

DS Survey Report 2022

Doctoral student survey 2022

This report summarizes the results of the doctoral student survey that was conducted in 2022 by the Chalmers Doctoral Student Guild.



Author:

Rahul Aggarwal (DS board member 2022-2023)

Chalmers Doctoral Student Guild

<https://www.dokt.chs.chalmers.se/>

Table of Contents

| | |
|---|-----------|
| Table of Contents..... | 2 |
| Executive Summary | 3 |
| Acknowledgements | 3 |
| Data availability statement | 3 |
| Conflict of interest statement..... | 3 |
| To report concerns or observations statement..... | 3 |
| Chalmers Doctoral Student Guild (DS) | 4 |
| DS survey..... | 4 |
| General information about the PhD students | 4 |
| Analysis of the Focus areas | 6 |
| Section 1: PhD enrollment and research education | 6 |
| Section 2: PhD Supervision | 7 |
| Section 3: PhD Employment | 11 |
| Section 4: PhD departmental duties | 13 |
| Section 5: PhD immediate work environment..... | 15 |
| Section 6: PhD students health and well-being | 17 |
| Section 7: Available support for PhD Students | 21 |
| Summary..... | 23 |
| Appendix A: List of all questions..... | 24 |

Executive Summary

This report presents an analysis of a survey conducted by the Chalmers Doctoral Student Guild (DS), which functions as a coordinating body for PhD students across all departments at Chalmers. DS acts as a vital link connecting doctoral students to both the Chalmers Student Union and the Chalmers faculty. The report begins with a brief introduction to DS, followed by an overview of the DS survey and general information about PhD students at Chalmers. Subsequently, we delve into a detailed analysis of the survey, covering various themes including PhD enrollment and research education, PhD supervision, employment, departmental duties (including teaching), the immediate work environment for PhD students, and the support available to them. Our discussion highlights key outcomes that are particularly relevant at the Chalmers level, along with some department-wise comparisons. It's important to note that this report does not encompass all survey results but focuses on the significant findings. The complete results have already been provided to local councils for department-specific analysis and have been communicated to various Chalmers committees and societies where DS is a member.

Acknowledgements

This report extends its gratitude to the DS member who designed the survey and collected the data. We would also like to express our sincere thanks to Ariadna Soro Álvarez for her valuable discussions and insightful comments on the draft report, which significantly contributed to its improvement

Data availability statement

The data utilized in this report was collected by DS. For inquiries about data availability, please contact DS directly.

Conflict of interest statement

There are no conflicts of interest to declare.

To report concerns or observations statement

The work presented in this report was conducted by members of the Chalmers Doctoral Student Guild board. Given that they are not experts and have limited time, there may be instances where errors are found, or the analysis is disagreed with. If you identify any mistakes or require clarification, please feel free to contact DS to request changes. We assure you that the analysis was conducted in good faith, and any unintentional errors will be promptly corrected upon being reported. We welcome and appreciate your feedback

Chalmers Doctoral Student Guild (DS)

DS serves as the coordinating mechanism for PhD students across all departments at Chalmers. It represents the interests of these students in various boards and committees within Chalmers, including the University Board, the Faculty Council, the Research Education Council, and the Equality and Work Environment Council, as well as outside of Chalmers, such as the Swedish National Union of Students Doctoral Committee

DS survey

The survey was conducted in February-March 2022 by the Chalmers Doctoral Student Guild using a Microsoft Form that was sent via email to all doctoral students registered with the Chalmers student union at that time.

General information about the PhD students

A total of 400 doctoral students participated in the survey, representing 37% of the total number of doctoral students at Chalmers until October 2022, according to administrators at each department.

Regarding the employers of the respondents, 87.3% (349/400) were employed by Chalmers, 2% by Gothenburg University, 9.8% by industrial partners, and the remaining 1% did not specify their employer. In terms of gender, 34.2% were female, 62% were male, and the remaining participants did not specify their gender. With regard to citizenship, 37.75% were from Sweden, 24.5% were from the EU/EEA/Schengen region (excluding Sweden), 30.75% were from the non-EU/EEA/Schengen region, 2.75% preferred not to say, and 4.25% specified other citizenships.

Table 1: Response rate by department

| Departments | Respondents | Response rate* | Female | Male |
|---|-------------|----------------|------------|------------|
| ACE - Architecture and Civil Engineering | 28 | 27% | 18 | 10 |
| BIO - Biology and Biological Engineering | 27 | 41% | 12 | 14 |
| CLS - Communication and Learning in Science | 2 | 40% | 1 | 1 |
| CSE - Computer Science and Engineering | 38 | 39% | 10 | 25 |
| E2 - Electrical Engineering | 49 | 33% | 7 | 38 |
| F - Physics | 31 | 41% | 12 | 18 |
| IMS - Industrial and Material Science | 29 | 35% | 7 | 22 |
| K - Chemistry and Chemical Engineering | 53 | 50% | 16 | 37 |
| M2 - Mechanics and Maritime Sciences | 36 | 28% | 11 | 24 |
| MC2 - Microtechnology and Nanoscience | 28 | 35% | 11 | 15 |
| MV - Mathematical Sciences | 17 | 47% | 2 | 14 |
| SEE - Space, Earth and Environment | 28 | 35% | 13 | 14 |
| TME - Technology Management and Economics | 33 | 45% | 16 | 16 |
| Prefer not to answer | 1 | - | 1 | 0 |
| Total | 400 | | 137 | 248 |

*Response rate of Ph.D. students evaluated based on total PhD students in each department in October 2022

In the Survey, the respondents answered about 74 questions on their experiences at Chalmers. The survey was divided into 7 main sections with specific questions.

1. General Information about the PhD students
2. Question related to PhD enrollment and research education
3. Question related to PhD Supervision
4. Question related to PhD Employment
5. Question related to PhD departmental duties including teaching
6. Question related to PhD immediate work environment
7. Question related to Available support to PhD students

This report is intended to be used as a reference document to identify the areas of concern for PhD students at Chalmers so that efforts of the Chalmers Doctoral Student Guild (DS) as well as other relevant stakeholders can be made to improve PhD student's experiences at Chalmers both as a student and as an employee of Chalmers.

A quantitative analysis of most of the questions per department was communicated to local PhD councils of each department, but in this report, the analysis focuses on the most concerning issues at the Chalmers level.

Note: *In the analysis, if the total is not 100%, then it means that the remaining percentage of respondents was either neutral to the question, or the question may not have been relevant to them (Not Applicable). However, it may happen that they responded with other answers that may not be included in the analysis.*

Also, the survey utilized a 5-point Likert scale, offering options such as 'Strongly Agree', 'Agree', 'Neutral', 'Disagree', 'Strongly Disagree', along with a 'Not Applicable' (N/A) choice. For the purpose of this analysis, responses of 'Strongly Agree' and 'Agree' are categorized as being in favor of the question, while 'Disagree' and 'Strongly Disagree' are considered as not in favor. This approach simplifies the responses into three categories: Yes, No, and Others

Analysis of the Focus areas

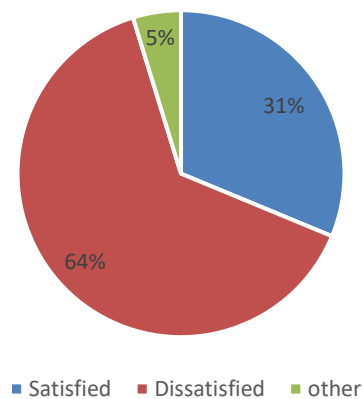
Section 1: PhD enrollment and research education

In this section, questions related to obtaining a licentiate/doctoral degree, PhD requirements at Chalmers, PhD courses including GTS courses and ISP were asked, along with questions related to the career after the PhD.

