing prolongation

The central question is of course where the money for prolongation should come from. Many departments, especially in social science and humanities, do not have the money to prolong doctoral students. It is important that prolongation is transparent and equally available for all doctoral students no matter what research field they come from. It is important that prolongation of doctoral students does not affect other university tasks negatively, and a question that needs to be addressed is who should actually pay as the universities do not have the necessary money. We therefore see a need that the state secures the extra financing needed.

- The state should secure financing of prolongation of doctoral students due to delays caused by the pandemic. We estimate that a sum in the order of 1000 million SEK is needed.
- The money should be allocated to the universities directly proportional to its number of doctoral students.
- We acknowledge that it should be left for the universities to decide how the
 money is distributed more specifically and grant prolongation of its doctoral
 students. However we encourage the universities to follow our previous
 recommendations in this document in order to ensure as equal and transparent
 treatment as possible.

4.1.3. Documentation in the individual study plan

The individual study plan (ISP) is the document that governs the individual doctoral education. The corona pandemic has provided major changes to doctoral education, and on the 2nd of February there was consensus that this should be documented in the ISP. Doctoral students however are unsure about how to fill in the ISP - this makes filling in the ISP unnecessarily complicated - and it leads to the ISP not being truly helpful.

4.1.4. Documation in the ISP

Make a corona appendix, with a template for how to report all the consequences
of the corona pandemic. Provide examples on how both tangible and intangible
delays are to be described. Such a template can be found here (SU -Physics) and
a general template for the ISP here (LTU).

5. Delays and measures

At the meeting on the 2nd of February, many mentioned that it is extremely difficult for doctoral students to find the information that they need. This creates unnecessary stress, and does not help an already stressful situation. To address this, we provide a list in section 5.1 of the **information** that doctoral students need, including links for good examples on how to provide this information.

Many doctoral students are working from home and are isolated at the moment. This means that their workday lacks structure, and that private and professional life blends together. In section 5.2 we address the issue of **lack of structure**, and provide a number of ideas for how to help doctoral students gain a more structured work life.

In section 5.3 we address the issue of how to support doctoral students when it comes to **mental health** issues.

In section 5.4 we address what support doctoral students need to set up a functional **home office** and how to help those who can not work from home.

In section 5.5 we address supervision: how to make supervision function well on distance, and how to support supervisors in supporting doctoral students.

In section 5.6 we address how to create a **research environment** as close as possible to what existed before the pandemic.

In section 5.7 we address the lack of access to research resources and how to support doctoral students whose **research projects fall apart** due to the pandemic.

In section 5.8 we address different groups of doctoral students that face special situations.

5.1. Finding the right information

Lack of information is a source of uncertainty and creates unnecessary stress. As a doctoral student you are both a student and researcher; sometimes you are employed and sometimes you are not. In general it is a jungle to navigate to find the relevant information - some information can be found under information for students - some under information for employees - and some not at all because it is neither relevant for other students nor for other employees. This was the case before the corona pandemic, but the issue now extends to the information that regards doctoral education during the pandemic.

We can not stress enough how important it is to have access to the necessary information. It should be as easy for doctoral students to find the right information as for everyone else. It also creates a huge responsibility on the doctoral student to make their own ethical and safety assessments of the situation to evaluate the risk in each situation regarding their education.

5.1.1. Suggested measures

M-1.1 Make a centralized source of information with the information doctoral students need during the corona pandemic. It is important that the information is available in English. It should as a very minimum include:

- A template for how to document the consequences of the pandemic in the **ISP**.
- A template for applying for **prolongation** due to delays caused by the pandemic.
- Information about how the **doctoral defenses** are affected by the pandemic, and where to get technical assistance regarding these if needed.
- Information about how to report **sick leave**, and how the doctoral students contract is extended. A combination of <u>Karolinska Institutets</u>, <u>SULF's</u>, and <u>Kammarkollegiet</u> information contain the needed information.
- Information about **occupational health services and studenthälsan.** Remember to highlight where doctoral students on stipends can get help.
- Information about when to work from home and when not to work.
- Information about what financial and technical help doctoral students can get when setting up a home office. Information about **insurance** on office equipment brought home.

