

PhD Employment Survey 2023

Report on PhD graduates from Aarhus University

January 2024

The PhD Employment Survey 2023 at Aarhus University is conducted by Magnus Bod Middelhede Hansen, Rikke Evald Povlsen and Ebbe Krogh Graversen, The Danish Centre for Studies in Research and Research Policy, Department of Political Science, Aarhus University.

Faculties at Aarhus University (AU):

In 2023, there are five faculties at Aarhus University: Arts, Aarhus BSS, Health, Natural Sciences and Technical Sciences.

Arts: The Faculty of Arts was established in 2011 when the former Faculty of Humanities, Faculty of Theology and the Danish School of Education were merged.

Aarhus BSS: Aarhus BSS was established in 2011 when the former Faculty of Social Sciences and Aarhus School of Business were merged.

Health: The Faculty of Health got its name in 2011 and provides degree programmes in all areas of the health sciences, including: medicine, dentistry, sports science and public health.

Nat: The Faculty of Natural Sciences was established in 2020 after the former Faculty of Science and Technology was divided and now encompasses the classical natural science fields of biology, physics and astronomy, chemistry, geology, mathematics, computer science, molecular biology and nanoscience.

Tech: The Faculty of Technical Sciences was also established in 2020 after the former Faculty of Science and Technology was divided and now encompasses activities in the fields of engineering, agro ecology, food, animal science, biology and environmental science.

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Introduction

This report presents the results of the 2023 PhD Employment Survey for PhD graduates. The survey includes two year groups (cohorts) of PhD graduates from Aarhus University (AU): PhD students that graduated between April 1st 2018 and March 31st 2019; and PhD students that graduated between April 1st 2022 and March 31st 2023. The report describes the employment status of the PhD graduates as of October the 1st 2023 and characterizes the employment situation in terms of sectors, branches, tasks, geography, and usefulness of the PhD degree programs.

The results are presented at AU and faculty level, and the report shows overall results for all graduates (both cohorts) as well as results divided into cohorts. The main results presented in the report will primarily consist of merged results of both cohorts whereas the corresponding results divided into cohorts can be found in Appendix 3. During the report, there will be departures from the standard way of displaying the results if there is a large difference between the cohorts or if a specific question is most elegantly displayed by using both cohorts separately.

The data was collected by sending out invitations via e-mail (if possible) or Digital Post to the PhD graduates with a link to the survey's online questionnaire. For respondents without a valid e-mail address registered, e-mail addresses were looked up manually. If no e-mail address could be identified, the questionnaire was sent via Digital Post.

When calculating the results at AU level, the report weights the responses to even out differences in response rates between the faculties. A more detailed weighting accounting for in-faculty differences between different PhD programs within each faculty is not used due to lack of responses in a few PhD programs, which exacerbates the risk of giving a few responses a non-representative weight. Hence, this report uses a faculty-based weighting method, which also means that within-faculty numbers are not weighted.

The corresponding report from 2021 found this simpler choice of weighting method robust when looking at the differences in numbers calculated using a faculty-based and a more detailed PhD program-based weighting method, where only very minor differences in calculated employment rates between the two weighting methods were found. Unweighted results for employment status can be found in Appendix 2.

Appendix 1 provides information about the identification and response rates of the PhD graduates.

Appendix 2 presents unweighted results for PhD graduates' employment status.

Appendix 3 presents all remaining tables of the main report divided into cohorts. Table numbers refer to the corresponding tables in the report added an A or B respectively.

1. Employment status

Tables 1.1 and 1.2 show the employment status of PhD graduates five and one year after completion of the PhD education, respectively. The AU results are weighted by faculty. It appears from table 1.1 that almost all graduates are in employment five years after completion of their PhD. The employment rate is lower for educated PhDs from Arts.

Table 1.1. Employment status for PhD graduates, year 18/19. Percentages for AU total and by faculties. Weighted by faculty.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	98,7	91,7	100	100	98	100
Other education	0	0	0	0	0	0
Unemployed	1,3	8,3	0	0	2	0
Inactive	0	0	0	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	219	24	32	74	50	39

Note: "Employed" includes respondents who answered "On leave with unconditional right to return". "Inactive" includes respondents who answered "inactive (homemaker, early retirement, etc.)". Source: The PhD employment survey 2023.

Table 1.2. presents the employment status for the 2022/23 graduates. It appears that the overall employment rate is only marginally lower for the newly educated graduates compared to the 2018/19 cohort. There is almost no variation across the faculties. The employment rate is actually higher for PhDs graduated from Arts for this cohort.

Table 1.2. Employment status for PhD graduates, year 22/23. Percentages for AU total and by faculties. Weighted by faculty.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	95,9	97,1	95,3	96	95	96,8
Other education	0,3	0	2,3	0	0	0
Unemployed	3,4	2,9	0	4	5	3,2
Inactive	0,3	0	2,3	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	243	34	43	75	60	31

Note: "Employed" includes respondents who answered "On leave with unconditional right to return". "Inactive" includes respondents who answered "inactive (homemaker, early retirement, etc.)". Source: The PhD employment survey 2023.

The unweighted results are very similar to the results found in table 1.1.U. and 1.2.U. See Appendix 2 for further details.

2. Employment – where and how fast?

The rest of the report concerns respondents who are in employment per October 1st 2023. The tables in section 2.1 and 2.2 include both cohorts. All the tables relate to the employment status per October 1st 2023. Tables divided into cohorts can be found in Appendix 3.

2.1. The type of position

Table 2.1 displays the number of working hours for employed PhD graduates. A clear majority of the employed respondents have a full-time job.

Table 2.1. Number of working hours for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Full-time job	94,6	88,9	97,3	92,4	99,1	94,2
Part-time job	5,4	11,1	2,7	7,6	0,9	5,8
Total (%)	100	100	100	100	100	100
Number of responses	446	54	73	144	106	69

Note: A “Full-time job” is a job with at least 37 working hours a week. A “part-time job” is a job with less than 37 working hours a week. Source: The PhD employment survey 2023.

Table 2.2 shows the type of position for employed PhD graduates. Just above half of the employed PhD graduates have a permanent position, and just above 40 % of the respondents have a temporary position. The table reveals a variation across the faculties as the percentage of permanently employed is highest among graduates from Nat. Table 2.2.A. and table 2.2.B. in Appendix 3 also display considerable divergence between the two cohorts with more graduates from 22/23 having temporary positions.

Table 2.2. Type of position for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Permanent position/tenure	53,2	48,1	47,9	52,1	60	53,6
Temporary/fixed-term position	42,6	50	45,2	42,4	37,1	43,5
Temporary substitute position	0,2	0	1,4	0	0	0
Subsidized employment	0	0	0	0	0	0
Self-employed	1,8	0	4,1	1,4	1,0	2,9
Other	2,3	1,9	1,4	4,2	1,9	0
Total (%)	100	100	100	100	100	100
Number of responses	445	54	73	144	105	69

Note: A temporary/fixed-term position is described as “Temporary/fixed-term position (e.g. project employment)”. Source: The PhD employment survey 2023.