Of the 400 respondents, 83% (332) responded that they have acquired or expect to acquire a licentiate degree or midway seminar within 3 years, while only 12% (47) responded with more than 3 years. The remaining respondents were not sure or had other time frames. Some reasons for the delay were the pandemic, parental leave, long publication times, departmental duties, and supervision-related difficulties. However, only 47% (187) of the respondents were satisfied with the influence they have on the timing of their licentiate.

Regarding doctoral level courses at the graduate school (not including GTS courses), only 31% (125) were satisfied, and 64% (256) were dissatisfied due to different reasons, including a smaller number of courses, low quality, and relevance of the courses to their area of research. By department, the dissatisfaction was highest in BIO with 93% (25/27) followed by MC2 with 82% (23/28), while it was lowest in MV with 35% (6/17) followed by IMS with 38% (11/29).

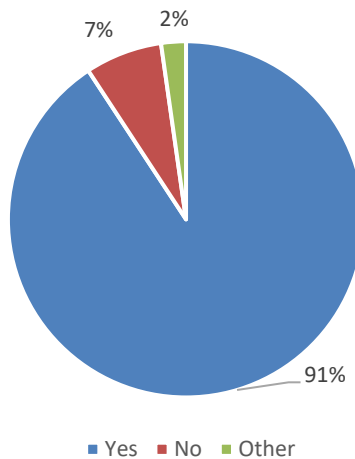
Satisfaction with the amount and quality of doctoral courses offered by graduate school (not including GTS courses)



Regarding GTS courses, only 43% (172) of the respondents were satisfied with mandatory GTS courses, while the satisfaction rate for optional GTS courses was higher at 58% (231). Furthermore, 42% (106) of the respondents have taken optional GTS courses outside Chalmers with a satisfaction rate of 63% (106/168). So, the satisfaction rate with optional GTS courses outside Chalmers is slightly higher than at Chalmers. On the other hand, the dissatisfaction rate with mandatory GTS courses was 30% (121), in contrast to 11% (45) for optional GTS courses. Overall, only 37% (148) of the respondents were satisfied with the amount and type of GTS courses offered at Chalmers, and the overall dissatisfaction rate was 25% (100). Therefore, there may be a scope for improvement with the amount and type of GTS courses offered at Chalmers that needs to be considered. Please note that while new GTS packages were introduced in 2022, they have not been included in this analysis.

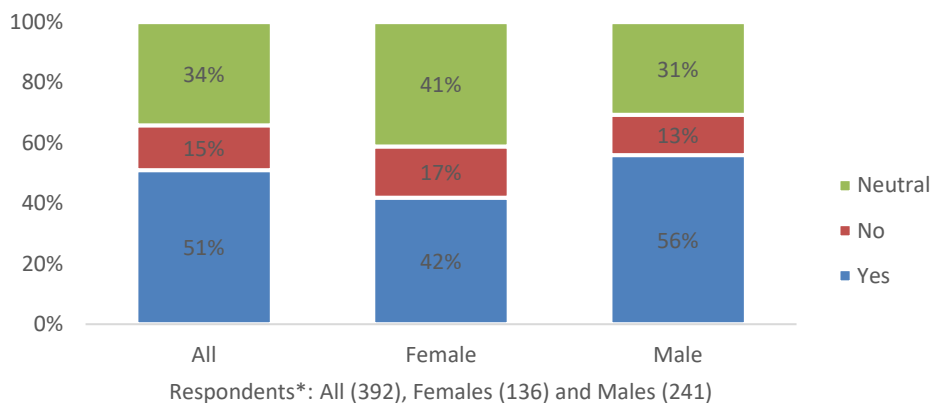
Regarding the individual study plan (ISP), 91% (363) of the respondents have an updated ISP that is signed by the respondent, supervisor(s), examiner, and the head of the graduate school at least once a year, as it is compulsory at Chalmers to have an ISP. The remaining 9% is a worrying number that needs to be considered in each department. By department, in E2 only 76% (37/49) have an updated ISP, which is the lowest in Chalmers, followed by TME with 85% (28/33).

Having a Yearly updated individual study plan (ISP)



Regarding the usefulness of ISP, 57% (229) of the respondents considered it a useful tool to follow the research progress, rather than planning research activities, with an approval rate of only 36% and a disapproval rate of 34% for ISP as a tool to plan research. Also, it is considered more useful for planning PhD courses that make up about 25% of PhD degree requirements, rather than research, which makes up about 75% considering a PhD with 240 ECTS.

Prepared for career after the PhD



*15 respondents prefer not to specify gender

Regarding careers after a PhD, only 51% (200/392) of respondents felt they were prepared, which is a worrying sign. Even more concerning is that only 42% (57/136) of females felt prepared compared to 56% (135/241) of males. This suggests a noticeable gender gap, with females feeling relatively less prepared for their future careers after obtaining a PhD. However,

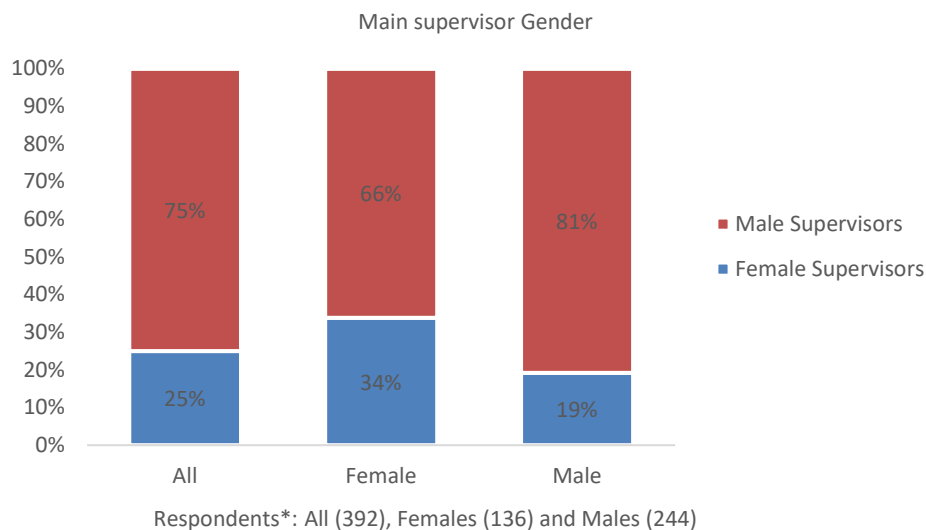
compared to the previous survey conducted in 2020, there has been a 3% improvement, with the number of respondents who felt prepared increasing from 48% to 51% in 2022

By department, the percentage of respondents who felt prepared for their future careers after obtaining a PhD was highest in E2 at 71%, followed by F with 61%, and K with 60%. On the other hand, it was lowest in BIO at 30%, followed by MC2 at 35% and SEE at 36%.

Section 2: PhD Supervision

In this section, questions related to PhD supervision and interactions between supervisors and PhD students were asked.

In Chalmers, based on all relevant responses (392), 25% of respondents have a female main supervisor and 75% have a male main supervisor. However, there seems to be a correlation between the supervisor's gender and the PhD student's gender. Among female respondents, 34% have a female main supervisor, while among male respondents, only 19% have a female main supervisor. This may indicate gender-based bias in selecting either the supervisor or PhD student.