In general information for doctoral students is sparse, and SFS-DK recommends that it is made more easily available. To get inspired, we recommend that you look at Uppsala studentkår and their Doktorandnämden's <u>Doctoral Student Handbook</u>.

5.2. Lack of structure

Before the pandemic doctoral students had (physical) seminars to attend, colleagues to have lunch with, fikas, etc. All of this added up to creating a structure in a workday. Many doctoral students report that they lack structure in their workday. The question is of course how one provides this. Some doctoral students would like someone to check in with on a daily basis, some on a weekly basis and some more irregularly. Some would like someone to simulate an office environment and work simultaneously with, some would like a support network.

One can ask if it is not up to the individual doctoral student to fix this, and of course doctoral students are also responsible for their education. However what they often lack is the network and the practical solution. The network could be the appropriate email list to reach enough people and the practical solution could be a Zoom room.

5.2.1. Suggested measures

M-2.1 Online writing and working communities

By online writing and working communities, we mean a Zoom meeting where the participants alternate between working on their own while muted and with their cameras off, and taking breaks at the same time. This method is called the <u>pomodoro method</u>. It is also often called shut up and write, and if you want to know more about the concept you can check the following four links [1], [2], [3], [4]

How to make it happen? The most simple version is to create a Zoom room for this. Share the link with all doctoral students at the faculty or university and provide information about the method. If they are many they can join breakout rooms. It could be an idea to have someone who explains the concept e.g. every first Monday in the month. Another option is to have doctoral students sign up and sort them in groups of around 25 people.

The idea can be varied as at e.g. Gothenburg university who offers <u>online writing</u> retreats.

M-2.2 Online peer support groups

One of the best examples we have found on how to help doctoral students help each other is the peer support group system that Sussex University has for its doctoral students. You can find it here.

M-2.3 Online coffee, fika or afterwork

Similar to the above we suggest that a Zoom room is set up where doctoral students at the department or faculty can check in at 9.00 in the morning to start the day sharing a cup of coffee with someone else, or in the afternoon for fika and small talk. Or e,g, Thursdays or Fridays in odd weeks for afterwork. The idea is simply to use the online environment to create a structure of an otherwise structureless day.

5.3. Mental health

It is important to stress that doctoral students are a group within academia that already have been identified as having worrying high levels of stress. A recently published article, specifically addressing graduate students perspectives on coping with the COVID-19 pandemic, highlights the complexity in balancing the different roles within a doctoral education and private life and the stress associated with that¹. This was also reflected upon in the meeting on the 2nd of February where an overwhelming majority of the groups mentioned the deterioration of mental health, which leads to delays in the doctoral education.

Doctoral students have the same concerns as other researchers and the rest of society, but they also have concerns directly coupled to their education: will they finish and will the quality of their research be good enough for their future career plans?

Working from home leads to an isolated work life, without colleagues to support you and bounce ideas off. The whole situation is surrounded with uncertainty and this affects the mental health. The universities can help by ensuring a good source of information for doctoral students, and especially by addressing the question of prolongation.

The academic environment can be harsh, at the meeting one participant said "no one wants to be considered as whiny". From <u>Doktorandspegeln 2016</u> we know that many doctoral students struggle with stress and from <u>UHR's report on sexual harassment</u> from 2019 we know that an alarming number of doctoral students experience harrasments. Academia does not alway provide the working environment one could dream of.

5.3.1. Suggested measures

M-3.1 Preventive measures

• Invite all doctoral students to a seminar about handling stress. Have an expert who provides help and leads discussion. SLU had such a seminar.

- Offer courses and seminars on <u>stress management</u> and on <u>project</u> and <u>time management</u>. We link to a course offered at Stockholm University and two offered at Lund University, respectively.
- Implement mentor programs where doctoral students are paired with senior researchers. Such programs exist at <u>KI</u> and <u>SLU</u>, among other places.
- Create opportunities for doctoral students and other early stage researchers to
 interact socially with their colleagues. Have online Zoom fikas, lunches or after
 work in the research group, at the department, or even at the faculty.

