Utbildningsutvärdering med extern bedömning
vid Göteborgs universitet

# BEDÖMARUTLÅTANDE FÖR UTBILDNINGEN PÅ FORSKARNIVÅ FÖR ÄMNENA BIOLOGI OCH MILJÖVETENSKAP VID NATURVETENSKAPLIGA FAKULTETEN

2020-12-17

## Background

The review committee (see below) was asked to examine the academic and pedagogic quality of the doctoral education at the Department of Biology and Environmental Sciences, Faculty of Sciences, and its relevance to students and society, based on the University criteria for evaluation of research education according to "Policy för kvalitetssäkring och kvalitetsutveckling" (Appendix 1).

- Before the interviews the faculty and the department made a number of relevant documents available to the review committee (Appendix 2).
- On October 22, a preparatory meeting was held with representatives from the department and the faculty.
- The review committee had three additional meetings on November 9, November 16 and November 27.
- Interviews with 18 persons were carried out on November 30 and December 1 (program for interviews, Appendix 3).
- All meetings and the interviews were carried out through Zoom.
- The review committee created a survey with six questions that was distributed to all PhD-students at the department (Appendix 4).
- Lastly, the BioEnv PhD-board provided a set of comments for the evaluation.
- Based on this material, and through email and additional meetings on December 2 and December 10, the review committee has jointly elaborated this report.

### Review committee

- Johan Ehrlén, Professor, Department of Ecology, Environment and Plant Sciences, Stockholm University (chair)
- Marie Dacke, Professor, Department of Biology, Lund Vision Group, Lund University (vice chair)
- Ellika Faust, PhD student, Department of Marine Science, University of Gothenburg.
- Dawn Sanders, Associate Professor, Department of Didactics and Pedagogical Profession, University of Gothenburg.
- Anna Lennquist, Senior Toxicologist, ChemSec

## Evaluation Methods

The evaluation group used three main methods to gather data on the postgraduate programme:

- Evaluation of departmental and course-related evaluation and administration documents provided by the department
- Online survey of current PhD-students (Appendix 4)
- Semi-structured interviews with key stakeholder groups (Appendix 3).

The evaluation group members were provided with access to an online folder of documents (GUBox) stored on the University of Gothenburg website. These documents were regularly updated in response to requests for further materials, as the need for more data emerged. An online survey was developed in relation to information from the documents. It consisted of six questions using a likert scale response approach in addition to optional choices in which respondents could choose those options that were applicable.

The online survey results provided a baseline of data that added to the depth the interviews could provide and increased the number of doctoral students we could reach. In response to these results, which were received before interviews began, the group recognised the need for at least two groups of doctoral students for the interview sessions. This request was actioned by the department.

*Evaluation timetable*

Access to the relevant documents was given to members of the evaluation board in a timely fashion. This meant each evaluation board member was able to bring a deeper body of knowledge to the meeting in which the interview themes and questions were discussed. Further, it allowed for the group to focus on priorities for the evaluation goals, in line with gaps in evidence suggested by the documents provided. This acclimatisation process made a difference to the quality and depth of the evaluation. It also meant the interview questions could probe the experiences and knowledge of the interviewees at a greater depth in the time allowed for each set of interviews. This would not have been the case if the body of documents and survey results were not available beforehand. The evaluation board met several times to develop the evaluation tools, in particular to thematise and prioritise the questions used in each set of interviews.

The evaluation group wishes to acknowledge and thank the interview participants and Gabriella Olshammar for their contributions to the evaluation process.

*Sample Details*

| Group | Method | Number of participants | Gender Mix | Role | Additional Notes |
|---|---|---|---|---|---|
| **One** | Survey | 18 | Not Requested | Students | Survey results returned before interviews began |
| **Two** | Semi-structured interview | 2 | One Female<br>One Male | Students | One female student did not attend |
| **Three** | Semi-structured interview | 3 | One Female<br>Two Male | Supervisors | |
| **Four** | Semi-structured interview | 2 | One Female<br>One Male | Examiners | One female examiner did not attend. This meant representation was skewed towards plant science. |
| **Five** | Semi-structured interview | 4 | Two Female<br>Two Male | Leadership Group | All aspects of leadership roles were covered in the representation of the group |
| **Six** | Semi-structured interview | 3 | One Female<br>Two Males | Alumni | The students had graduated in 2009, 2011 & 2013. All three had left academia. |
| **Seven** | Semi-structured interview | 3 | One Female<br>Two Males | Students | |

### PhD education at the Department of Biological and Environmental Sciences (Bioenv)

The Bioenv department was formed in 2012 by fusing the Departments of Plant and Environmental Sciences, Zoology and Marine Ecology. In 2015, many of the departmental staff joined the new Department of Marine Sciences. The current department is thus a product of two large recent reorganisation events. Bioenv is spread across three locations: the Botany building, the Zoology building and the marine research station Kristineberg. BioEnv will move to new common premises in 2023.

The department has about 140 employees and 35 PhD-students. There are four main research areas at the department: Evolutionary Ecology & Conservation, Physiology & Cell Biology, Environmental Sciences and Systematics & Biodiversity. The department is involved in four research centres, FRAM (Future chemical Risk Assessment and Management strategies), SWEMARC (the Swedish Mariculture Research Centre), GGBC (the Gothenburg Global Biodiversity Centre) and CeCAR (the Center for Collective Action Research). The four centres comprise the majority, but not all, of the Bioenv PhD students and supervisors.