2.2. Employment – where?

Table 2.3 shows the employment sectors for employed PhD graduates. Looking at the results for AU overall, it appears that a majority of the PhD graduates are employed in the public sector. Around 25 % are employed in the private sector. There is a substantial variation across the faculties as just above 85 % of the graduates from Health are employed in the public sector, whereas graduates from the natural sciences are more equally distributed between the public and the private sectors.

Table 2.3. Employment sector of employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in private sector	25,2	5,6	28,8	10,4	49,5	30,4
Employed in the public sector	68,8	87,0	60,3	86,8	44,8	62,3
Employed in a professional or non-profit organization	2,9	3,7	2,7	0,7	4,8	4,3
Other	3,0	3,7	8,2	2,1	1,0	2,9
Total (%)	100	100	100	100	100	100
Number of responses	445	54	73	144	105	69

Source: *The PhD employment survey 2023.*

In the survey, the graduates employed in the public sector are asked which part of the public sector they are employed in. Table 2.4 displays the results of this question. Overall, most graduates are employed by central government institutions or the regions, but there are notable differences between the faculties.

Table 2.4. Different parts of the public sector for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
EU	2,9	2,1	6,8	3,2	2,1	0
Central government	43,1	68,1	65,9	17,6	55,3	60,5
Region	34,1	8,5	11,4	69,6	4,3	7,0
Municipality	4,2	8,5	2,3	2,4	6,4	4,7
Other	15,7	12,8	13,6	7,2	31,9	27,9
Total (%)	100	100	100	100	100	100
Number of responses	306	47	44	125	47	43

Source: *The PhD employment survey 2023.* A majority of the respondents who answered "other" further elaborate that they are employed at a university.

Table 2.5 shows the size of the organizations that employ the PhD graduates. Most of the graduates are employed in large enterprises or organizations. This pattern is similar across the faculties.

Table 2.5. Size of organization for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Small enterprise/organization	9,0	3,7	9,6	2,8	16,2	14,5
Medium-sized enterprise/organization	10,1	9,3	12,3	8,3	11,4	10,1
Large enterprise/organization	80,9	87,0	78,1	88,9	72,4	75,4
Total (%)	100	100	100	100	100	100
Number of responses	445	54	73	144	105	69

Note: A small enterprise/organization is described as a “small enterprise/organization (less than 50 employees)”, a medium-sized enterprise/organization as a “medium-sized enterprise/organization (50-250 employees)” and a large enterprise/organization as a “large enterprise/organization (more than 250 employees)”. Source: The PhD employment survey 2023.

Table 2.6 displays results showing whether the PhD graduates are employed inside or outside of Denmark. Overall, just above 75 % are employed in Denmark with some variation across the faculties.

Table 2.6. Employment country for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed outside of Denmark	23,8	31,5	35,6	6,9	28,6	36,2
Employed in Denmark	76,2	68,5	64,4	93,1	71,4	63,8
Total (%)	100	100	100	100	100	100
Number of responses	445	54	73	144	105	69

Source: The PhD employment survey 2023.

The graduates employed in Denmark were further asked about the physical location of their workplace. Table 2.7 presents the results from this question. Evidently, a majority of the PhD graduates are employed in the eastern part of Jutland.

Table 2.7. Physical location of the workplace for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Greater Copenhagen	13,2	32,4	12,8	10,5	13,3	6,8
Zealand and islands	3,0	5,4	2,1	2,3	2,7	4,5
Funen	2,7	2,7	4,3	3,8	0	2,3
Aarhus and eastern part of Jutland	65,5	43,2	61,7	64,7	72	77,3
Rest of Jutland	15,7	16,2	19,1	18,8	12	9,1
Total (%)	100	100	100	100	100	100
Number of responses	336	37	47	133	75	44

Note: Postal codes under 3000 are defined as Greater Copenhagen, postal codes between 3000 and 4999 as Zealand and islands, postal codes between 5000 and 5999 as Funen, postal codes between 8000 and 8999 as Aarhus and the eastern part of Jutland and postal codes between 6000 and 7999 and above 9000 as the rest of Jutland. Source: The PhD employment survey 2023.

2.3. Employment – how fast?

A small block of questions was only a part of the newly educated PhD graduates' questionnaire. The 2022/23 graduates in employment October 1st were asked when they started their first job. The results are presented in table 2.8. It appears just above 80 % started their first job in less than 3 months after completion of the PhD program. Compared to the other faculties, the results indicate that a higher share of graduates from Arts began their first job later than 3 months after completion of the PhD.

Table 2.8. Start time of first job for employed PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Before completion of PhD	40,9	36,4	35	50	35,2	41,4
Less than 3 months after completion of PhD	40,1	21,2	42,5	42,2	46,3	41,4
3-6 months after completion of PhD	9,1	21,2	12,5	4,7	9,3	3,4
7-12 months after completion of PhD	8,9	18,2	10	3,1	9,3	10,3
More than 12 months after completion of PhD	1,0	3,0	0	0	0	3,4
Total (%)	100	100	100	100	100	100
Number of responses	220	33	40	64	54	29

Source: *The PhD employment survey 2023.*

The 2022/23 PhD graduates were also asked with whom they had been consulting on their career development during their PhD education. These results are shown in table 2.9, and it appears that the most common consultations were with the supervisor and external collaborators.

Table 2.9. Career development consultations for employed PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Supervisor	75,7	72,7	80,5	72,9	68,4	69,0
Head of department/ closest manager	15,8	33,3	29,3	11,4	0	17,2
Internal mentor	11,3	3,0	17,1	11,4	8,8	13,8
AU Career consulting	19,9	24,2	17,1	17,1	12,3	31,0
External collaborators	54,5	60,6	58,5	55,7	49,1	34,5
My colleagues	28,9	27,3	31,7	14,3	35,1	41,4
No one	8,8	12,1	2,4	4,3	12,3	13,8
Number of responses	220	33	41	70	57	29

Note: Multiple choices possible. Source: *The PhD employment survey 2023.*

To paint a picture of the pace with which the PhD graduates change jobs in the years after completion of their PhD program, the 2018/19 graduates were asked how many positions they had had after they handed in their PhD thesis. Table 2.10 displays these results. The most common answer with 42,9 % respondents is two positions, but the answers are fairly spread out across the response categories. There is a weaker tendency that a higher share of graduates from Arts have had three or more positions, and this corresponds to the results presented in table 2.2 showing that a larger percentage of Arts graduates have temporary positions.

Table 2.10. Number of positions after PhD thesis hand-in for employed PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
One position	19,0	30	16,1	21,9	16,7	12,8
Two positions	42,9	15	41,9	41,1	52,1	48,7
Three positions	24,3	35	29,0	23,3	16,7	28,2
More than three positions	13,8	20	12,9	13,7	14,6	10,3
Total (%)	100	100	100	100	100	100
Number of responses	211	20	31	73	48	39

Source: *The PhD employment survey 2023.*

3. Job functions and usefulness of the PhD education

This final part of the 2023 report contains a section on the value added by a PhD degree in the actual employment situation. Before that, section 3.1 describes the graduates' employment sectors and job functions. All the tables and figures relate to the employment status per October 1st 2023. Tables divided into cohorts can be found in Appendix 3.