¹ A. Bal, O. Arslan, K. Budhrani, Z. Mao, K. Novak, and P. S. Muljana, "The balance of roles: Graduate student perspectives during the COVID-19 pandemic," TechTrends, vol. 64, no. 6, pp. 796–798, 2020

M-3.2 Information

- **Inform** all doctoral students about their rights when it comes to sick leave, vacation, "friskvårdsbidrag" and access to occupational health services.
- Information about how to report **sick leave**; this should stress that the doctoral students contract is extended when on sick leave. For inspiration a combination of <u>Karolinska Institutets</u>, <u>SULF's</u>, and <u>kammarkollegiets</u> information on the topic would contain the necessary information.
- **Inform** all doctoral students about how to get access to psychological support, both through the occupational health services but also that this is possible through the regular health care system. Remember that there are many international doctoral students.
- We recommend that this information is gathered on the university webpage, but also that an email is sent out to all doctoral students twice per semester.

M-3.3 Occupational health services and studenthälsan

- Make sure all doctoral students are covered by either the occupational health service or studenthälsan. <u>UKÄ's mapping of studenthälsan</u> shows that at half of the universities, doctoral students on stipends are covered neither by occupational health service nor studenthälsan.
- Make sure studenthälsan and the occupational health service is scaled up to handle the situation. Ensure that they have the capacity to handle the situation within a reasonable time frame.
- Make sure the occupational health service is qualified to work with doctoral students and ensure that both Swedish and internationals get the same treatment by ensuring that everyone is informed.

M-3.4 When the damage is done - sick leave

• Make an individual plan for how the doctoral student gets back on track after a longer sick leave and follow up on it.

5.4. Working from home, the home office and access to campus facilities

Many doctoral students have been working from home on and off through the past year. The default assumption seems to have been that all doctoral students have space at home to set up a home office. But the reality is that many do not have that possibility of separating work from private life and have to work from their bedroom. At the same time they are more likely to share office space with others, meaning that they will most likely be among the last to return to their offices.

Most universities have not offered information about what help they can provide, financial as well as in terms of equipment. This places the responsibility of finding this out on each individual doctoral student, again making the threshold much higher than it needs to be.

5.4.1. Suggested measures

M-4.1 Measures from the universities regarding the home office

- Provide home office supplies, technical support and help with transportation.
- Take responsibility for ensuring a decent home work environment and do not put the responsibility on the doctoral students.
- Inform doctoral students how they can take home the necessary equipment to conduct their research, like an ergonomic and proper chair, a desk, office supplies, printer, and monitors.
- **Inform** doctoral students on what financial compensation they can get for setting up a home office.
- Share **information** about how to set up an <u>ergonomic workplace</u> at home. The link included is from Lunds Tekniska Högskolas webpage. The general information page about working from home can be found <u>here</u>, it also has a <u>home exercise program</u>.
- Share information about how the **occupational health service** can help when it comes to the physical work environment. Have seminars on the topic.

M-4.2 Campus facilities

- Find a solution for doctoral students whose research can not be done from home.
- Doctoral students share offices and laboratories. Schedule access such that those who need access have access.
- Make sure doctoral students have access to libraries.

5.5. About supervision

There are many different approaches on how to handle the supervision during the current situation. However it is important to ensure that doctoral students receive high quality and sufficient supervision, also when working from home.

Most doctoral students have good relationships with their supervisors, and this is one of the cornerstones of the Swedish doctoral education. However the current situation is stressful for everyone, and there needs to be someone the doctoral student can turn to if this is not the case.

The role of the supervisor in relation to the doctoral student covers more than just the actual supervision. Supervisors are not mental health experts, but it is important that they ensure an environment where the doctoral students feel that they can seek help for such issues without fearing the reaction.

5.5.1. Suggested measures

M-5.1 Regular supervision

- Register frequency of supervision meetings in the ISP. Maintaining or increasing the frequency of meetings will hopefully contribute to not lacking supervision.
- Help to replan the doctoral education if needed. Document this in detail in the ISP.
- Help the doctoral student to build a research network.
- For late stage doctoral students, address the question of their future career plans.