PhD-studies comprise 240 higher education credit points (hec), that is 4 years of full time studies. The actual research constitutes three years (180 hec), while one year in total includes curses and literature examination etc. At the department, most PhD-students are also involved in teaching, at up to 20% of full time, so in reality the PhD period is five years. All PhD students are employees, and are mostly funded through a combination of external grants and internal department funds. All PhD students are recruited through an open advertising procedure.

Each PhD-student has a supervisory team with a main supervisor, one or more assistant supervisors and an examiner. There is regular monitoring of progress, with a meeting with the supervisor and examiner at least once a year (in this report referred to as follow-up meetings).

## Evaluation of the PhD education at BioEnv

The key task of the review committee was to assess where and how improvements in the education of PhD-students could be achieved. Below, the review committee discusses strength and weaknesses with several aspects of the research education at the Department of Biological and Environmental Sciences based on the interviews and on the other material that was made available to us. We particularly focus on the areas where we consider that there is room for improvement and identify some possible steps to further improve PhD-education. Our discussion of different aspects of PhD-education at BioEnv is organized in 9 sub-sections. We conclude with a set of concrete recommendations.

## 1. Routines and information to PhD-students at admission

From our discussions with students, it is clear that they regard clear, structured, reliable and up-to-date information about administrative routines, practical matters, regulations, support structures and what person to contact in a particular situation and for a specific question, as a key part of their PhD-education. One way to facilitate this would be to compile all relevant information on the PhD-program in a written information package – a PhD-handbook. Such a starting package should also include a list of the specific persons that the student should turn to with questions regarding administrative matters, Ladok reporting, teaching, routines for half-time seminars and dissertations, mentoring and problems with supervision, and who to turn to in emergency situations.

In the interviews with the PhD-students they expressed that they in some way, and after some time, in most cases were able to find the information that they needed, but that they were learning about the program largely through conversations with other students and that they were missing an efficient system to communicate the most important information. The department leadership are well aware of the importance of providing adequate information in an efficient way at the start of the PhD-studies, and have been taking several steps to improve the information. We strongly support these efforts.

It is also important to clarify the roles and expectations of PhD-students and supervisors at the onset of the PhD-studies. In their responses to our survey question "Is the information regarding practical aspects of your PhD-studies and what the faculty expects from as a student clear?", 3/18 regarded it as "very clear", 8/18 "quite clear" and 4/18 "unclear" (Appendix 4). One way in which this could be achieved is that the student and the supervisors together discuss a set of predefined questions related to the students and supervisors expectations regarding the nature and aim of doctoral studies, as well as to the form of and frequency of supervision. One example of such a document can be found at https://www.science.lu.se/sites/science.lu.se.internal/files/discussion_introduction_phd_student_supervisor.pdf. These questions should then be re-visited during follow-up meetings.

Good understanding of expectations and feedback on how these expectations are met would hopefully also address some of the stress caused by imposter syndrome, which is experienced by 10/18 PhD-students.

**Recommendations:**

- Establish a more structured way to communicate all the practical information necessary for the student to get started, as well as the information needed during subsequent stages of the education.
- Further clarify the roles and mutual expectations of the student and the supervisors at the start of a new PhD-project.

## 2. Data gathering

A range of documents were provided in which there was some statistical information concerning the current community of doctoral students. This information did not encompass the depth of detail that is needed to provide a comprehensive overview of, for example; number of students, through-flow, where students come from, where they go after their studies. There also appeared to be no yearly summary *across* the group where gender balance, "time keeping" within the Phd education (for example half time), sick leave (stress) is taken into account. There could also be further mapping of data related to alumni and where they go after their doctoral studies.

This suggested database should, at the minimum, include the duration and scientific output of each PhD-project, how much teaching the PhD-students do, where they have completed their masters exam, where they are employed after graduation, their gender and, if possible, how they progress in their career.

**Recommendation:**

- The department should accurately record and regularly monitor relevant substantive data regarding their PhD-students in their studies and where they go after dissertation.

## 3. Supervisors and examiners

Our survey and interviews suggested that the PhD-students overall are happy with the support they receive from their supervisor and examiner (14/18 students indicated a high degree of support). With 13 professors (5 of them women), 3 docents and 4 senior lecturers, the 20 main supervisors at the department for which we received full CVs appear scientifically well qualified.

While the role of the supervisor seems to be clearly defined at all levels, the role of the examiner was less clear. In particular, from what we learned during the interviews, the role of the examiner is sometimes dual – acting both as an examiner and a mentor. One suggestion from us, that we share with BioEnv PhD-board, is to separate these roles and that each student - in addition to supervisors and examiner - is also assigned a mentor at the start of their studies.

The mentor should be someone with a permanent position that is *not* involved in the project and does *not* examine or evaluate the progress of the PhD-student. This would give each student a clear directive for who to turn to when additional support is needed and when not able, or willing, to turn to their supervisors. An appointed mentor for each student could possibly also help to negate the "stress from lack of guidance" that ¼ students reported in our survey. Ideally, the student and its mentor should meet in an informal setting at least once a year.

**Recommendations:**

- The role of the examiner needs to be more clearly specified and communicated.
- The possibility of assigning a mentor for each PhD student should be discussed.

## 4. Individual study plan (ISP)

For most students, the ISP is updated on a yearly basis after a "follow-up meeting" with the supervisor and the examiner. From the ISPs we were given as examples and discussions with supervisors, examiners and students, it is obvious that the ISP is a useful tool for documentation of a student's progress. As a planning tool, however, the ISP does not seem to be used fully as intended.

In our survey, 3/18 students found the ISP "not at all useful" and 7/18 "somewhat useful" for planning and follow-up studies. In the 4 ISPs we were given as examples, 3 of the students indicated that they had not read the general agreement, 1 ISP did not list any assistant supervisors and in 1 ISP the project plan had not been updated properly since 2016 (even if follow-up meetings had been held). In addition, in our survey, ¼ students reported that they experienced "stress from lack of guidance".