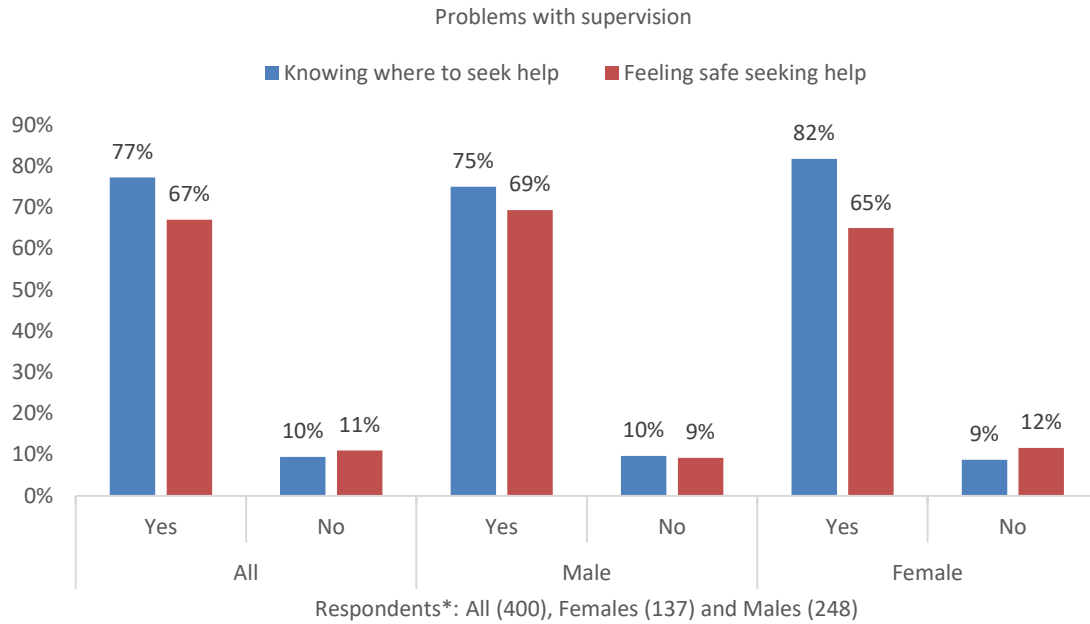
*12 respondents prefer not to specify gender

Based on the responses, 13% (53/400) of respondents have the same person as their main supervisor and examiner. However, there is a general guideline at Chalmers that specifies that the main supervisor and examiner should not be the same person. Therefore, 13% is a large number in this context. At the departmental level, the highest percentage is in E2 (39%), followed by M2 (31%) and IMS (28%).

Regarding other aspects of supervision, including interactions with supervisors, overall responses are positive with a dissatisfaction rate in the range of 3% to 15%, without any noticeable difference between responses by male and female respondents. Respondents felt that their supervisors acted in their best interest, cared for their personal well-being, helped them prioritize their time (if needed), had clear expectations from them, considered their ideas and suggestions, provided supervision whenever needed, and encouraged them to engage in professional networks/activities outside of Chalmers (conferences, cooperation with other universities, etc.).

Also, the majority of respondents knew where to seek help in case they faced any difficulty related to supervision and felt safe in asking for help. However, there is a difference between knowing where to seek help, which is 77% (309/400), and feeling safe while seeking help, which

is 67% (268/400). With respect to gender, this difference is more visible where 82% (112/137) of female respondents know where to seek help, but only 65% (89/137) felt safe while seeking help. In contrast, 75% (186/248) of male respondents knew where to seek help, but only 69% (172/248) felt safe while seeking help.

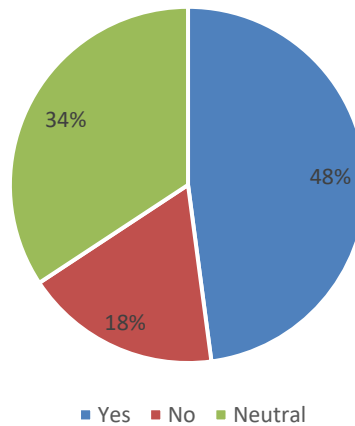


Section 3: PhD Employment

In this section the questions related to PhD employment and interactions between the line manager and the PhD students were asked

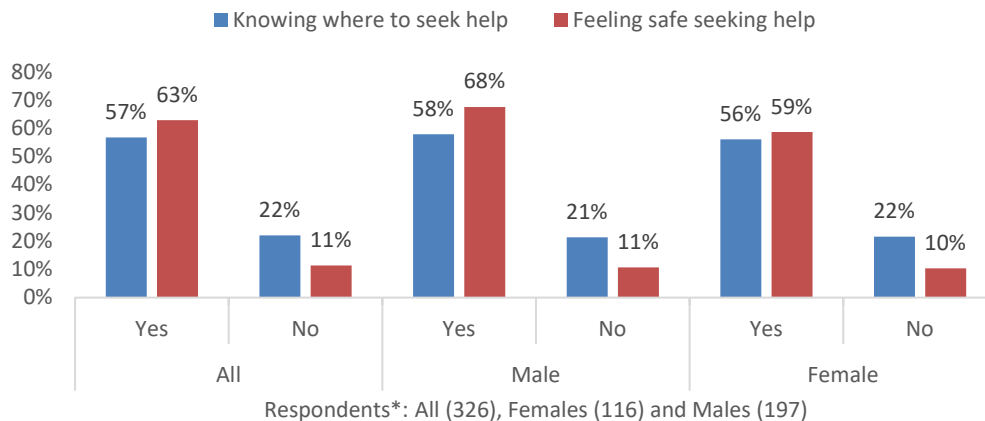
At Chalmers, the line manager is responsible for the PhD students' work environment. Overall, the respondents knew their line manager, but 11% (43/400) did not know. The percentage of respondents who did not know their line manager was highest in IMS (31%), followed by BIO (22%), K (17%), and F (16%). In total, 72% of the respondents felt that their line manager could take responsibility for the work environment according to Swedish law (i.e., preventing bullying, stress, discrimination, etc.). However, this feeling was lower among female respondents (66%) than male respondents (76%). This suggest female respondents may have relatively less confidence in their line managers compared to male respondents.

Usefulness of yearly appraisal talks (medarbetarsamtal)



Regarding the usefulness of the yearly appraisal talks (medarbetarsamtal) with the line manager, only 48% of all applicable respondents (286) who had yearly appraisal talks felt that they were useful, while 18% felt that they were not useful.

Problems with line manager



Out of all the respondents, 57% (185/326) knew where to seek help in case they faced any difficulty with their line manager and felt safe in asking for help. However, with respect to gender, there is a difference, in which 59% of female respondents (68/116) felt safe while seeking help, in contrast to 68% of male respondents (133/197).

Section 4: PhD departmental duties

This section addresses questions related to departmental duties, including teaching responsibilities, the amount of time spent on departmental duties, and overall satisfaction with those duties.

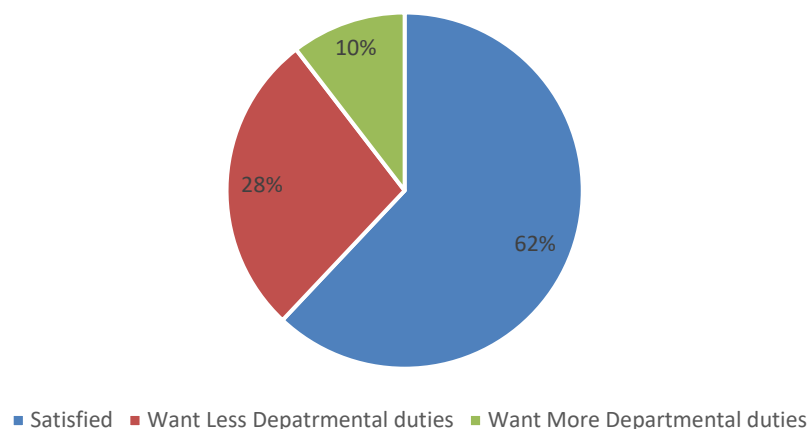
At Chalmers, PhD programs typically last four - five years with a maximum 20% departmental duty allowed each year if agreed. Departmental duties may include teaching, supervision, committee participation, and other tasks related to the division, department, or Chalmers that are not directly related to the PhD research or coursework.

Of the 369 respondents, 90% (333) reported that teaching was part of their departmental duties. However, only 73% (242/333) felt they had sufficient support to feel comfortable in their teaching duties, such as adequate knowledge of the subject matter and access to necessary materials. There was a noticeable difference in support satisfaction by gender, with 64% (75/117) of female respondents reporting feeling supported, compared to 77% (154/201) of male respondents.