M-5.2 Mental health

- As a supervisor, ask your doctoral student how they are doing! Many have not been asked that question in a long while, and simply asking it will help.
- If a doctoral student is not doing well, tell them to seek out the occupational health service or studenthälsan. If severe enough, bring up seeking medical help!
- Encourage doctoral students to take time off! They might not feel they have the time for it, but it helps if the supervisor encourages a healthy work life.

M-5-3 Support the supervisors

- Support supervisors on how to handle digital supervision. Check out the following two links: [1], [2].
- Provide supervisors with information on support offered by the university for doctoral students.

5.6. Research environment and network opportunities

The doctoral education happens in many different places, but it first and foremost happens in interactions with others. In interactions with the supervisors, in interactions with other doctoral students or with other more experienced researchers. It happens when bouncing ideas in the office, in the laboratory collaborating on an experiment, or when discussing the latest colloquium. It happens when you present your research at seminars, or when building your own research network at conferences, summer schools, or visit other research groups. Working from home or in an empty corridor does not facilitate these interactions, and this has consequences.

As one participant expressed it "holding on to your academic network is harder. Not talking or seeing colleagues brings down creativity and can also have an effect on productivity." Though it might be hard, the aim should be to create the research environment that doctoral students normally have.

5.6.1. Suggested measures

M-6.1 Business as usual

- Start by asking yourself the following questions: Did you use to have weekly seminars, group meetings, journal clubs, fikas etc in your research group/department? What has happened to those activities during the pandemic?
- Encourage the research environments at the universities to continue business as usual. But of course make it online.
- Make sure all doctoral students have **regular** access to meetings or seminars (besides supervision) where they have a chance to hear about and discuss research related to their own. By regular we mean something like once per week.
- Create a **Slack work space**, or similar, for the department (or faculty) with different **channels** for different groups of people, say research groups, doctoral students, etc. This lowers the threshold of asking for help as compared to sending an email. To learn more about <u>Slack</u>.

M-6.2 Online seminars, colloquiums, defenses and conferences

- **Share information** about seminars, conferences, and even defenses between departments and between universities. The online aspect makes it easier to invite other researchers with interest in the field, as most things are online these days.
- In conjunction with **seminars and colloquiums**, open the meeting early such that one can drop in and say hi and have a small talk. Similar in the end, open up the possibility for people joining different breakout rooms by the end of the talk.

- For larger talks, or talks by more prominent researchers, it can be intimidating as a doctoral student to discuss openly with senior researchers. Here it can be an idea to have a **designated** breakout room for doctoral students (maybe include master students and postdocs) for discussing the talk afterwards.
- If you are organizing **conferences** then consider how to include doctoral students in a good way. E.g. if there is a poster session, how do you ensure all doctoral students get feedback? Maybe include sessions where doctoral students get to present their research in smaller groups to each other but also to some other senior researchers.
- For designated **conferences for doctoral students** we can recommend to check out this <u>conference</u> for doctoral students in computer science to get inspired.

M-6.3 Meetings for doctoral students

- Support doctoral students' possibility to meet other doctoral students in the same or related fields.
- An example could be to have a monthly meeting for doctoral students in the field/department/cross university. Have the participants present themselves, their research, what has gone well, and what has gone badly the past month.

M-6.4 Share opportunities

- Collect information about seminars, colloquiums, defenses etc going on at the department or faculty in one place. Share this information with other departments and universities.
- If there is a Swedish professional society in the field, collaborate with them! They most likely have a web page, a Facebook group, or something similar, which could link to information about seminars at one university such that researchers at another institution could find it.

M-6.5 Mentoring of doctoral students

• Implement a mentor program. The <u>mentor</u> is chosen by the student. The mentor should hold a PhD and not be involved in the same research project as the student. The doctoral student can turn to a mentor for advice and help. It builds a support system around doctoral students larger than the supervisors.

5.7. Lack of access to research resources

We try in this report to distinguish between the research environment and the research resources. We discussed the lack of research environment in the previous sections.

However the lack of access to research resources is very different from the lack of a research environment, and it is important to keep in mind that when it comes to the lack of access to research resources, the universities and the doctoral students have fewer opportunities to solve the issue.