Discussions with supervisors, examiners and students confirmed that the ISP in many cases is used only as a reporting tool, with project planning done by other means. Our impression is that the structure and function of the follow-up meetings (and the use of the ISP as a planning tool) varies depending on the supervisor and the examiner. This view is also shared by the BioEnv PhD-board. We strongly recommend that the ISP should be used more as a planning tool to inspire discussions on the follow-up meetings into activities and goals for the next 12 months.

One possible way to structure and streamline the follow-up meetings is to formulate a set of questions to be discussed in preparation for the meeting (could differ depending on the progress of the student). An example of such a questionnaire can be found here - https://www.naturvetenskap.lu.se/internt/sites/naturvetenskap.lu.se.internt/files/lathund-arlig-utvardering-doktorandens-handledning-och-arbetssituation.pdf. A yearly discussion regarding expectations from examiners and supervisors could potentially also serve to negate the stress associated with the imposter syndrome experienced by many students (10/18 PhD-students in our survey).

From interviews and documents provided, it was clear that an important function of the half-time seminar is to give the student and the supervisor a clearer idea of whether the project work is progressing in line with the plan, and put past and current work in the context of the entire thesis project. This requires that all parts of the thesis work are discussed in connection to the half-time seminar. The present format, where there is no requirement of a written report if the students have at least one accepted paper does not appear to make sure that these

requirements are fulfilled. The students would benefit from clearer guidelines regarding this aspect for their half-time report.

**Recommendations:**

- We strongly recommend that the routines for the yearly progress meetings with the supervisor and examiner are more clearly defined. Should the follow-up meetings primarily serve as a planning or a recording tool?
- It is also important to make clear that ISP-protocols serves as a type of contract that is not only informal but also formally important for both the Ph.D.-student and the supervisor.
- The intended role of the halftime seminar should be discussed, and routines clarified.
- Better routines to ensure that ISP follow-up meetings are documented in an appropriate way.

## 5. Courses

From our interviews, doctoral students were overall quite happy with both the availability of courses and their quality. Interviews with the alumni from outside of academia demonstrated the value of taking PhD-courses to *broaden* the field of competence, for example in project management, economics and law.

Although PhD-students said that the number of courses given at the department had decreased during recent years, they were still able to find the courses needed outside GU. Significantly, the responsibility for keeping track of available courses now seems to be on PhD-students. As this is a key function in doctoral education, we suggest that the responsibility for this should be on the department.

One problem, mentioned during the interviews, was that transfer of knowledge is becoming increasingly difficult because of a lower number of students. One way to address this could be to arrange short methods courses at the department. A second point, emerging from the interviews, was the role of funding in providing courses within the department and the impact this has on the internal provision of courses and the role of external provision of courses.

It was also not clear to the committee how it is guaranteed that PhD-students acquire a broader knowledge of the research field. For example, if there is a mandatory literature course for all students? Indeed, literature courses seemed to be organised on a student by student basis, related to individual student's needs, their supervisors and a specific suggested text. We think that it is important that literature course provision is reviewed by the department in relation to the goal stated in Högskoleförordningen, that for a doctoral degree the doctoral student should demonstrate a broad knowledge within and systematic understanding of the research area.

**Recommendations:**

- Responsibility for keeping track of available courses should be with the department and not doctoral students.
- Literature course provision should be reviewed to ensure a broad knowledge and systematic understanding of the research area.

## 6. Teaching

The participation of PhD-students in teaching appears to work well. Most students at the department teach about 20% of their time, meaning that the four years of financial support for PhD-studies are distributed over five years. Our interviews suggested that most students enjoy teaching and regard the possibility to teach as an important experience for their future career, and a good opportunity for them to develop both their scientific and pedagogic skills. Students expressed that planning was generally good and that they usually knew what and when to teach well in time. However, information about scheduling and contributions expected by PhD-students seem to vary considerably among courses, and about 40% of students mentioned teaching as a cause of stress.

## 7. Togetherness

The department is described to have four research themes and is split across three geographic locations, Botany building, Zoology building and the research station Kristineberg. These divisions present additional challenges for the scientific environment in terms of critical mass, togetherness and community. It seems the themes were created to involve people from different (previous) departments and to merge a separation which traditionally has been rather strong between topics, e.g. zoology and botany. Unfortunately, the themes do not seem to have had the desired effect and divisions are still present.

In the interviews it became clear that there are many levels/environments to where you belong; the research group is the smallest unit, then the research area, the building, the department, the different university centers (eg GGBC) and the international research field. However, much of the current division appears to be dictated by the geographic locations, especially Botany and Zoology. The planned common building is likely helpful in the integration process, but is still several years away.

Activities, like seminar series, seem to work differently in different buildings and research groups. Some students are able to take part in recurring activities such as journal clubs, group meetings, seminars etc, whilst others have less such opportunities. This could in part be addressed by virtual activities and by listing all upcoming activities online or in a weekly information email.

In the interviews, it was highlighted on numerous occasions that there are very few PhD-students at the department and that increasing the number of students is an important aim. In addition, the current structure of the department results in a very different scientific environment for each PhD student. Our survey showed that every second PhD (9/18) student finds isolation to be a cause of their stress. This isolation and physical separation calls for active integration efforts.

**Recommendations:**

- The isolation and physical separation calls for active integration efforts. Ongoing activities, such as seminars and journal clubs, should be made more visible and inclusive.