3.1. Employment sectors and job functions

Table 3.1 presents the employment fields in which the PhD graduates are employed. There are fairly large differences across the faculties. For all faculties except Health, it is most common to be employed by universities. More than 60 % of the graduates from Health are employed by the health sector. Generally, the differences between the faculties correspond very well to what we would expect given the content of PhD programs.

Table 3.1. Employment sectors for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Health sector	22,5	0	6,8	62,2	1,0	1,5
Pharmaceutical industry/biotech	7,0	0	0	7,7	16,2	2,9
Industry	3,4	1,9	4,1	0	7,6	4,4
Building and construction	0,2	0	0	0	0	1,5
IT and telecommunications	3,6	1,9	2,7	0	10,5	2,9
Trade and commerce	0,8	0	4,1	0	1,0	0
Finance and insurance	2,2	0	4,1	0	4,8	2,9
Law practice	0,4	0	2,7	0	0	0
Public administration	1,3	1,9	2,7	0	1,0	2,9
Culture and tourism	0,6	5,6	0	0	0	0
Media and communication	0,4	1,9	1,4	0	0	0
Consulting and counselling services	2,3	0	1,4	0,7	5,7	2,9
Universities	39,6	61,1	47,9	23,1	37,1	55,9
Government research or other public research institution	4,7	9,3	5,5	2,1	4,8	5,9
Non-public research company	1,1	0	4,1	0	1,0	1,5
Teaching institution	2,2	7,4	0	1,4	2,9	1,5
Food industry	2,3	0	1,4	2,1	3,8	2,9
Other	5,2	9,3	11,0	0,7	2,9	10,3
Total (%)	100	100	100	100	100	100
Number of responses	443	54	73	143	105	68

Note: The categories “advertising and marketing” and “transportation and services” are left out due to zero answers in those categories. The categories “Government research or other public research institution” and “Teaching institutions” are in the questionnaire described as “Teaching institution (colleges of education, grammar/high school, primary/elementary school or similar)” and “Government research or other public research institution (not university)”, respectively. Source: The PhD employment survey 2023.

Table 3.2 shows which job functions PhD graduates have as part of their jobs. For all faculties, the most common job function is research and development. The largest variation across faculties is found in relation to teaching which is a part of the job for half of the graduates from Arts and Aarhus BSS but only around 20 % of the graduates from Nat.

Table 3.2. Job functions for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Research and development	83,8	79,6	80,8	81,8	86,7	89,7
Teaching	39,1	55,6	52,1	46,2	19,0	30,9
Managerial responsibility	21,9	14,8	15,1	21,7	21,9	33,8
None of the above	10,9	13,0	17,8	11,9	6,7	7,4
Number of responses	443	54	73	143	105	68

Note: Multiple answers possible. Source: The PhD employment survey 2023.

PhD graduates having research and development as a part of their jobs were asked which type of R&D they work with. The results from this question are displayed in table 3.3 and paint a mixed picture with applied research as the most common answer (65,2 %).

Table 3.3. Which type of R&D for PhD employed graduates working with R&D, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Basic research	42,0	69,8	64,4	24,8	48,4	29,5
Applied research	65,2	53,5	64,4	73,5	52,7	75,4
Development	42,8	37,2	30,5	36,8	58,2	45,9
Number of responses	371	43	59	117	91	61

Note: Multiple answers possible. Source: The PhD employment survey 2023.

PhD graduates having teaching as a part of their jobs were asked in which type of institution they teach. Table 3.4 shows that teaching at universities is the most common type of teaching for PhD graduates across all faculties.

Table 3.4. Which type of teaching for employed PhD graduates working with teaching, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
University	74,5	70	86,8	65,2	85	81,0
Other higher education institution	6,5	0	2,6	12,1	5	4,8
College of professional education	9,7	23,3	0	10,6	5	9,5
Gymnasium	0,6	0	0	0	5	0
Own training company	3,5	3,3	0	6,1	0	4,8
Other educational institution	14,1	3,3	10,5	27,3	5	0
Number of responses	175	30	38	66	20	21

Note: Multiple answers possible. The answer categories "Technical and vocational school", "Folk high school" and "Elementary/primary school" are left out due to no responses. Gymnasium is described as "Upper secondary education, i.e. grammar school/high school". "College of professional education" is described as "College of professional education (University College)" Source: The PhD employment survey 2023.

PhD graduates having managerial responsibility as part of their jobs were asked which type of managerial responsibility they have. Overall, table 3.5 shows that the most common answer is project responsibility reported by 75 % of the graduates. More than half of the PhD graduates with managerial responsibility have staff responsibility. Especially when it comes to financial and production responsibilities, there are notable differences between the faculties.

Table 3.5. Which type of managerial responsibility for employed PhD graduates with managerial responsibility, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Financial responsibility	25,7	50	36,4	25,8	30,4	8,7
Staff responsibility	56,1	62,5	72,7	64,5	56,5	34,8
Production responsibility	29,6	0	27,3	48,4	21,7	21,7
Project responsibility	75,0	75	72,7	64,5	82,6	82,6
Other	9,9	12,5	45,5	0	8,7	8,7
Number of responses	96	8	11	31	23	23

Note: Multiple answers possible. Source: The PhD employment survey 2023.

Tables 3.6 and 3.7 give an overview of the share of employed PhD working in academia defined as working at a university and conducting basic or applied research. Table 3.6 presents the results for PhD graduates employed inside Denmark and table 3.7 the results for PhD graduates employed outside of Denmark.

Table 3.6 shows that just above 30 % of all employed PhD graduates in Denmark work in academia with some variation between the faculties. Health has the lowest share of PhD graduates working in academia in Denmark with just above 20 % and Aarhus BSS the highest share with just below 45 %.

Table 3.6. Employed PhD graduates working in academia in Denmark, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	32,1	40,5	44,7	21,8	33,3	44,2
Employed outside academia	67,9	59,5	55,3	78,2	66,7	55,8
Total (%)	100	100	100	100	100	100
Number of respondents	335	37	47	133	75	43

Source: The PhD employment survey 2023.

Table 3.7 shows that PhD graduates working outside of Denmark with 52 % working in academia have a greater tendency to work in academia. Here, Arts stands out with more than 75 % of the PhD graduates employed outside of Denmark working in academia.

Table 3.7. Employed PhD graduates working in academia outside of Denmark, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	52,3	76,5	53,8	30	36,7	64
Employed outside academia	47,7	23,5	46,2	70	63,3	36
Total (%)	100	100	100	100	100	100
Number of respondents	108	17	26	10	30	25

Source: The PhD employment survey 2023.

Tables 3.8 to 3.12 on the following pages present the distribution of the PhD graduates' work tasks in their present job as of October 1st for each faculty and cohort. The five most frequent tasks in each faculty table are highlighted. Each faculty's graduates were presented with a faculty-unique set of predefined possible tasks and were asked to choose up to five 'most frequent tasks in your job' from the list.