There is no way around it, some research is very physically restricted or can not be carried out at all at the moment. This is the case within all research fields, and it concerns all research that can not be carried out from home or at campus.

This means that some doctoral students have seen their planned research project fall apart. This happens in every field, no one is to blame, but it is necessary that the issue is addressed.

5.7.1. Suggested measures

M-7.1 Assess the situation - use the ISP

- The ISP's should reflect how affected the doctoral students research projects have been. Have an overview of how affected doctoral students at the department/faculty/university have been. **Encourage** doctoral students to be detailed when describing how their research has been affected in the ISP.
- Refer from suggesting that doctoral students solve delays by taking courses or doing their departmental duties. Doctoral students do not have that much influence on either when courses are given or their departmental duties.

M-7.2 Replan the doctoral students' research

• For doctoral students whose research projects fall apart - address the situation and help them replan.

M-7.3 Expand the doctoral students research network

- Find an (new) active co-supervisor for the doctoral student. Supervisors often have a routine way of doing research, another supervisor might have another way.
- Share solutions and best practices between universities.

M-7.4 Address the issue of financing and time

• A comment at the meeting was "don't throw out students even if their time is up". In severe cases there is no other solution than to prolong and replan the entire research project.

5.8. Special concerns

"The pandemic hits differently depending on where you are in your PhD", one participant expressed at the meeting. There are some groups of doctoral students that have special circumstances, we highlight those below.

M-8.1 New doctoral students

- The importance of well structured introductions and to be introduced to important people, was also brought up.
- Implement a buddy system for new doctoral students where they are paired up with a more senior doctoral student in the department.

M-8.2 Doctoral students with less than a year of financing left

- Address the issue of prolongation quickly such that they know what they have to plan according to.
- Address what happens if they run out of financing. What resources do they continue to have access to, what resources do they lose?

M-8.3 International doctoral students

For international doctoral students it is more difficult to integrate in Sweden than usual. As a consequence, international students might be more isolated. This amplifies all the issues described earlier.

- Make all relevant information available in both English and Swedish.
- Help with how doctoral students who experience visa problems can get help.
- Make it possible for international doctoral students to socialize with others:
 <u>language cafes</u> are an idea, after work another, but maybe doctoral students without a social network in Sweden also need to be given the opportunity to meet physically with others in the same situation.

M-8.4 Doctoral students with small children

Distractions and disruptions go hand in hand with working from home and having small children. If both parents are working from home, and their child is sick, only one gets VAB.

- Address the issue of how to create an office environment that works. Whether it is at home or on campus, and find a solution that suits the situation.
- Doctoral students returning from parental leave need time to settle back into a new normal. The supervisor(s), mentors and the doctoral student should address this.

M-8.5 Doctoral students who represent

Doctoral students who represent other doctoral students have experienced a higher workload when it comes to their representational duties. Doctoral education did not get the attention it deserved last spring, and as a consequence it was left for doctoral students who represent to monitor the situation, address solutions, carry out surveys, etc. in order to bring awareness to that doctoral education has been affected. In SFS and SFS-DK we have seen how hard doctoral students who represent at universities have worked to ensure a good and high quality doctoral education for all doctoral students. Similarly we know from them, that the same is the case for faculty and department representatives.

• Recognize their work!

• Encourage and expect that an increase in representational work related to the corona pandemic is **documented** in the **ISP**.

M-8.6 Doctoral students who teach

Teaching online takes more preparation than ordinary class room teaching. Many doctoral students experience that they are not properly compensated for this.

- Compensate doctoral students for the time they use on departmental duties.
- Encourage and expect that an increase of the teaching load is **documented** in the **ISP**.
- Support the doctoral students on how to do good online teaching. Include seminars and training in online teaching in the departmental duties of those who teach.