In 2021, 55% (203/369) of respondents spent up to 18% of their time on departmental duties, while 32% (118/369) spent more than 18%. This indicates that many PhD students are doing more than the required 20% departmental duties. CSE had the highest percentage of respondents spending more than 18% of their time on departmental duties at 73% (24/33), followed by MV with 53% (8/15), IMS with 48% (13/27), and TME with 45% (13/29).

Overall, 62% (214/345) of respondents were satisfied with the amount of time they spent on departmental duties, including teaching responsibilities, while 38% (131/345) were not. Among those dissatisfied, 28% wanted fewer departmental duties and 10% wanted more. Respondents requesting fewer departmental duties were primarily in departments where more than 40% of respondents spent more than 18% of their time on departmental duties. For example, in CSE, 59% (19/32) wanted fewer departmental duties, in MV it was 33% (8/15), in IMS it was 32% (13/27), and in TME it was 21% (5/24). Departments with respondents wanting more departmental duties included MC2 with 35% (9/26), F with 24% (7/29), and ACE with 20% (5/25).

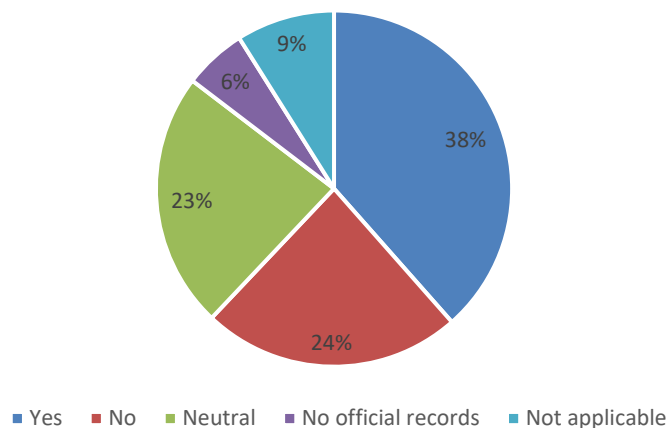
Satisfaction with departmental duties



Regarding transparency in official records, only 45% (167/369) of respondents agreed that official records are transparent regarding the hours spent by them on departmental duties, while 19% of respondents totally disagreed. The remaining respondents were neutral, and 6% felt that there are no official records regarding the time spent by them on departmental duties. The alarming fact is that only 38% (142/369) of respondents felt that official records reflect the actual time they spend on departmental duties, while 24% of respondents totally disagreed. Therefore, in general, respondents felt that they are spending more time on departmental duties than reflected in their departmental official records, and there is a lack of transparency when recording departmental duties in official records.

The overall impression is that departments randomly assign teaching hours per course that are usually lower than the actual time needed. The time spent on a course depends a lot on a PhD student's familiarity with the course, previous teaching experience, previous involvement in the course, etc., which are not usually accounted for while assigning the teaching hours. Therefore, there is a need to have a robust system to calculate the teaching hours, keeping different variables into account to deal with the discrepancies between reported and actual teaching hours spent as a part of departmental duties.

Official records reflects actual time spend on Departmental Duties



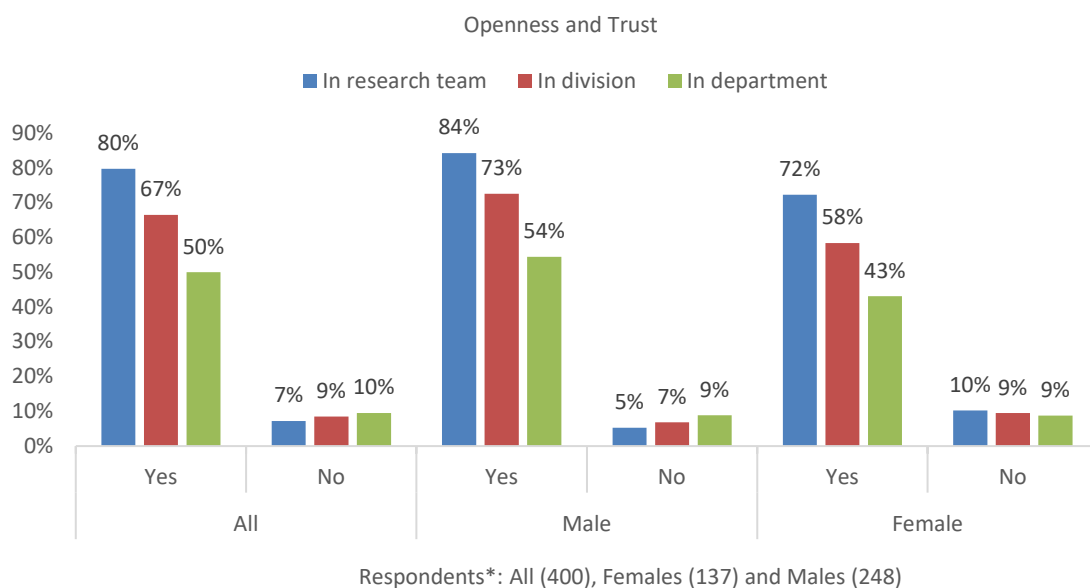
In the last survey conducted in 2020, 43% of respondents felt that the official records of hours spent on departmental duties reflect the actual hours spent on departmental duties, which has decreased to only 38% in 2022. Additionally, in the 2020 survey, 53% of respondents stated that these records are transparent, compared to only 45% in 2022. This indicates a decline in both transparency and accuracy in recording actual time spent on departmental duties.

Section 5: PhD immediate work environment

This section includes questions related to research, work environment, work-related conflicts, and available support.

In the 2022 survey, 68% (271/400) of respondents felt that the Covid-19 pandemic had a negative impact on their research. 19% (76/400) believed that the Aliens Act (2021 migration legislation changes) had a negative impact, while 15% (59/400) reported not being negatively affected by anything. Some respondents also felt that the Economy in Balance affected them negatively.

Regarding openness and trust, there is a gradual decline from the research team level to the divisional level, followed by the department level. Overall, 80% of respondents felt that there was an atmosphere of openness and trust in their research team. However, when analyzed by gender, male respondents reported a higher feeling of openness and trust, with 84%, compared to female respondents, who reported only 72% in comparison to the overall average. At the divisional level, there was a big decline, with only 67% of respondents reporting an atmosphere of openness and trust. This declined even further at the departmental level, with only 50% reporting such an atmosphere.