## 8. Stress

The problem with stress among students appears to be widespread. On the survey question "How often do you experience stress?" ⅔ of students answered "Often" (7/18) or "Very Often" (5/18) and no students answered "Never". On the follow up question "What do you think are the causes of this stress?" students were given the option to select multiple of the eight possible options. The most common answer was "Workload" (13/18) closely followed by "Imposter syndrome" (10/18) and "Isolation" (9/18). "Teaching" "Publishing", and "Competitive Environment" caused stress in 7/18 of the students, 5/18 found "Lack of guidance" to be a contributing factor and only 3/18 found "Administrative tasks" to be a cause for stress.

The leadership are aware of the widespread stress among the students and have taken some action by arranging for a stress workshop held by Feel good (företagshälsa). Yet, detailed information about the extent of the problem, the main causes of stress and planned actions are not available. Although there is always an individual story, as pointed out in the interviews, the survey results show that there are also some common factors which can be addressed. From the interviews and the documentation, it also became evident that a large contributor to stress among PhD-students is lack of information and poor communication.

Recurring surveys would allow the Department to get a better grip on to what extent and why students experience stress, and help guide more informed decisions on what actions need to be taken to reduce stress.The PhD-council has also asked that the department "explicitly state the steps the department is taking to deal with the problems". Such an action plan could include clarified expectations, project plans and evaluations (*see 4. ISP*), clearer information and communication (*see 1. Routines and information to PhD-students at admission*) and clearer information about who to turn to when experiencing stress-related problems (*see 3. Supervisors and examiners*). Finally we highly recommend providing education for supervisors and examiner to recognize stress and stress-related problems at an early stage and how to direct students to appropriate resources.

From the interviews we understood that every PhD-student is assigned one of two contact persons with whom they should have an annual developmental meeting to discuss their work situation. However, the function of this contact person and the purpose of the meetings was less clear. It was mentioned that the meetings are there to, among other things, capture and prevent stress related problems. However, this was not clear to all PhD-students nor senior staff. We believe that the function of a mentor would complement and be a more available, direct clearer contact for students when experiencing stress or other problems (*see 3. Supervisors and examiners*).

**Recommendations:**

- Carry out surveys to get a better grip on to what extent and why students experience stress.
- Develop an action plan based on data collected from the surveys.
- Educate staff to identify high levels of stress and direct students to appropriate resources.

## 9. Career planning

In the survey, 13/18 PhD students answered " I would appreciate more support and inspiration on this" given the question if their career options post-dissertation were clear. 6/18 answered that they know what is expected from them and what they can expect from a continued career in academia. 4/18 answered gave the corresponding answer for a career outside of academia. These results were confirmed during the interviews with both current and earlier PhD students.

According to the interviews, career is something that is meant to be discussed with the supervisor. Those discussions, for obvious reasons, tend to focus on a continued career in academia; for example how to apply for funding and making connections for possible postdoc positions.

The evaluation committee recommends to investigate more opportunities for PhD students to discuss and explore career opportunities, to be better prepared for life after dissertation.

**Recommendations:**

- Invite alumni to present at department seminars and provide possibilities for students to have a mentor from outside of the department.
- Provide possibilities to get credits for spending time at a non-academic workplace.

## Summary and key recommendations

Based on the provided written material, the survey and the interviews, our overall impression is that the scientific quality of the environment is good, that the supervisors are scientifically well qualified, and that the PhD training is going quite well. We stress that our recommendations thus are meant to improve an already well-functioning program.

Current and former PhD-students expressed overall satisfaction with their study programs and with the supervision they get, while offering constructive criticism of the support systems. Alumni considered the PhD-education to have been valuable in their future careers. We also think that the framework and routines necessary to support successful PhD-education are generally in place. However, in some cases our impression is that this system is not always fully utilized, and that routines are not always followed. This can cause unnecessary stress. To aid the implementation of our suggestions, key recommendations are repeated below.

**Recommended actions:**

- Develop a structured way to communicate all the practical information necessary for PhD-students to get started.
- Clarify the roles and mutual expectations of the student and the supervisors at the start of the PhD-education.
- Clarify and communicate the role of the examiner. Discuss the possibility of including an assigned mentor.
- Review the routines for the yearly progress meetings. In particular, it needs to be clarified if the follow-up meetings should primarily serve as a planning or a recording tool.
- Review literature courses to ensure a broad knowledge and systematic understanding of the research area.
- Increase active integration efforts to deal with problems associated with isolation and physical separation.
- Collect data on stress through surveys, create action-plan and follow up.
- Educate staff to identify high levels of stress and to direct students to appropriate resources.
- Record and monitor relevant data regarding the PhD-students in their studies and where they go after dissertation.
- Provide possibilities for students to have a mentor from outside of the department, and discuss the possibility to get credits for spending time at a non-academic workplace.

**University criteria for evaluation of research education** Appendix 1

The committee was asked to review whether the provided education met the following criteria:

- Achieved study results matching intended learning outcomes and the qualitative targets of the Higher Education Ordinance.
- Teaching being focused on student acquisition of knowledge/skills.
- The content and form of teaching resting on good scientific and/or artistic bases and proven experience.
- Teachers having up-to-date and adequate competence as regards their subjects, higher education pedagogics and subject didactics, and that said teachers being in proportion to the scope and content of study courses and programs.
- Study courses and programs being relevant to the needs of the students/doctoral students and society.
- Students/doctoral students having influence in planning, implementing and monitoring study courses and programs.
- There being a study and learning environment that is accessible and purpose-oriented for all students/doctoral students.
- There being continuous monitoring and development of study courses and programs.