Table 3.8 below shows the most frequent tasks reported by graduates from Arts. It appears that the most frequent tasks are data collection and processing, research, communication and dissemination, coordination and planning, project management and project work, and teaching and guidance/supervision. The answers are rather similar across the two cohorts.

Table 3.8. Five most frequent tasks for employed PhD graduates from the Arts faculty by cohort. Percentages.

Tasks	2018/19	2022/23
Data collection and processing	55	57,6
Design and system development	5	12,1
Events	10	6,1
Research	85	72,7
Research management	30	12,1
Fundraising	10	6,1
It support	0	3,0
Church ceremonies	0	3,0
Communication and dissemination	50	39,4
Coordination and planning	45	51,5
Courses	10	3,0
Marketing and/or advertising	0	3,0
Personnel management	5	3,0
Policy	0	3,0
Project management and project work	30	48,5
Educational work	30	24,2
Editorial work	5	15,2
Advisory and consultancy services	5	15,2
Council, committee, board, etc. (participation)	5	6,1
Secretariat functions and/or public sector consultancy/management	5	9,1
Language and translation tasks	0	6,1
Team management	10	3,0
Excavation and finds processing	0	0
Exhibits, curation and archival work	0	3,0
Development and innovation	25	9,1
Teaching and guidance/supervision	55	48,5
Finance	5	3,0
Number of respondents	20	33

Note: Up to five answers per respondent. The categories "HR", "Procurement and/or sales", "Directing and performance work", "Customer and citizen services", "Production of music, radio and TV", "Excavation and finds processing" and "Other" are left out due to no responses. Source: The PhD employment survey 2023.

Table 3.9 displays the most frequent tasks for graduates from Aarhus BSS. Again, the answers are relatively similar across the two cohorts. The most frequent tasks are analysis and/or evaluation, data collection and/or processing, research, communication and/or dissemination, and teaching and/or supervision.

Table 3.9. Five most frequent tasks for employed PhD graduates from the Aarhus BSS faculty by cohort. Percentages.

Tasks	2018/19	2022/23
Analysis and/or evaluation	56,3	87,8
Data collection and/or processing	40,6	78,0
Business development	9,4	9,8
Research	65,6	75,6
Research management	9,4	19,5
Fundraising	15,6	4,9
Legal functions	12,5	2,4
Communication and/or dissemination	28,1	31,7
Courses	12,5	9,8
Marketing and/or advertising	3,1	0
Policy	12,5	7,3
Product and/or system development	6,3	4,9
Programming	25	19,5
Project and/or development work	25	19,5
Project management	31,3	22,0
Advisory and/or consultancy services	3,1	7,3
Case handling and/or documentation	12,5	4,9
Secretariat functions and/or public sector consultancy/management	6,3	4,9
Taxes	3,1	0
Language and/or translations tasks	3,1	2,4
Strategy development and/or implementation	18,8	12,2
Therapy and interviews	6,3	0
Team management	9,4	2,4
Teaching and/or supervision	46,9	41,5
Development and efficiency measuring	3,1	2,4
Finance and/or accounting functions	3,1	2,4
Other	0	4,9
Number of respondents	32	41

Note: Up to five answers per respondent. The categories "Procurement and/or sales", "Personnel management" and "Support function (e.g. IT or customer service)" are left out due to no responses. Source: The PhD employment survey 2023.

Table 3.10 below shows the most frequent tasks for graduates from Health. Compared to graduates from Arts and Aarhus BSS, the diversity in tasks is larger for graduates from Health. For both cohorts, research management, data collection/processing, patient related clinical work and clinical work are among the top five most frequent tasks. Other frequent tasks include analysis, writing articles and dissemination.

Table 3.10. Five most frequent tasks for employed PhD graduates from the **Health** faculty by cohort. Percentages.

Tasks	2018/19	2022/23
Administration	13,7	7,2
Work at the outpatient clinic	21,9	17,4
Writing articles	24,7	36,2
Analysis	26,0	36,2
Data collection and/or processing	32,9	37,7
Diagnostics	30,1	13,0
Preparation	4,1	7,2
Dissemination	27,4	23,2
Research	13,7	13,0
Research management	46,6	43,5
Fundraising	5,5	13,0
Patient related clinical work	37,0	33,3
Coordination	6,8	8,7
Courses	5,5	0
Quality assurance/documentation	5,5	11,6
Laboratory work	8,2	10,1
Management	4,1	4,3
Study of literature	8,2	18,8
Clinical work	38,4	23,2
Monitoring of medicine	0	2,9
Meetings	2,7	21,7
Autopsies	16,4	0
Surgeries	6,8	2,9
Patient treatment	16,4	14,5
Patient administrative work	5,5	4,3
Communication with patients	13,7	14,5
Project management	5,5	26,1
Programming	2,7	11,6
Advisory and/or consultancy services	1,4	1,4
Software development	1,4	2,9
Specialist doctor	17,8	2,9
Group leader	1,4	2,9
Therapy and interviews	1,4	4,3
Teaching	17,8	14,5
Supervision	17,8	7,2
Economy	1,4	0
Other	1,4	1,4
Number of respondents	73	69

Note: Up to five answers per respondent. The categories "Clinical dentistry", "Surgical assisting", "Secretariat functions and/or public sector consultancy/management" and "Course leader" are left out due to no responses.

Source: The PhD employment survey 2023.

Table 3.11 shows the most frequent tasks for graduates from Nat. Analysis, research, and laboratory work are in the top five of most frequent tasks for both cohorts of graduates from Nat. Other frequent tasks include data collection and/or processing, programming, project work and project management.

Table 3.11. Five most frequent tasks for employed PhD graduates from the **Nat** faculty by cohort. Percentages.

Tasks	2018/19	2022/23
Administration	6,3	3,6
Analysis	41,7	51,8
Calculation Engineer	0	1,8
Business care configuration	4,2	1,8
Data collection and/or processing	29,2	35,7
Design verification	2,1	3,6
Research	45,8	67,9
Fundraising	14,6	5,4
Innovation	18,8	19,6
Inspection	2,1	0
Communication/dissemination	16,7	21,4
Coordination	2,1	12,5
Client support	8,3	0
Quality assurance/documentation	12,5	10,7
Laboratory work	33,3	39,3
Modelling	20,8	8,9
Personnel management	6,3	1,8
Product development	10,4	12,5
Programming	33,3	32,1
Project work	14,6	30,4
Project management	29,2	16,1
Advisory/consultancy work	4,2	3,6
Sales/procurement	2,1	1,8
Software development	27,1	10,7
Team management	10,4	1,8
Technical tasks	10,4	19,6
Tests	8,3	3,6
Preparing applications/quotations	2,1	5,4
Development	18,8	16,1
Teaching including preparation	12,5	10,7
Guidance/supervision	25	14,3
Contact with customers/citizens/pupils/students/etc.	10,4	7,1
Other	0	3,6
Number of respondents	48	56

Note: Up to five answers per respondent. The categories “Offshore work”, “Scrum master tasks” and “Secretariat functions and/or public sector consultancy/management” are left out due to no responses. Source: The PhD employment survey 2023.