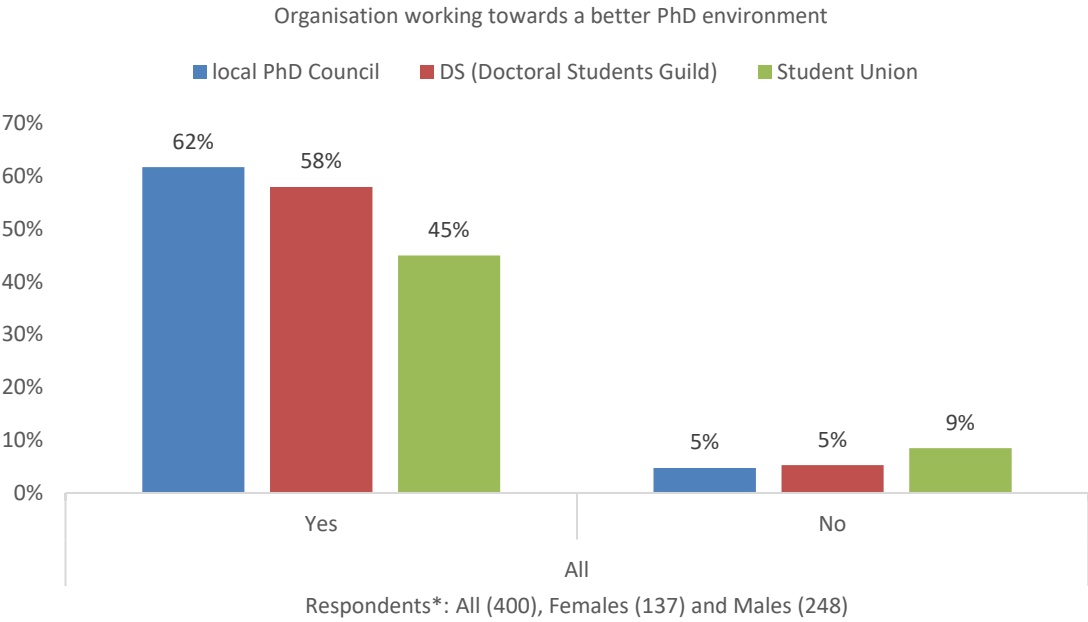


*Neutral and not applicable responses are not included

Regarding the negative effects of conflicts with supervisors, other personnel at Chalmers, or undergraduate students in 2022, only 11% of respondents reported being negatively affected by conflicts with supervisors and 9% by conflicts with other personnel at Chalmers. However, when analyzed by gender, females reported being slightly more affected than males.

Regarding which organization is working for a better environment for PhD students, respondents had the highest confidence in their local PhD Council, with an approval rating of 62%, followed by DS (Doctoral Students Guild) with 58%, and the lowest approval rating was for

the Student Union, with 45%. Only 5% of respondents felt that neither their local PhD Council nor DS (Doctoral Students Guild) were working for their welfare. However, with regard to the Student Union, 9% of respondents felt that it was not working for them.



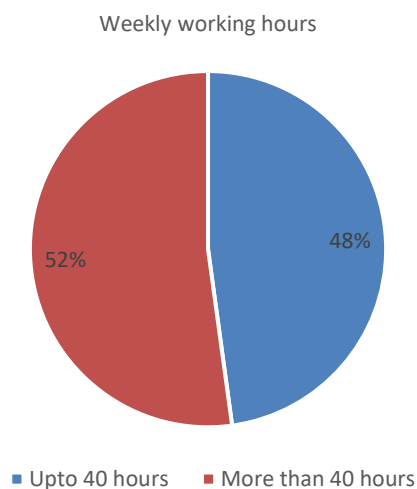
*Neutral and not applicable responses are not included

Section 6: PhD students health and well-being

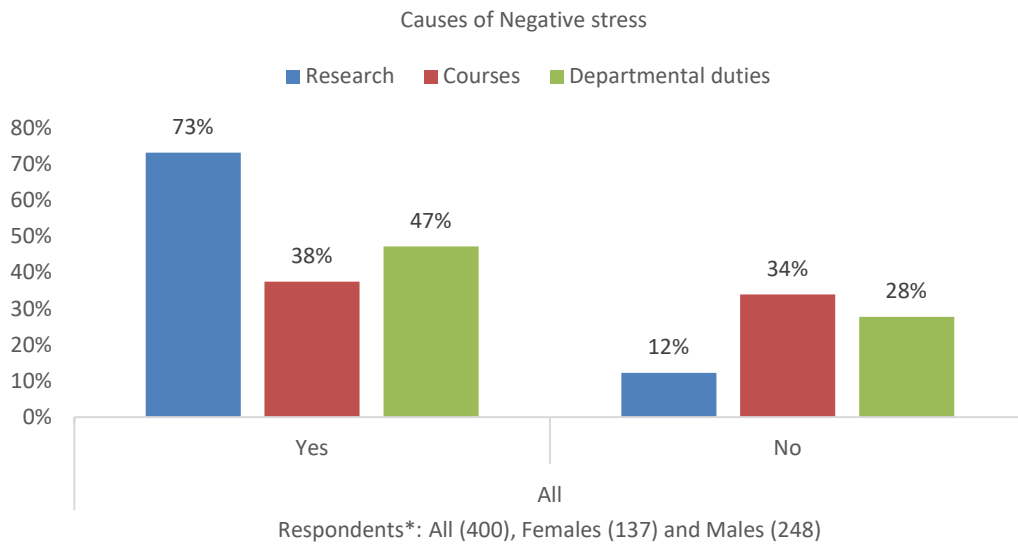
In this section, questions related to work satisfaction, working hours, work-related stress, sickness, sick leaves, physical wellbeing, mental wellbeing, personal problems, and support available at Chalmers were asked.

Overall, 72% (287/400) respondents are satisfied with their life as a doctoral student, 16% are neutral, and 12% are dissatisfied. At the departmental level, dissatisfaction is highest in ACE with 25%, followed by CSE, TME, MV with 18% each. Only SEE with 89% and K with 81% have a satisfaction rate above 80%.

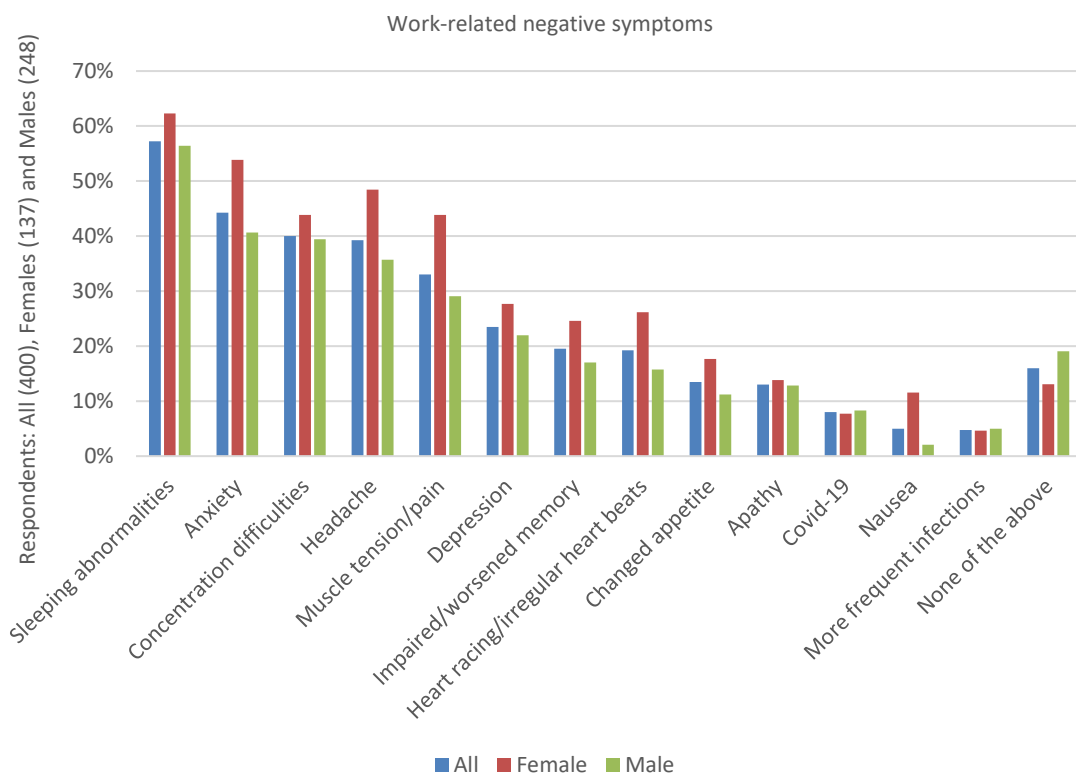
Only 46% (184/400) respondents felt that their work has a positive impact on their personal life, and 26% (103/400) felt that there is no positive impact. It should be noted that 18% (70/400) respondents felt that they are expected to work on vacations, which has increased from 2020 when only 13% of doctoral students felt this way. Additionally, 11% (43/393) respondents felt that they do not have the freedom to choose the timing of their vacation. At the departmental level, the highest percentage of respondents who felt that they are expected to work on vacations was in MC2 with 32% (9/28), and the highest percentage of respondents who felt that their work had no positive impact on their personal life was also in MC2 with 39% (14/28).