For doctoral education, it is particularly important that the doctoral students have access to an active research environment with sufficient subject depth, subject width and scope. It is also important to take into account the possibility for doctoral students to collaborate with researchers both nationally and internationally and with the surrounding community.

**Underlag till bedömargruppen** Appendix 2

Introduction to the review package for the PhD Education at the Department of Biological and Environmental Sciences

Table of Contents:

## Program: digital interviews

Appendix 3

## November 30

**13:00-14:00: First group of three Doctoral students**

- Ola Nordqvist. Start date: 160901. PhD student in Natural Science, specialising in Educational Sciences
- Emilija Dukic. Strat date: 170801. PhD student in Natural Science, specialising in Biology
- Malin Broberg. Start date: 150518. PhD student in Natural Science, Specialising in Environmental Sciences

**14:00-14:15:** Break and/or reflections among group of assessors

**14:15-15:15: Supervisors**

- Frank Götmark
- Kristina Sundell (also doctoral examiner)
- Göran Wallin

**15:15-15:45**: Break

**15:45-16:45 Doctoral Examiners**

- Bengt Oxelman
- Malin Celander
- Cornelia Spetea Wiklund

**16:45-17:00**: Reflections among group of assessors

## December 1

**13:00-14:00: Department leadership, including Director of PhD-studies, Head of Department, Head of Administration and Postgraduate studies officer**

- Henrik Aronsson (Head of Department) henrik.aronsson@bioenv.gu.se
- Elisabeth Jönsson Bergman (vice head of Department) elisabeth.jonsson@bioenv.gu.se
- Mats Olsson (Director of research Studies) mats.olsson@bioenv.gu.se
- Ingela Lyck (main administrator for PhD students, adm. For ISP system) ingela.lyck@bioenv.gu.se

**14:00-14:15**: Break and/or reflections among group of assessors

**14:15-15:15: Alumni, including PhDs that have remained in science and those that have departed to other jobs**

- Sofia Brockmark, utredare, Havs- och vattenmyndigheten
- Lars Niklasson, apotekschef, Kronans Apotek
- Erik Heyman, biolog, COWI
  (Ev också en forskningsingenjör från Chalmers och en person från AstraZeneca: inväntar svar)

**15:15-16:00**: Break and/or reflections among group of assessors

**16:00-17:00: A second group of three Doctoral students**

- Christina Jönander. Start date: 180906. PhD student in Natural Science, Specialising in Environmental Sciences
- Magnus Lovén Wallerius. Start date: 160501. PhD student in Natural Science, specialising in Biology
- Niklas Warwas. Start date: 180917. PhD student in Natural Science, Specialising in Biology

**17:00-17:30: Oral feed-back**

- Henrik Aronsson (Head of Department)
- Elisabeth Jönsson Bergman (vice head of Department)
- Mats Olsson (Director of research Studies)
- Ingela Lyck (main administrator for PhD students, adm. For ISP system)

# Questions for doctoral students in relation to evaluation of research education at BioEnv, GU, November 2020

**1. Where are you in the timeline of your studies? Please select**

First Year/ Middle/ Near Disputation/Recently graduated

**2. Is the information regarding the practical aspects of your PhD-studies and what the faculty expects from you as a student clear? Please select**

Very Clear/ Quite Clear / Unclear / No Opinion

**3. How useful is the ISP in planning and following up your studies?**

Very useful/ Somewhat Useful/ Not at all useful/No Opinion

**4. A) How often do you experience stress?**

Very Often/ Often/ Occasionally/ Never/ No Opinion

**4. B) What do you think are the causes of this stress? Please select all options that are applicable to your experience:**

Workload / Lack of guidance / Teaching / Publishing / Competitive Environment / Isolation / Imposter syndrome / Administrative tasks

**5. Are your career options post-dissertation (in and outside of academia) clear to you? Please select, (you can choose several options):**

I know what is expected from me and what I can expect for a continued career in academia

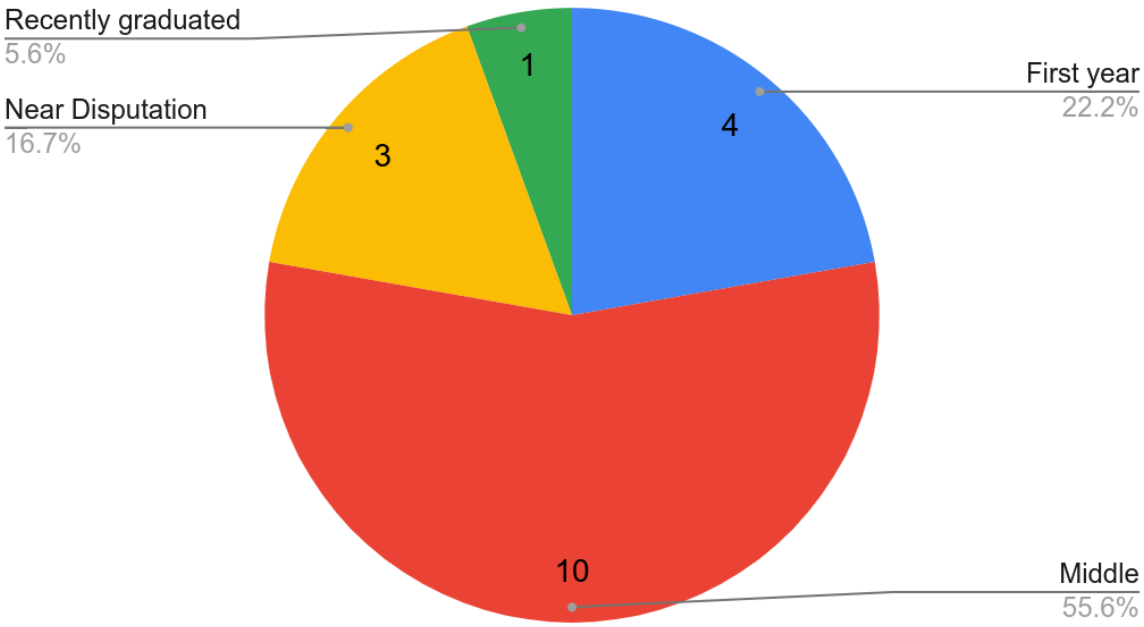
I know what is expected from me and what I can expect for a continued career outside of academia