6. Svensk sammanfattning

Doktorandutbildningen består av flera delar. Den består givetvis av de kurser och den forskning som doktorander gör, men den består självklart även av den miljö som utbildningen genomförs i. Denna miljö är vad vi genomgående i rapporten kallar för forskningsmiljö och den innehåller alla aspekter av doktorandutbildningen. Den handlar om att lära sig att bli en forskaren inom ett visst område och även om det finns skillnader mellan olika områden, så finns det även likheter. Den inkluderar när doktoranden träffar sin handledare, när de är på kontoret och bollar idéer med andra doktorander, när de presenterar forskning under seminarium på institutionen - och på andra ställen - men framförallt handlar den om interaktioner med andra forskare.

När pandemin först drabbade det svenska systemet för högre utbildning så fick doktorandutbildningen inte så mycket uppmärksamhet - det var andra saker som var mer akuta. Det fanns också hopp om att allt skulle vara som vanligt efter sommaren, vilket inte visade sig vara fallet. Nu har det gått nästan ett år och vi börjar se de långsiktiga effekterna på doktorandutbildningen. Doktorander i Sverige har till stor del genomfört sin utbildning på distans sen mars 2020, med lite fokus på konsekvenserna. Det här har betytt avsaknad av den ovan beskrivna forskningsmiljön, brist på information och struktur kring doktorander, försämrad mental hälsa för många doktorander och en del doktorander har sett sina forskningsprojekt falla sönder. Allt det här och många andra aspekter orsakar förseningar.

Hur stor försening doktorander faktiskt har fått erfara är såklart den stora frågan. Under de veckor mellan mötet och publicerandet av den här rapporten kom den årliga statistiken över hur många forskningspublikationer som de svenska universiteten har publicerat från <u>UKÄ</u>. Den visade att antalet forskningspublikationer som producerats i Sverige hade minskat med från ungefär 65 000 under 2019 till 55 000 under 2020. Den totala påverkan som pandemin har haft på svensk forskning kommer givetvis inte vara känd på flera år - och antalet publikationer är såklart bara en aspekt - men det visar att vi redan nu kan se en stor påverkan.

Det är självklart inte bara doktorander vars forskning har blivit påverkad av pandemin; alla nivåer av svensk forskning har påverkats. Men det som gör doktorandutbildningen speciell är att det är just en utbildning. Doktorandutbildningen är en fyra år lång utbildningen, förseningar av forskningen och annat som saktar ner utbildningen betyder i slutändan att utan förlängning måste doktorander uppnå lärandemålen för utbildningen på kortare tid än vad som faktiskt krävs. I en verklighet där doktorander redan innan pandemin jobbade övertid, antalet stressrelaterade sjukskrivningar var oroväckande höga och förväntningarna på doktoranderna redan var, med rätta, höga så är det helt enkelt inte görbart.

Vi ser därför att frågan om förlängning för doktorander är extremt viktig, både för individuella doktorander men också för hela det svenska samhället. Konsekvenserna av att inte förlänga doktorander kommer förmodligen att leda till att doktorander tvingas till att inte avsluta sina doktorandutbildningar eller en drastisk försämring av kvalitén

av det som produceras. Det kommer att påverka både tillströmningen av nya forskare till det svenska forskningssystemet men också påverkar den totala forskningskvalitén eftersom att en stor del av forskningen i Sverige bedrivs av doktorander.

Angående förseningar som redan har skett så finns det bara en lösning på problemet och det är att förlänga doktoranden. Även om vi argumenterar för att förlängning är lösningen till de förseningar som doktoranden redan har stött på så vill vi även påtala vikten av att doktorander inte fortsätter att ackumulera förseningar. För att undvika det här så fokuserar en stor del av den här rapporten på de åtgärder som universiteten kan genomföra för att säkerställa att doktorander försenas så lite som möjligt. Vissa åtgärder implementeras bäst på institutionsnivå medan andra lämpar sig bättre på universitetsnivå. Vissa kräver samarbeten mellan universiteten. Det är vår förhoppning att flera av dessa, och andra, förslag implementeras.

De detaljerade beskrivningarna av förseningarna med föreslagna åtgärder är baserade på diskussioner från mötet "Doktorandutbildningen under coronapandemin" som hölls den andra februari 2021. Mötet organiserades av Sveriges förenade studentkårer (SFS) och dess doktorandkommitté (SFS-DK). På mötet var det över 100 deltagande, inkluderat allt ifrån doktorander till universitetsledningar. Majoriteten av de svenska universiteten som har doktorandutbildningar var representerade. Syftet med mötet var att diskutera hur doktorandutbildningen har påverkats av coronapandemin och mer specifikt, hur den har försenats, samt vad som kan göras för att motverka dessa förseningar.