Table 3.12 displays the most frequent tasks for graduates from Tech. They are similar compared to graduates from Nat as analysis, research, and data collection and/or processing are among the most frequent tasks for both cohorts of graduates from Tech. Again, there is some variation across the cohorts, and other frequently reported tasks include coordination, communication/dissemination and project management. Compared to the other faculties, graduates from Tech also have a greater variety in frequent tasks.

Table 3.12. Five most frequent tasks for employed PhD graduates from the **Tech** faculty by cohort. Percentages.

Tasks	2018/19	2022/23
Administration	10,3	6,9
Analysis	33,3	41,4
Calculation Engineer	0	3,4
Business care configuration	5,1	0
Data collection and/or processing	30,8	48,3
Design verification	0	3,4
Research	51,3	75,9
Fundraising	12,8	17,2
Innovation	23,1	17,2
Communication/dissemination	33,3	37,9
Coordination	25,6	20,7
Quality assurance/documentation	7,7	6,9
Laboratory work	12,8	17,2
Modelling	17,9	31,0
Personnel management	10,3	0
Product development	7,7	6,9
Programming	17,9	20,7
Project work	20,5	13,8
Project management	46,2	24,1
Advisory/consultancy work	12,8	3,4
Software development	12,8	6,9
Team management	10,3	6,9
Technical tasks	12,8	10,3
Tests	0	3,4
Preparing applications/quotations	15,4	6,9
Development	20,5	10,3
Teaching including preparation	15,4	20,7
Guidance/supervision	15,4	10,3
Contact with customers/citizens/pupils/students/etc.	10,3	3,4
Number of respondents	39	29

Note: Up to five answers per respondent. The categories "Inspection", "Client support", "Offshore work", "Sales/procurement", "Scrum master tasks", "Secretariat functions and/or public sector consultancy/management" and "Other" are left out due to no responses. Source: The PhD employment survey 2023.

3.2. The relation between PhD dissertation and current job

The last section of the report examines how the PhD graduates experience the relation between their PhD education and their current job. First, the report examines the graduates' assessment of the relevance of their PhD research topic or method for their current job, as well as how the PhD education has prepared the graduates for working life. Second, the report displays competency maps for all graduates (AU level) and divided into faculties. The competency maps show the relation between the competences acquired during the PhD education and the competences needed at work.

Table 3.13 shows whether the PhD graduates find their PhD education relevant for their current job. The respondents are asked to assess whether the topic of the PhD dissertation or the chosen research method is relevant to their current job. A clear majority of more than 75 % find that their PhD topic or research method has relevance to their current job.

Table 3.13. Relevance of PhD dissertation topic or research method for the current job for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Relevant	75,6	79,2	77,5	83,8	63,1	73,5
Partially relevant	7,7	11,3	12,7	5,1	6,8	7,4
Not relevant	16,7	9,4	9,9	11,0	30,1	19,1
Total (%)	100	100	100	100	100	100
Number of responses	431	53	71	136	103	68

Source: *The PhD employment survey 2023.*

As a related question, the respondents are asked to evaluate the relation between their PhD degree program and their current job. Table 3.14 shows that more than 90 % of the respondents find at least some relation between their PhD program and current job. The most common answer is that the job is within the academic content of the PhD, and this applies to all faculties although some variation between the faculties is present.

Table 3.14. Relation between PhD and current job for employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Job is within the academic content of the PhD	68,5	77,4	73,2	75	55,3	64,7
Job is outside the academic field of the PhD, but requires general qualifications acquired through the PhD	23,5	11,3	15,5	20,6	34,0	29,4
No clear connection between the academic content of the PhD and job	8,0	11,3	11,3	4,4	10,7	5,9
Total (%)	100	100	100	100	100	100
Number of responses	431	53	71	136	103	68

Source: *The PhD employment survey 2023.*

Table 3.15 displays results showing to which degree the PhD program prepared the PhD graduates for working life. 94 % answer that the PhD program has prepared them for working life, at least to some degree. The answers are similar across the faculties even though there is an indication that a larger share of the graduates from Aarhus BSS and Tech find that the PhD program has prepared them for working life to a high degree.

Table 3.15. Did the PhD program prepare for working life? For employed PhD graduates, both cohorts. Percentages for AU total and by faculties.

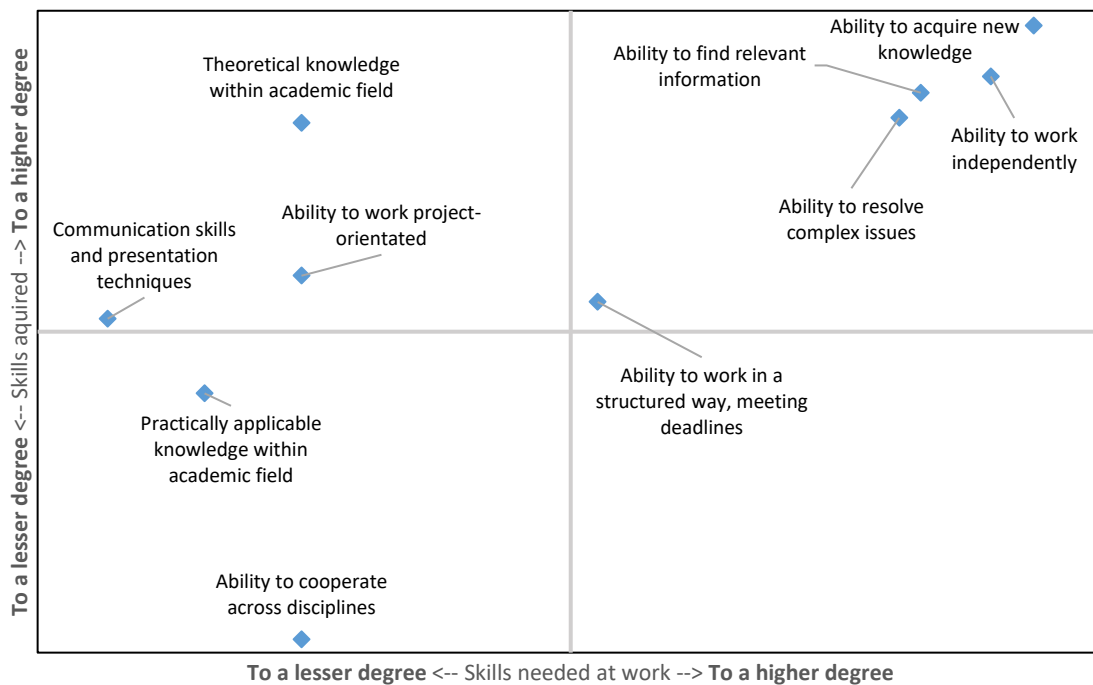
	AU	Arts	Aarhus BSS	Health	Nat	Tech
To a high degree	61,3	64,2	70,8	58,5	51,0	72,1
To some degree	33,2	35,8	22,2	33,8	43,3	25
Only a little	4,1	0	6,9	5,6	2,9	2,9
Not at all	1,4	0	0	2,1	2,9	0
Total (%)	100	100	100	100	100	100
Number of responses	439	53	72	142	104	68

Source: *The PhD employment survey 2023.*

The last part of the main section of the report consists of competency maps. The competency maps show the relationship between the qualifications and competences acquired during the PhD education and the qualifications and competences needed at work. The maps are created based on two questions asking the PhD graduates to evaluate to which degree they acquired the listed competences during their PhD education, and to which degree they need the competences in their current job. Hence, the figures show which competences the graduates themselves experience to be most important in their current job. The results are both depicted for AU overall and at faculty level. The competency maps are made using merged data from both cohorts. The scaling in the five competency maps is not comparable across figures as they are rescaled individually.