Regarding weekly working hours, 48% (188/393) respondents are working up to 40 hours on average, but unfortunately, 52% (205/393) are working more than 40 hours. At Chalmers, PhD students are not expected to work more than 40 hours, so the figure of 52% is concerning. The situation is the same regardless of gender. However, at the departmental level, the highest percentage of respondents working more than 40 hours is in MC2 with 71% (20/28), followed by F with 65% (20/31), then BIO with 63% (17/27). It is lowest in MV with 35% (6/17), followed by SEE with 37% (10/27). If compared with respondent satisfaction with their working hours, overall, 67% (260/389) are satisfied, and only 33% (129/389) are dissatisfied. However, the dissatisfaction rate is lower in the context that 52% of respondents are working more than 40 hours per week. This suggests that individuals working more than 40 hours per week are not necessarily dissatisfied.



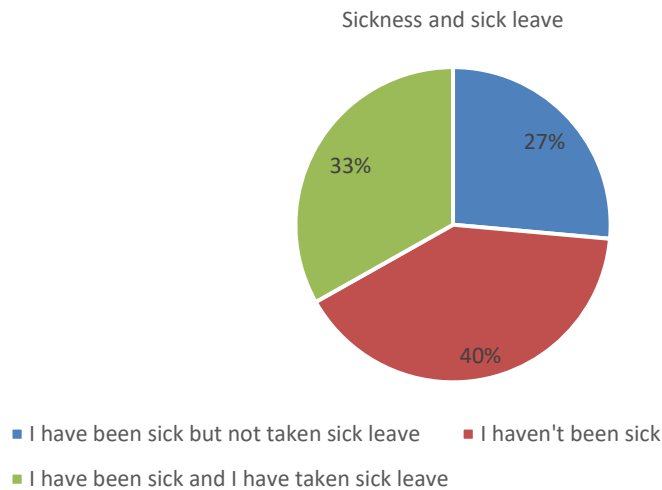
Regarding negative stress, 73% (293/400) respondents felt it because of research, 47% (189/400) because of departmental duties, and 38% (150/400) because of courses. So, overall, the main cause of negative stress among respondents was research, followed by departmental duties. In 2020, 74% of respondents experienced negative stress because of their research, so there has been no improvement in this regard.



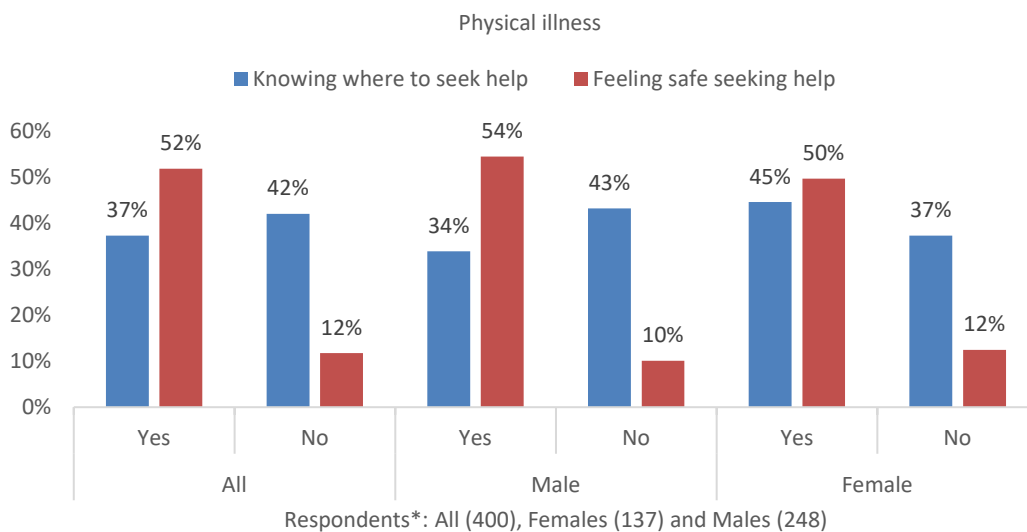
Regarding negative symptoms experienced by respondents in 2021 because of work-related issues, these included sleeping abnormalities experienced by 57% of respondents, anxiety experienced by 44%, concentration difficulties experienced by 40%, headaches experienced by 39%, and muscle tension/pain experienced by 33%. Other symptoms such as depression,

impaired/worsened memory, and heart racing/irregular heartbeat were experienced by 20-25% of respondents, and the rest were below 15%. However, only 16% of respondents did not feel any negative symptoms in 2021 because of work-related issues.

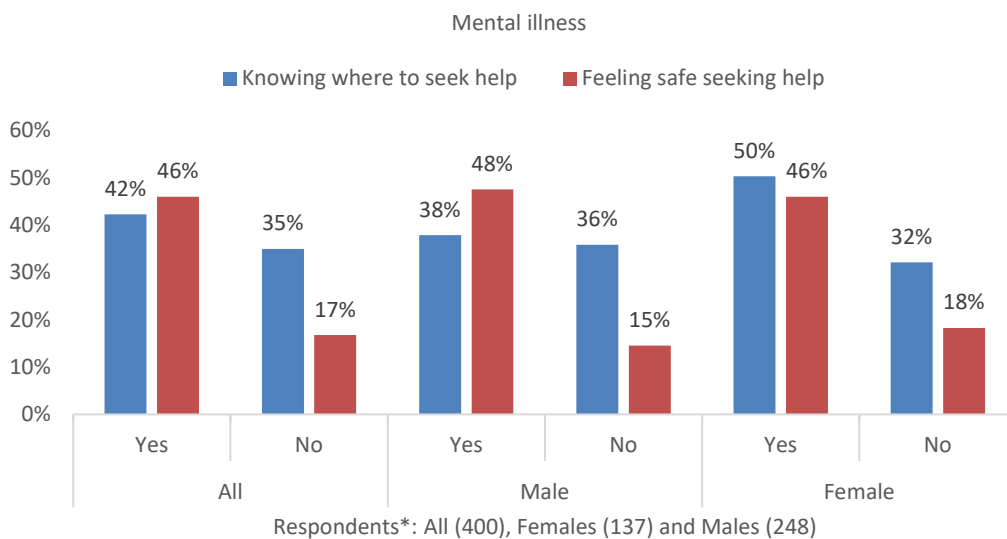
By gender, more female respondents reported experiencing negative symptoms compared to male respondents. Anxiety, headache, muscle tension/pain, heart racing/irregular heartbeats, and nausea were experienced by 10-15% more female respondents than male respondents.



Regarding sick leaves, in 2021, 40% (156/386) of respondents were not sick, while 60% (258/386) were sick. Among the 60% who were sick, only 56% took sick leave, and the remaining 44% did not take a sick leave. Out of the respondents who did take sick leave, 41% (52/128) worked while on sick leave. Reasons for not reporting sick leave included the possibility to work from home, flexible working hours, less severe sickness, deduction in salary, strict deadlines, and taking vacation instead of sick leave. It's important to note that sick leave days are accounted for and lead to an extension of the PhD duration; therefore, sick leave is not considered part of the working time.



Regarding physical illness, only 37% (149/400) of respondents knew where to seek help at Chalmers, and 52% (207/400) felt safe in asking for help. However, with respect to gender, there was a difference in which 50% of female respondents felt safe while seeking help, in contrast to 54% of male respondents. However, female respondents were more aware of where to seek help at Chalmers than male respondents. It appears that there is less knowledge among respondents of where to seek help in case of experiencing physical illness, as 42% of respondents felt that they did not know where to seek help at Chalmers. Although it may be the case that they knew where to seek help outside of Chalmers, but not within.