Medan denna rapport fokuserar på förseningar och åtgärder så vill vi även poängtera att det är absolut avgörande att konsekvenserna som pandemin har på doktorandutbildningen och dess kvalité även fortsättningsvis övervakas. Det bör bör ske på alla nivåer, inkluderat institutions- och universitetsnivå samt nationellt.

För SFS och SFS-DK,

Simon Edström, President Swedish National Union of Students

gra Edita

Linn Svärd, Vice president Swedish National Union of Students Pil Maria Saugmann, Chairperson The doctoral students committee Swedish National Union of Students

Pil de Jay

Sara Gunnarsson, Vice chairperson The doctoral students committee Swedish National Union of Students

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7. Supplementing material

7.1. Statistics about research publications

Information about the statistics about research publications from the Swedish Universities (UKÄ).

 $\underline{https://www.uka.se/om-oss/aktuellt/nyheter/2021-02-11-ny-statistik-om-forskning-vid-universitet-och-hogskolor.html$

The statistics

https://www.uka.se/statistik--analys/statistikdatabas-hogskolan-i-siffror/statistikomrade html?statq=https://statistik-api.uka.se/api/totals/111

7.2. About doctoral students' situations in general

Doktorandspeglen: A national survey from 2016 by UKÄ about the doctoral students situation

 $\frac{https://www.uka.se/download/18.67d7db0e1598fa32b7fadbc6/1487841858377/rapport-2016-12-08-doktorandspegeln-doktoranders-studiesituation.pdf}{}$

Third-cycle students and third-cycle qualifications 2017: A report from UKÄ and SCB from 2017

 $\frac{https://www.scb.se/contentassets/d53282e6a4dc4c78b03a36124d0cbbde/uf0204~2017a01}{sm~uf21sm1801.pdf}$

"Hur mår doktoranden" a survey from 2012 by ST and SFS. https://st.org/om-st/det-har-vill-vi/sts-rapporter/hur-mar-doktoranden

About doctoral students mental health: An article in Universitetsläraren: https://universitetslararen.se/2019/11/21/doktorandernas-valfard-en-fraga-om-hallbarhet/

7.3. Material by SFS and SFS-DK

Joint debate article in Universitetsläraren by SFS-DK and SDF (SULF's doctoral students council)

https://universitetslararen.se/2020/11/12/forlang-doktorandernas-utbildning-med-anledning-av-corona/?utm campaign=unspecified&utm content=unspecified&utm medium=e mail&utm source=apsis-anp-3&fbclid=IwAR0A-q8KqNqwYL6LKBsUyav jK72aL86dFJpwCCcyD-lGvZV7u1aMzxU-Qc

7.4. Other references

The reference on p. 13: A. Bal, O. Arslan, K. Budhrani, Z. Mao, K. Novak, and P. S. Muljana, "The balance of roles: Graduate student perspectives during the COVID-19 pandemic," TechTrends, vol. 64, no. 6, pp. 796–798, 2020

 $\frac{https://link.springer.com/article/10.1007/s11528-020-00534-z?fbclid=IwAR28MxKI~Q370}{vYCvpOoh-JDh75okT~Jhm5YQOZTusBMKrRugduTb52v3Cc}$



Sveriges förenade studentkårers doktorandkommittée

8th of March 2021, Stockholm

Delays of doctoral education due to the corona pandemic

Appendix: Measures in section 5 - who should do what?

Motivation

In the report "Delays of doctoral education due to the corona pandemic", recently published by SFS and SFS-DK, we suggested a number of measures to be implemented in order to prevent doctoral students being further delayed by the corona pandemic. In the report, the measures suggested in section 5 are sorted thematically. As a supplement to the report, we therefore provide this appendix where we instead have sorted the measures by whom we see could be responsible for implementing these measures. This appendix only lists the measures by their numbers and does not contain the actual measures, for that one has to look in the report.