I would appreciate more support and inspiration on this

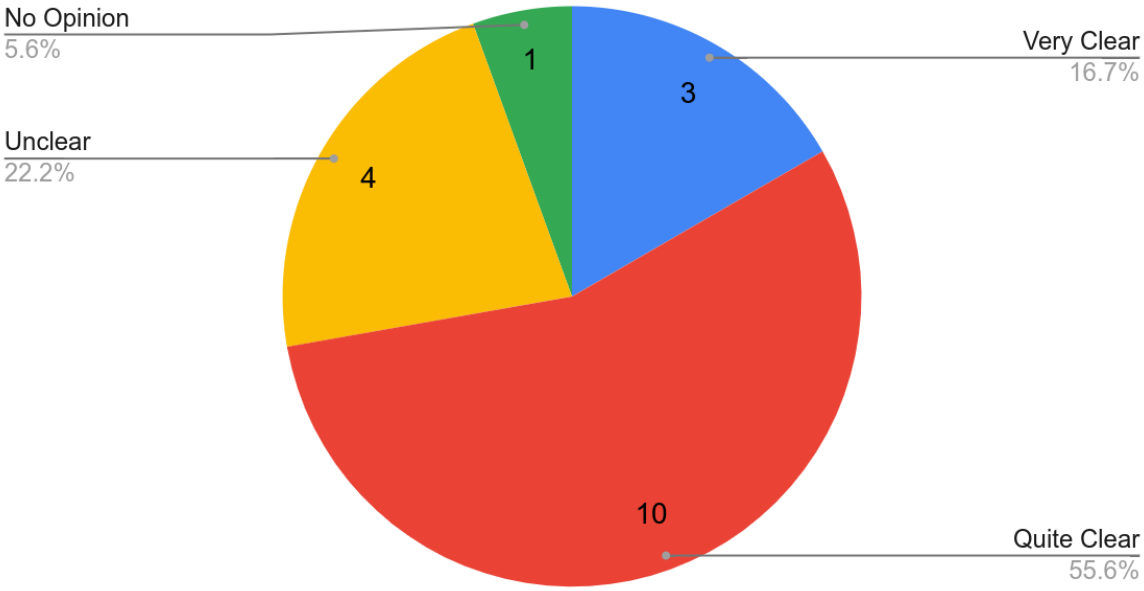
**6. Do you get the overall support you need from supervisors and examiner? Please select (5 is well-supported, 1. is not supported):**

5 / 4 / 3 / 2 / 1

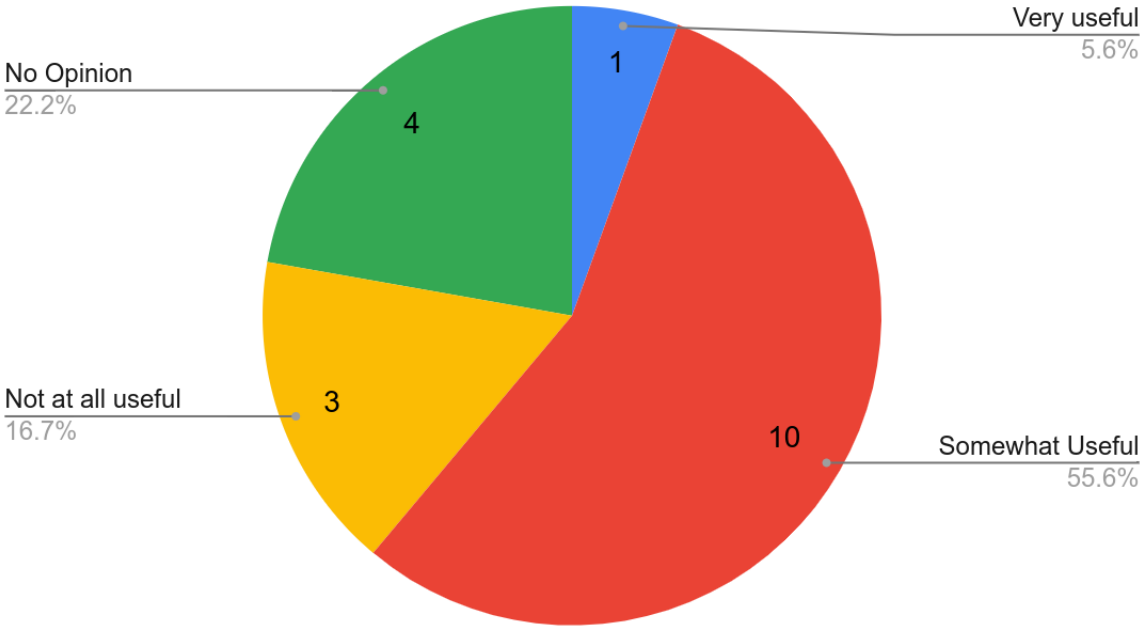
1. Where are you in the timeline of your studies?