Figure 3.1 shows the competency map at AU level (all five faculties). Most of the competences are located relatively close to the diagonal which indicates that there is a match between the acquired competences and the competences needed in the current job. Looking at the results for AU total, the four most important competences are: Ability to acquire new knowledge, work independently, find relevant information, and resolve complex issues. All these competences are acquired during the education to a high degree. The largest divergence is seen in relation to theoretical knowledge within the academic field which is perceived to be less needed in the current job.

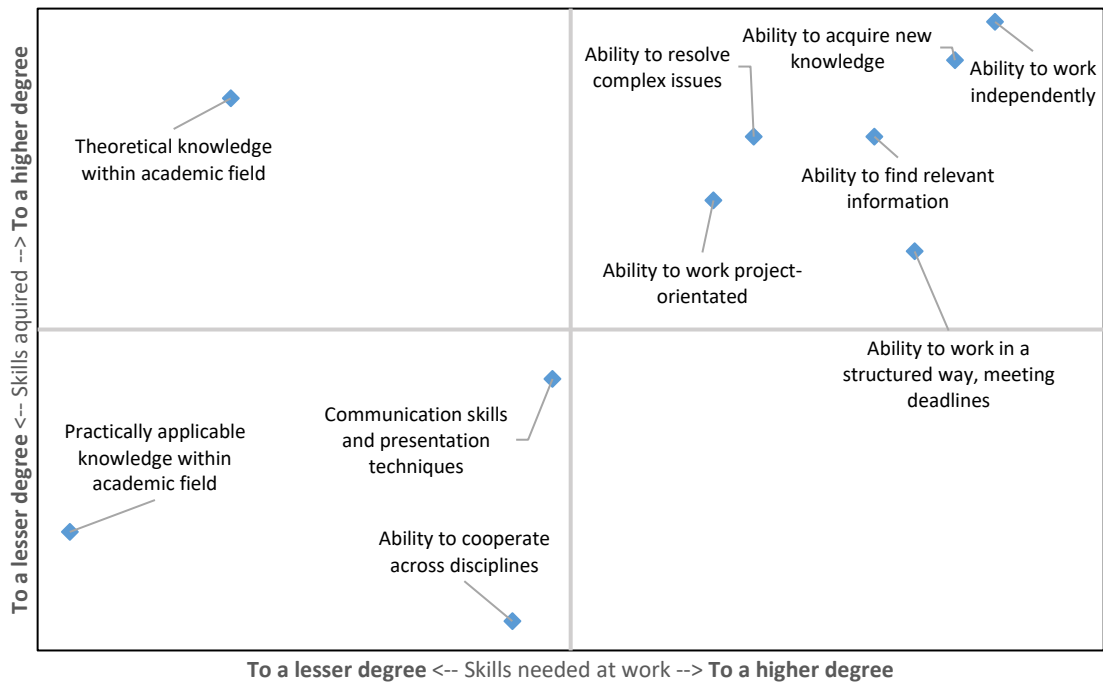
Figure 3.1. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, **AU** total.



Source: *The PhD employment survey 2023*.

Figure 3.2 shows the competency map for graduates from Arts. Again, most of the competences are located along the diagonal. The two most important competences are the same as for AU overall but the ability to work in a structured way and meeting deadlines is perceived as the third most important competence among graduates from Arts. The figure further indicates that graduates from Arts experience a greater need for communication skills and presentation techniques, an ability to cooperate across disciplines, and an ability to work project-orientated compared to graduates from other faculties.

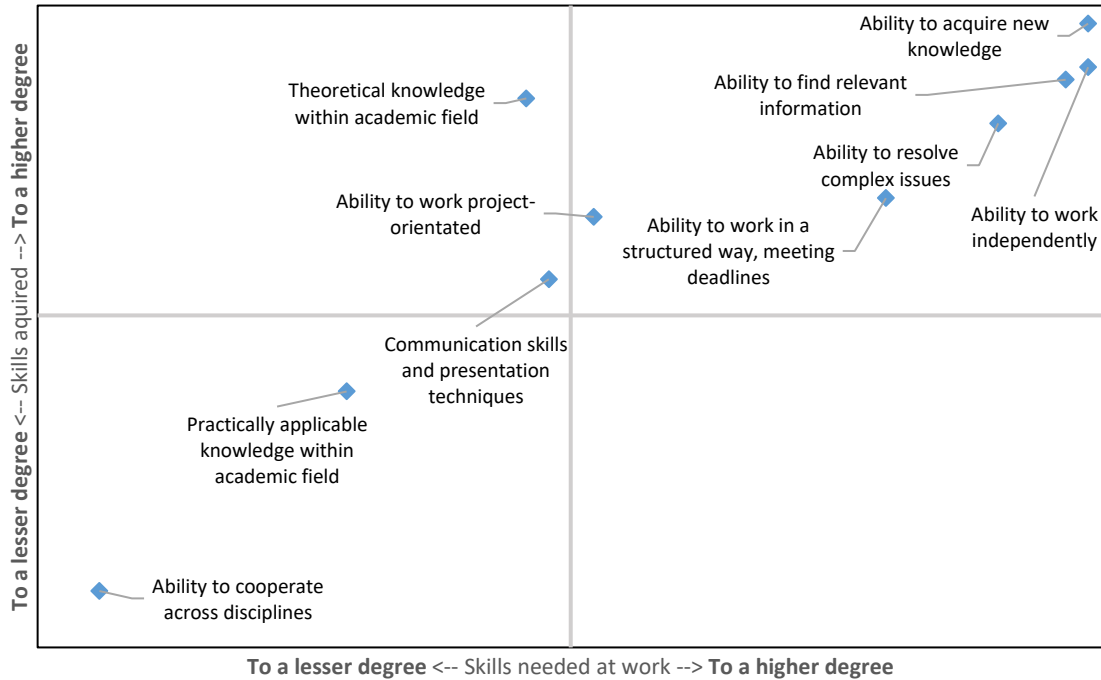
Figure 3.2. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of Arts.



Source: *The PhD employment survey 2023.*

Figure 3.3 displays the competency map for graduates from Aarhus BSS. The figure indicates that there is a strong relationship between the acquired and needed competences. The top four most important competences are the same as for AU overall. Compared to AU overall, communication skills and presentation techniques, and the ability to work project orientated seem to be more important for graduates from BSS in their current job.