We wish to stress that the most important aspect is of course that many of these measures are implemented and not so much who does it. The sorting below is our suggestion, but as the structure of the Swedish universities can vary considerably there is of course not a one size fits all solution. We have divided the measures into the following categories: *University level, Faculty level, Department level, Head of research education* and *Supervisor, mentor and research environment*. The terminology for some of these will vary from university to university.

For the measures that we recommend are carried out at university, faculty and

department level one can say that the measures are varying in nature. Some are for the management to decide upon, some are purely administrative, etc. We recommend that the body that deals with research education at the appropriate level goes through the recommendations.

University level

5.1 Finding the right information

M-1.1 Make a centralized source of information with the information doctoral students need during the corona pandemic

5.3 Mental health

- M-3.1 Preventive measures
- M-3.2 Information
- M-3.3 Occupational health services and studenthälsan

5.4 Working from home

- M-4.1 Measures from the universities regarding the home office
- M-4.2 Campus facilities

5.8 Special concerns

- M-8.1 New doctoral students
- M-8.2 Doctoral students with less than a year of financing left
- M-8.3 International doctoral students
- M-8.5 Doctoral students who represent

Faculty level

5.2 Lack of structure

- M-2.1 Online working communities
- M-2.2 Online peer support groups

5.3 Mental health

- M-3.1 Preventive measures
- M-3.2 Information

5.4 Working from home

M-4.1 Measures from the universities regarding the home office

5.6 Research environment and network opportunities

- M-6.2 Online seminars, colloquiums, defenses and conferences
- M-6.3 Meetings for doctoral students
- **M-6.4** Share opportunities

5.8 Special concerns

- M-8.1 New doctoral students
- M-8.2 Doctoral students with less than a year of financing left
- M-8.3 International doctoral students
- M-8.5 Doctoral students who represent

Department level

5.3 Lack of structure

- M-2.1 Online working communities
- M-2.2 Online peer support groups
- M-2.3 Online coffee, fika or afterwork

5.3 Mental health

- M-3.1 Preventive measures
- M-3.2 Information
- M-3.4 When the damage is done sick leave

5.4 Working from home

M-4.1 Measures from the universities regarding the home office

5.6 Research environment and network opportunities

- M-6.1 Business as usual
- M-6.2 Online seminars, colloquiums, defenses and conferences
- **M-6.3** Meetings for doctoral students
- M-6.4 Share opportunities
- M-6.5 Mentoring of doctoral students

5.8 Special concerns

- M-8.1 New doctoral students
- M-8.2 Doctoral students with less than a year of financing left
- M-8.3 International doctoral students
- M-8.4 Doctoral students with small children
- M-8.5 Doctoral students who represent
- M-8.6 Doctoral students who teach

Head of research education

5.3 Mental health

M-3.4 When the damage is done - sick leave

5.5 About supervision

M-5.3 Support the supervisors

5.7 Lack of access to research resources

- M-7.1 Assess the situation use the ISP
- M-7.2 Replan the doctoral students' research
- M-7.3 Expand the doctoral students research network

5.8 Special concerns.

- M-8.1 New doctoral students
- M-8.2 Doctoral students with less than a year of financing left
- M-8.3 International doctoral students
- M-8.4 Doctoral students with small children
- M-8.5 Doctoral students who represent
- M-8.6 Doctoral students who teach

Supervisors, mentors and the research environment

5.3 Mental health

M-3.4 When the damage is done - sick leave

5.5 About supervision

- M-5.1 Regular supervision
- M-5.2 Mental health

5.6 Research environment and network opportunities

- M-6.1 Business as usual
- M-6.2 Online seminars, colloquiums, defenses and conferences
- **M-6.4** Share opportunities

5.7 Lack of access to research resources

- M-7.1 Assess the situation use the ISP
- M-7.2 Replan the doctoral students' research
- M-7.3 Expand the doctoral students research network

5.8 Special concerns

- M-8.1 New doctoral students
- M-8.2 Doctoral students with less than a year of financing left
- M-8.4 Doctoral students with small children