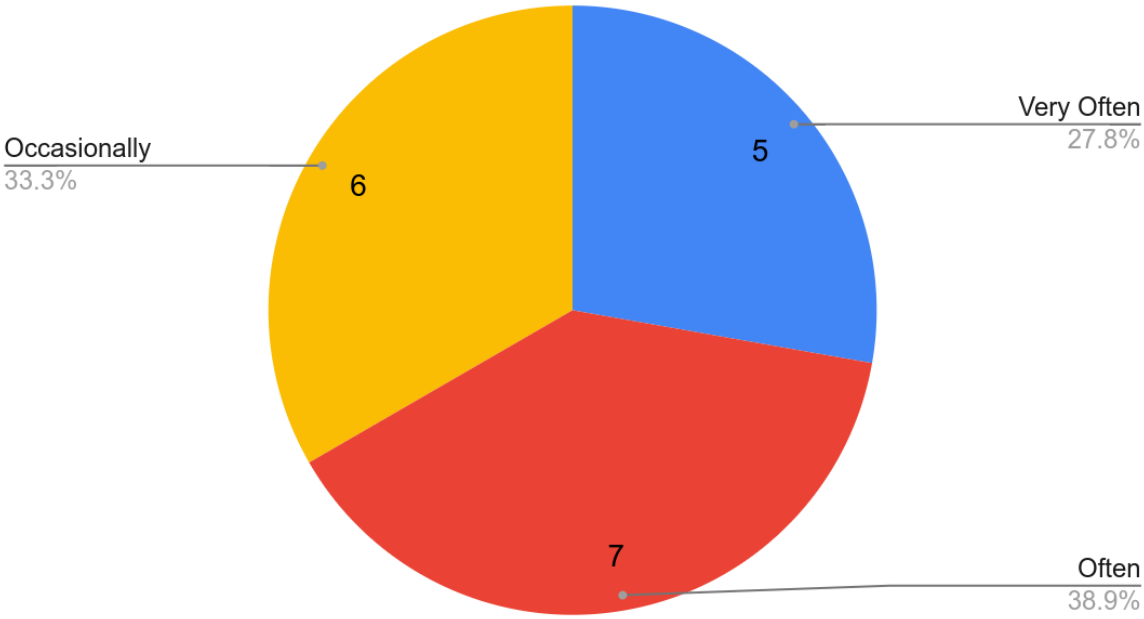

2. Is the information regarding the practical aspects of your PhD-studies and what the faculty expects from you as a student clear?



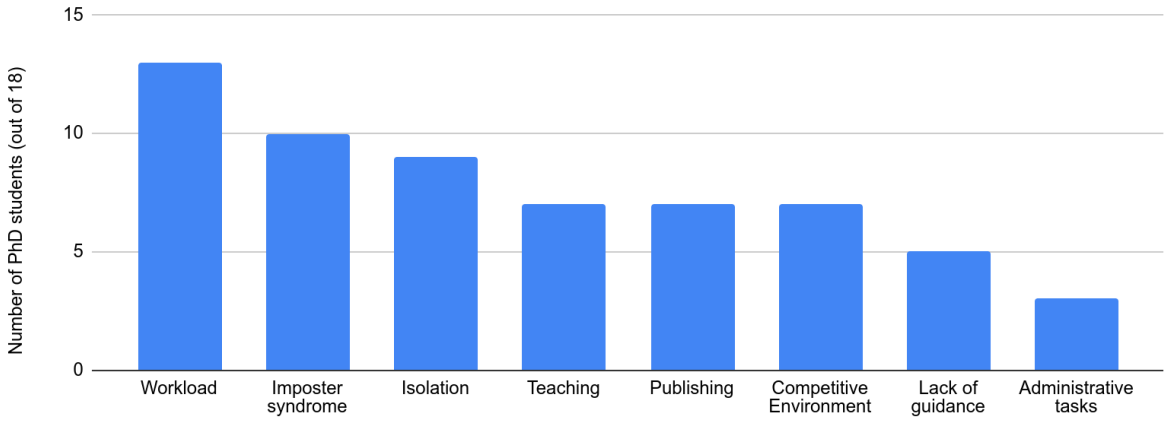
3. How useful is the ISP in planning and following up your studies?