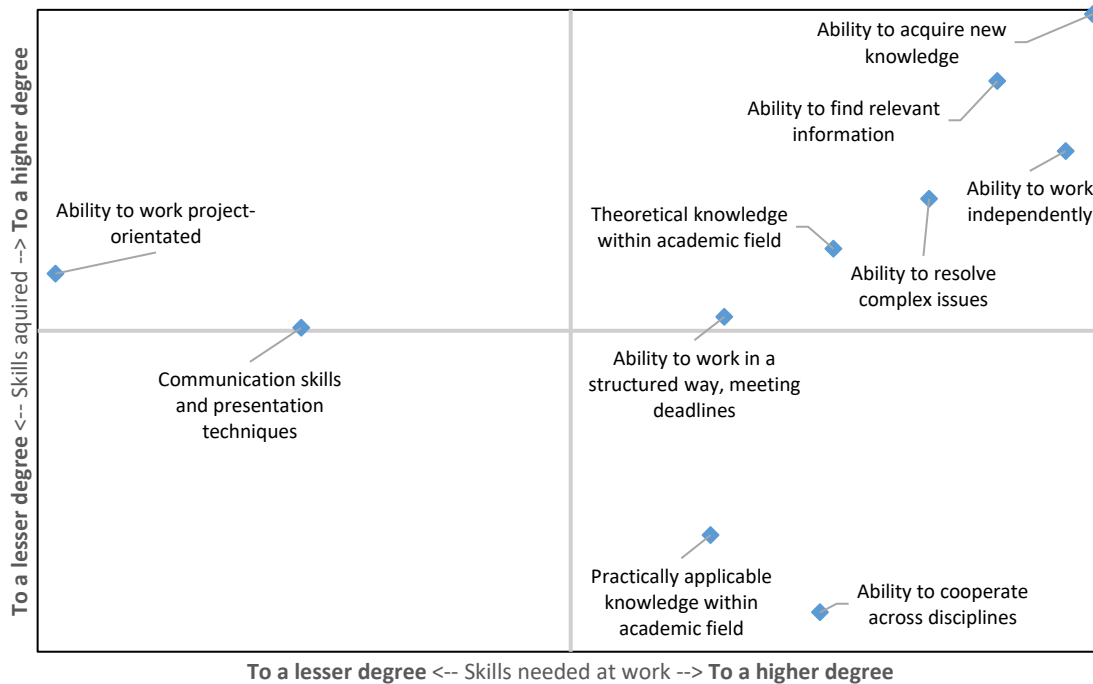
Figure 3.3. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Aarhus BSS.



Source: *The PhD employment survey 2023.*

Figure 3.4 shows the competency map for graduates from Health. The pattern is rather similar to the previous figures as most competences are located relatively close to the diagonal. Compared to AU overall, graduates from Health experience a greater need for the ability to cooperate across disciplines, and for practically applicable knowledge within their academic field, but they only experience to acquire these competences during their PhD program to a lesser degree. The ability to work project-orientated is perceived to be less needed, but it is acquired during the education to a higher degree.

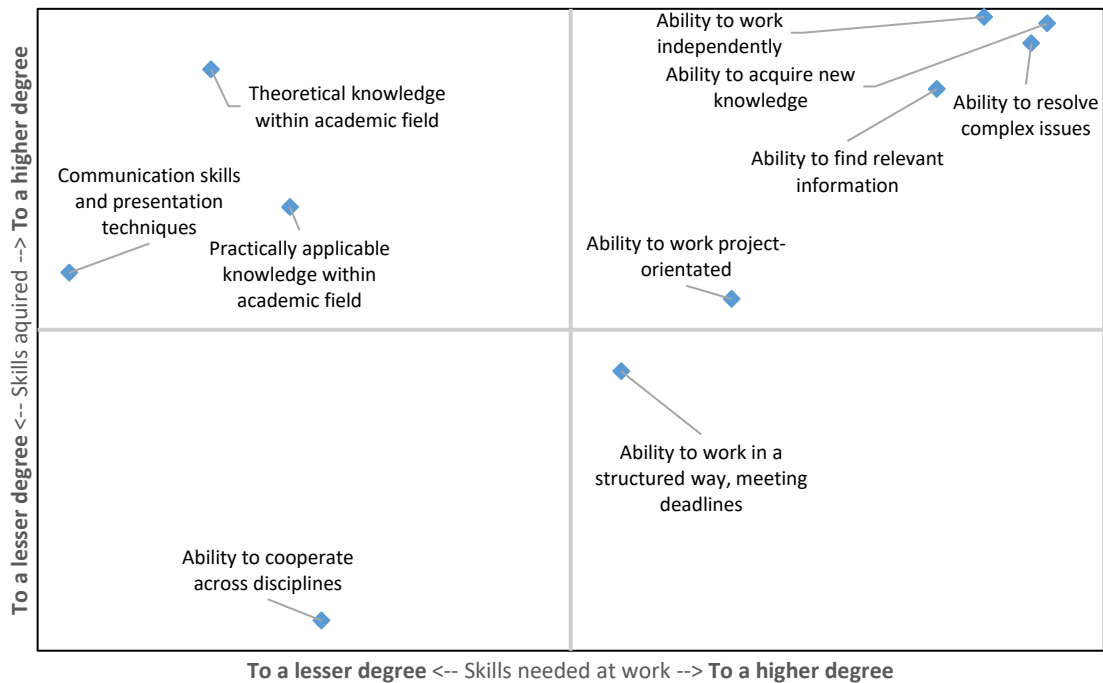
Figure 3.4. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of Health.



Source: *The PhD employment survey 2023.*

Figure 3.5 shows the competency map for graduates from Nat. Again, the four most needed competences are the same as for AU overall. Two competences are placed further away from the diagonal: Communication skills and presentation techniques, and theoretical knowledge within the academic field. None of these competences are perceived to be very important in the current job.

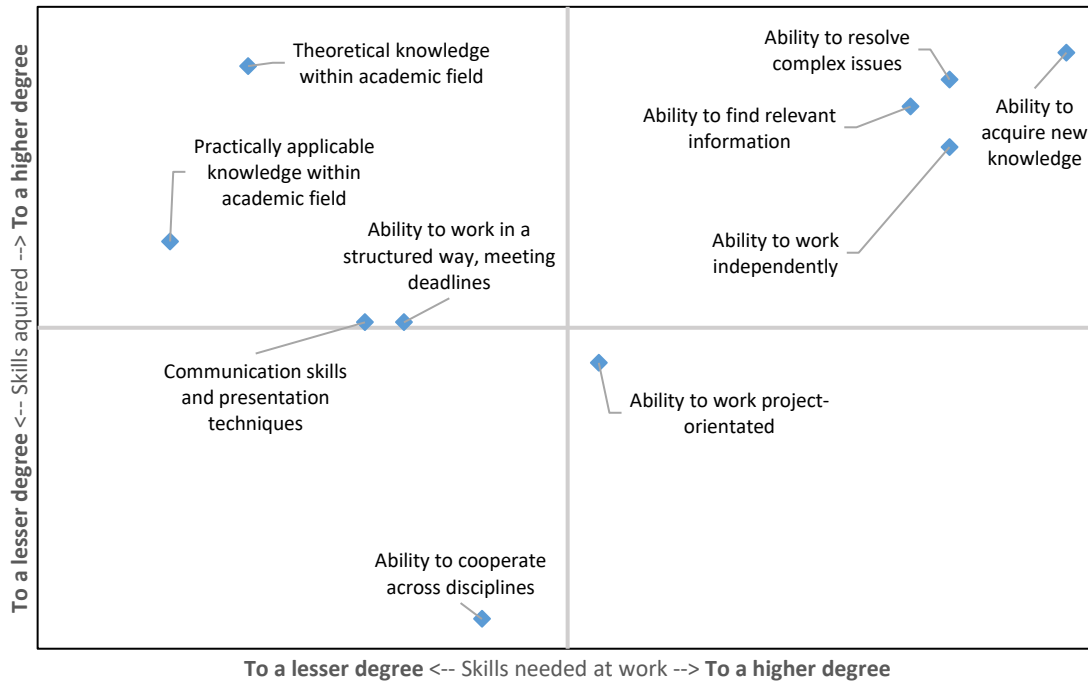
Figure 3.5. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of **Natural Sciences**.