Regarding mental illness, only 42% (169/400) of respondents knew where to seek help at Chalmers, and 46% (184/400) felt safe in asking for help. However, with respect to gender, there was a difference in which 46% of female respondents felt safe while seeking help, in contrast to 48% of male respondents. However, female respondents were more aware of where to seek help at Chalmers than male respondents. It seems that like physical illness there is less knowledge among respondents of where to seek help in case of experiencing mental illness, as 35% of respondents felt that they did not know where to seek help at Chalmers. Although it may be the case that they knew where to seek help outside of Chalmers, but not within.

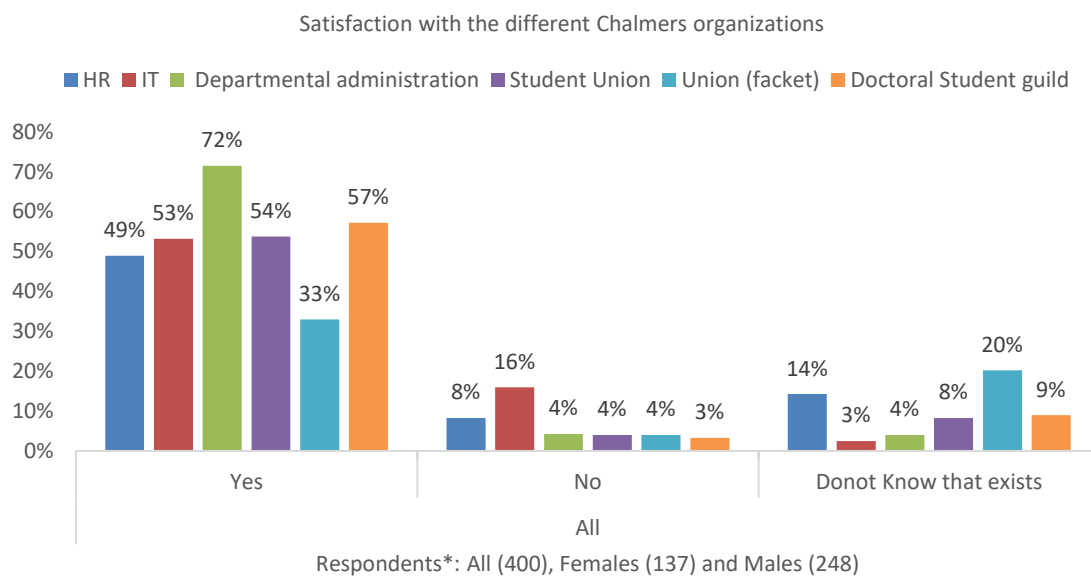
Overall, the majority of respondents do not know where to seek help at Chalmers if they experience physical or mental illness. The knowledge about seeking help at Chalmers regarding mental illness is slightly higher than for physical illness. Female respondents are more aware of where to seek help at Chalmers than male respondents, but they do not necessarily feel safe while seeking help.

Regarding non-work-related topics, almost 85% (338/400) of respondents felt that they could talk to their colleagues, and 61% (243/400) even felt that they could talk about issues in their personal life which might affect their working capabilities to their colleagues.

Section 7: Available support for PhD Students

In this section, questions related to the Chalmers doctoral student ombudsman (DOMB), Chalmers organization, and the decision to pursue a PhD were asked. At Chalmers, there is an independent system in place to assist PhD students known as the Chalmers doctoral student ombudsman (DOMB). DOMB is independent of Chalmers and is directly employed by DS. Any PhD student can contact the Chalmers doctoral student ombudsman (DOMB) confidentially and free of charge regarding any potential issues related to their doctoral education.

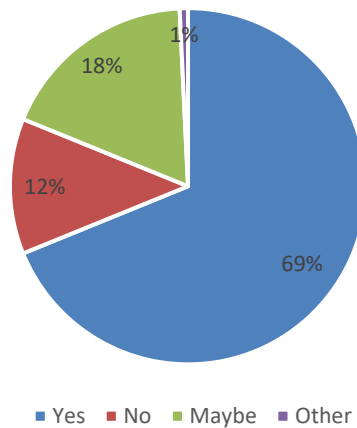
Overall, only 62% (245/395) of respondents were aware of the existence of DOMB, but unfortunately, 19% did not know what DOMB is, and the remaining 19% were aware of DOMB but were unsure of how it could assist them. This suggests that there is a lack of information regarding DOMB among PhD students. In the previous survey, only 16% were unaware of DOMB, which is slightly lower than the current survey's 19%. This suggests that the situation regarding awareness about DOMB has not improved.



*Neutral and not applicable responses are not included

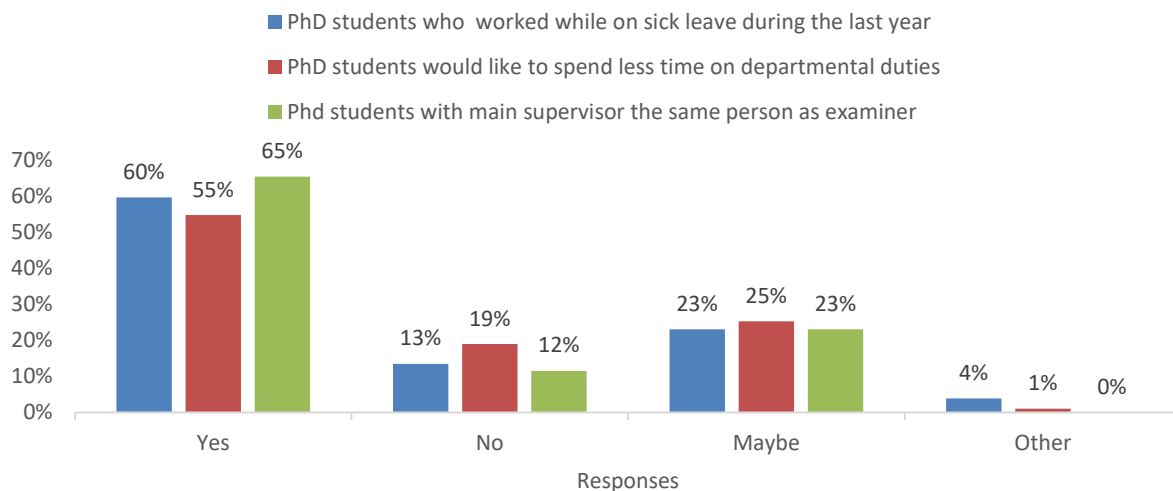
Regarding satisfaction with the different parts of the Chalmers organization, including HR, IT, Departmental administration, Student Union, Union (facket), and Doctoral Student guild, respondents expressed high satisfaction with the Departmental administration with a satisfaction rate of 72%, followed by Doctoral Student guild with 57%, Student Union with 54%, IT with 53%, HR with 49%, and Union (facket) with 33%. The lower satisfaction rate in the case of HR and Union (facket) may be because 14% of respondents were unaware of HR, and 20% were unaware of Union (facket). On the other hand, respondents expressed high dissatisfaction with IT, with a dissatisfaction rate of 16%, followed by HR with 8%. Therefore, it seems that IT and HR are the organizations that require improvement. In the case of HR, the satisfaction rate for female respondents was 45%, which is lower than the satisfaction rate for male respondents at 52%.

Would take the same decision again?



In this, responses related to the respondents' experience and knowledge of doing a PhD, and their willingness to choose the same decision again were analyzed. Overall, 68% (274/398) of respondents said they would choose to do a PhD again with their current real-life experience and knowledge. 12% (49/398) would not choose to do it again, 18% (72/398) were unsure, and 1% had different opinions depending on factors such as the pandemic or their project. At the departmental level, the willingness to make the same decision again was highest in SEE, with 82% (23/28) of respondents indicating they would choose to do a PhD again. K followed with 81% (43/58), and IMS with 76% (22/29). In contrast, the tendency not to take the same decision was highest in CSE, with 24% (9/38) of respondents saying they would not choose to do a PhD again. This was followed by TME with 22% (7/32), MV with 18% (2/17), and ACE with 18% (5/28).