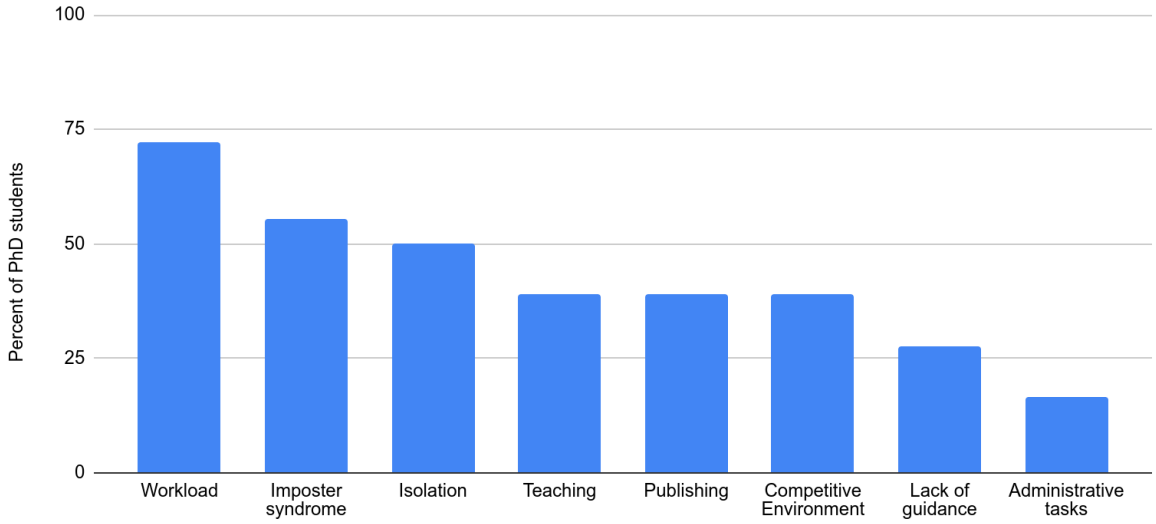

4. A) How often do you experience stress?



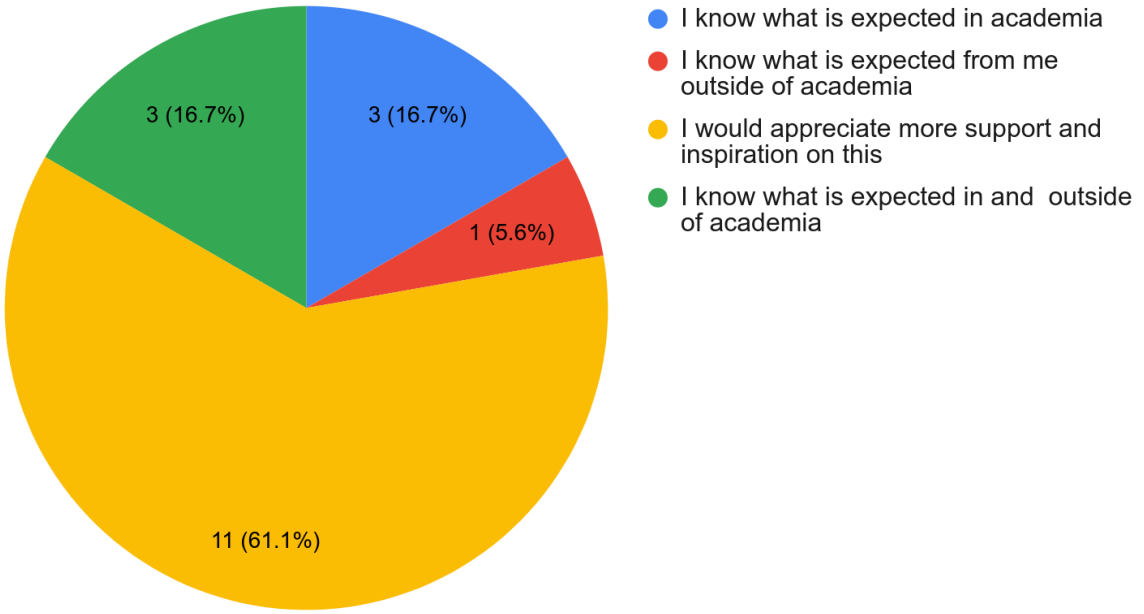
4. B) "What do you think are the causes of this stress? Please select all options that are applicable to your experience:"



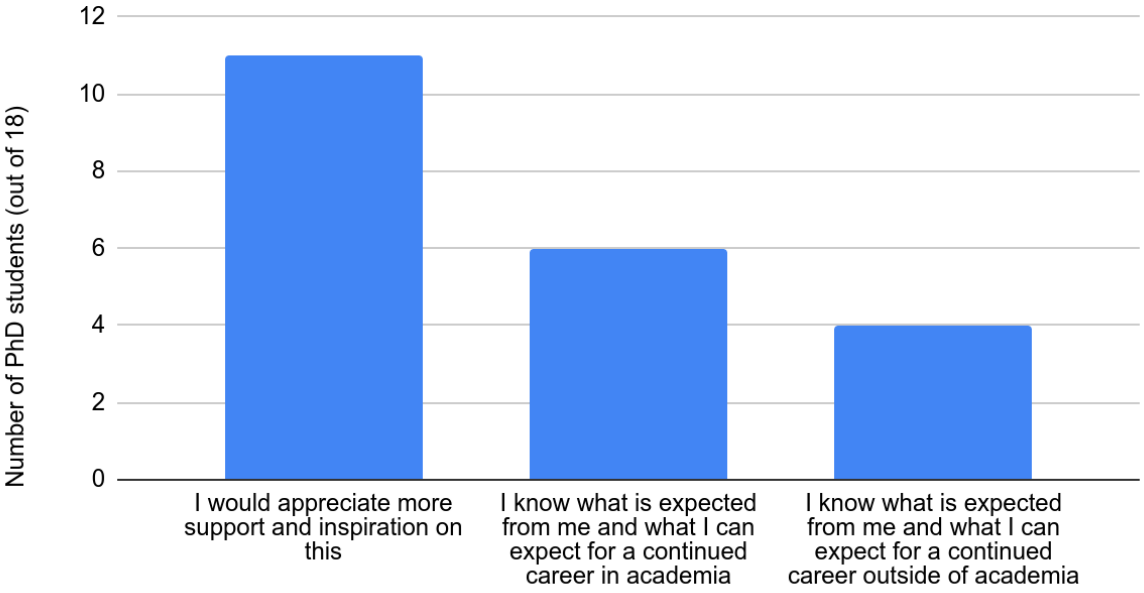

4. B) What do you think are the causes of this stress? Please select all options that are applicable to your experience:



5. Are your career options post-dissertation (in and outside of academia) clear to you? Please select, (you can choose several options):




5. Are your career options post-dissertation (in and outside of academia) clear to you? Please select, (you can choose several options):



6. Do you get the overall support you need from supervisors and examiner? Please select: (5 is well-supported, 1. is not supported)