Would take the same decision again?



When the responses were analyzed based on specific criteria, such as PhD students who worked while on sick leave during the last year (52), PhD students who would like to spend less time on departmental duties (95), and PhD students who had the same person as their main supervisor and examiner (52), we found different perspectives. In all cases, the willingness to make the same decision again with current knowledge was low among all respondent groups. However, the lowest willingness was among respondents who would like to spend less time on departmental duties.

Summary

The PhD survey was conducted from mid-February to mid-March 2022 with the active support of the department-level PhD councils, resulting in a high level of participation with 400 respondents.

The survey revealed that most PhD students are satisfied with their life as a doctoral student, find their immediate working environment to be open and trustworthy, and have good relationships with their supervisor(s).

Through a combination of quantitative and qualitative analysis, the survey identified focus areas that can guide the efforts of the DS and relevant administrative bodies at Chalmers University.

Additionally, the gender of PhD students was found to impact their experiences at Chalmers, and the overall statistics do not accurately reflect departmental realities. Therefore, it is necessary to analyze the data on a departmental level to identify areas for improvement.

Appendix A: List of all questions

This is a complete list of questions asked in the DS 2021 survey

The answer type is given in brackets, e.g. [Likert Scale].

The Likert scales were 5 step discrete scales containing 'Strongly Agree', 'Agree', 'Neutral', 'Disagree', 'Strongly Disagree' and an option to answer 'N/A'.

General Info

- Who are you employed by? [choose one from list]
- Which department do you belong to? [choose one from list]
- Which department do you belong to? [choose one from list]
- Which graduate school do you belong to? [choose one from list]
- Gender [choose one from list]
- Citizenship [choose one from list]

Enrollment and research education

- Which year were you enrolled as a doctoral student? [choose one from list]
- Which year do you expect to finish your doctoral thesis? [choose one from list]
- After how long time as a doctoral student did/do you expect to acquire your licentiate degree / take a midway seminar? [choose one from list]
- What were/are reasons for the delay? [free text]
- I am satisfied with the influence I had on the timing of my licentiate? [Likert Scale]
- Are you satisfied with the amount and quality of courses at a doctoral level offered at your graduate school (not including GTS courses)? [choose one from list]
- Regarding GTS courses, I am satisfied with... [Likert Scale]
 - ...the mandatory courses I have taken
 - ...the optional courses I have taken at Chalmers
 - ...the optional courses I have taken outside of Chalmers
 - ...the amount and type of courses offered at Chalmers
- I have an individual study plan (ISP) that is updated and signed by myself, my supervisor(s), my examiner and the head of my graduate school at least once a year [choose one from list]
- The ISP is a useful tool for... [Likert Scale]
 - ... following up on my research progress
 - ... following up on my progress in research education
 - ... planning my research
 - ... planning my research education
- Regarding my doctoral degree, I am familiar with the... [Likert Scale]
 - ... requirements set by my graduate school
 - ... objectives for a doctoral degree set by Chalmers
- I feel that I get prepared for my continued career after the PhD. [Likert Scale]
- Comments and reflections on my enrollment and research education [free text]

Supervision

- What gender does your main supervisor have? [choose one from list]
- Is your main supervisor the same person as your examiner? [choose one from list]
- The interaction with my supervisor(s) works well overall [Likert Scale]
- I feel that my supervisor(s) [Likert Scale]
 - ... acts in my best interest
 - ... cares for my personal well-being
 - ... helps me prioritize my time if needed
 - ... has clear expectations of me

- I feel that my ideas and suggestions matter and are considered. [Likert Scale]
- I feel I get the supervision needed to meet deadlines. [Likert Scale]
- I feel that my supervisor(s) encourages me to engage in professional networks/activities outside of Chalmers (conferences, cooperation with other universities, etc.) [Likert Scale] If there are problems with my supervision, ... [Likert Scale]
- ... I know where to seek help.
- ... I feel safe seeking help.
- Comments and reflections regarding my supervision [free text]

Employment

- The person responsible for your work environment is your line manager. Do you know who your line manager at Chalmers is? [choose one from list]
- My line manager is... (check all that applies) [choose multiple from list]
- I feel my line manager is capable of taking his/her responsibility for my work environment according to
 - the Swedish law (i.e. preventing bullying, stress, discrimination, etc.) [Likert Scale]
 - I feel my yearly appraisal talks (medarbetarsamtal) are useful [Likert Scale]
 - If there are problems with my line manager, ... [Likert Scale]
- ... I know where to seek help
- ... I feel safe seeking help
- Other comments and reflections regarding my employment [free text]

Departmental duties

- I am or have been teaching as a part of my departmental duties. [choose one from list]
- I have the support I need to feel comfortable in my teaching duties (I have enough knowledge about the topic, I have access to materials to prepare the classes, I get notified of changes well in advance, etc.) [Likert Scale]
- The actual time I spend on departmental duties during the last year on average corresponds to [choose one from list]
- I am satisfied with the amount of time I actually spend on departmental duties (including teaching) [choose one from list]
- I personally keep track of the time I spend on departmental duties. [choose one from list] I feel that the official records of my departmental duty hours spent... [Likert Scale]
- ... are transparent to me.
- ... are reflecting the actual time I spend.
- Comments and reflections on my departmental duties [free text]

My immediate work environment

- I feel that my research or studies is/was negatively affected by [choose multiple from list]
- I feel that there is an atmosphere of openness and trust... [Likert Scale]
- ... in my research team.
- ... in my division.
- ... in my department.
- In the last year, I have been negatively affected by conflicts with... [Likert Scale]
- ... supervisor(s).
- ... other personnel at Chalmers.
- ... undergraduate students.
- I feel that ... is working towards a better environment for me. [Likert Scale]
- My local PhD Council
- The DS (Doctoral Students Guild)

- The Student Union
- Comments and reflections on my immediate work environment [free text]

Health and well-being

- I think that overall, ... [Likert Scale]
- ... I am satisfied with my life as a doctoral student.
- ... my work situation affects my personal life positively.
- ...I feel that I am not expected to work when I am on vacation
- How many hours a week are you working on average as a part of your PhD? [choose one from list]
- Are you satisfied with how much you are working? [choose one from list]
- I feel or have felt during the past year negative stress because of ... [Likert Scale] ... my research.
- ... ongoing or planned courses I am taking.
- ... departmental duties.
- I have experienced the following symptoms during the last year because of work related issues: [choose multiple from list]
- Do you feel that you have the freedom you want regarding when to take vacation? [choose one from list]
- Have you been on sick leave during the last year? [choose one from list]
- I did not report sick leave, because... [free text]
- I have worked while on sick leave during the last year. [choose one from list]
- I know where at Chalmers I can turn to when... [Likert Scale]
- ... I experience physical illness
- ... I experience mental illness
- I feel safe seeking help at Chalmers when... [Likert Scale]
- ... I experience physical illness
- ... I experience mental illness
- I can talk to my colleagues about... [Likert Scale]
- ...non-work related topics
- ...issues in my personal life which might affect my working capabilities
- Comments and reflections on health and well-being [free text]

Available support

- I am aware that I can contact the Chalmers doctoral student ombudsman (DOMB) confidentially and free of charge, about any potential issue related to my doctoral education? [choose one from list]
- I am satisfied with the following parts of the Chalmers organization... [Likert Scale]
- ...HR at my department (with regards to contract extension and other employment related matters)
- ...IT
- ...Departmental administration
- ...Student Union
- ...Student Union
- ...Doctoral Student guild
- Comments and reflection on available support [free text]
- With the knowledge that you have today, would you have chosen to pursue PhD studies like you did? [choose one from list]