Source: *The PhD employment survey 2023*.

Lastly, figure 3.6 displays the competency map for graduates from Tech. Most competences are located close to the diagonal, and the four most needed competences are the same as for AU overall. However, practically applicable knowledge within academic field, and theoretical knowledge within academic field are perceived to be a bit less needed at work.

Figure 3.6. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of **Technical Sciences**.



Source: *The PhD employment survey 2023.*

Appendix 1. Identification and response rate

The total number of PhD graduates in the two cohorts is presented in table 0.1.

Table 0.1. Number of PhD graduates by faculty and cohort. Absolute numbers.

Faculties	2018/19	2022/23
Arts	44	58
Aarhus BSS	66	65
Health	151	148
Science	109	106
Technology	72	66
Total	442	443

Source: *The PhD employment survey 2023*.

It was possible to send out the questionnaire to all respondents via either e-mail address or Digital Post. This results in an identification rate of 100 % as seen in table 0.2.

Table 0.2. Non-response caused by a lack of identification. Both cohorts. Absolute numbers and percentages.

	Number	Percentage
Identified	885	100
Not identified	0	0
Total	885	100

Note: "Not identified" includes respondents with an unknown e-mail address and no Digital Post account. Source: *The PhD employment survey 2023*.

Table 0.3 presents the identified respondents' response rates divided into faculty and cohort.

Table 0.3. Response rates by faculty and cohort. Percentages.

Faculties	2018/19	2022/23
Arts	54,5	58,6
Aarhus BSS	50	66,2
Health	49,0	51,4
Science	45,9	56,6
Technology	55,6	47,0
Total	50,0	55,1

Note: *Partially answered surveys count as a response*. Source: *The PhD employment survey 2023*.

The different response rates across the faculties risk biasing the results due to an overweight of respondents from certain faculties. To minimize this risk, the report uses a faculty-based weighting method. Using this method, the responses from respondents from faculties with a lower response rate will be given a greater weight, which will make up for the relatively lower response rate.

Appendix 2. Sensitivity of employment shares to weighting method

This appendix corresponds to section 1 about employment status and shows the results when different weighting methods are applied. It appears that there are only marginal differences between the weighted results in section 1 and unweighted results below.

Table 1.1.U. Employment status for PhD graduates, year 18/19. Percentages for AU total and by faculties. Not weighted.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	98,6	91,7	100	100	98	100
Other education	0	0	0	0	0	0
Unemployed	1,4	8,3	0	0	2	0
Inactive	0	0	0	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	219	24	32	74	50	39

Note: "Employed" includes respondents who answered "On leave with unconditional right to return". "Inactive" includes respondents who answered "Inactive (homemaker, early retirement, etc.)". Source: The PhD employment survey 2023.

Table 1.2.U. Employment status for PhD graduates, year 22/23. Percentages for AU total and by faculties. Not weighted.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	95,9	97,1	95,3	96	95	96,8
Other education	0,4	0	2,3	0	0	0
Unemployed	3,3	2,9	0	4	5	3,2
Inactive	0,4	0	2,3	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	243	34	43	75	60	31

Note: "Employed" includes respondents who answered "On leave with unconditional right to return". "Inactive" includes respondents who answered "Inactive (homemaker, early retirement, etc.)". Source: The PhD employment survey 2023.

Appendix 3. Tables divided into cohorts

Table numbers refer to the corresponding tables in the report added an A for cohort 18/19 and B for cohort 22/23, respectively. If there is only one table, the table covers both cohorts, and corresponding tables divided by cohort are included in the main report.

Section 1. Employment status

Table 1.3. Employment status for PhD graduates, both cohorts. Percentage for AU total and by faculties. Weighted by faculty.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	97,2	94,8	97,3	98,0	96,4	98,6
Other education	0,2	0	1,3	0	0	0
Unemployed	2,4	5,2	0	2,0	3,6	1,4
Inactive	0,2	0	1,3	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	462	58	75	149	110	70

Note: "Employed" includes respondents who answered "On leave with unconditional right to return". "Inactive" includes respondents who answered "Inactive (homemaker, early retirement, etc.)". Source: The PhD employment survey 2023.

Section 2.1. Type of position

Table 2.1.A. Number of working hours for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Full-time job	94,5	95,2	96,9	89,0	100	94,9
Part-time job	5,5	4,8	3,1	11,0	0	5,1
Total (%)	100	100	100	100	100	100
Number of responses	214	21	32	73	49	39

Note: A "full-time job" is a job with at least 37 working hours a week. A "part-time job" is a job with less than 37 working hours a week. Source: The PhD employment survey 2023.

Table 2.1.B. Number of working hours for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Full-time job	94,8	84,8	97,6	95,8	98,2	93,3
Part-time job	5,2	15,2	2,4	4,2	1,8	6,7
Total (%)	100	100	100	100	100	100
Number of responses	232	33	41	71	57	30

Note: A "full-time job" is a job with at least 37 working hours a week. A "part-time job" is a job with less than 37 working hours a week. Source: The PhD employment survey 2023.

Table 2.2.A. Type of position for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Permanent position/tenure	64,1	57,1	53,1	68,5	68,8	61,5
Temporary/fixed-term position	31,2	42,9	37,5	27,4	27,1	33,3
Temporary substitute position	0,5	0	3,1	0	0	0
Subsidized employment	0	0	0	0	0	0
Self-employed	2,8	0	6,3	1,4	2,1	5,1
Other	1,5	0	0	2,7	2,1	0
Total (%)	100	100	100	100	100	100
Number of responses	213	21	32	73	48	39

Note: A temporary/fixed-term position is described as "Temporary/fixed-term position (e.g. project employment)".

Source: The PhD employment survey 2023.

Table 2.2.B. Type of position for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Permanent position/tenure	42,9	42,4	43,9	35,2	52,6	43,3
Temporary/fixed-term position	53,3	54,5	51,2	57,7	45,6	56,7
Temporary substitute position	0	0	0	0	0	0
Subsidized employment	0	0	0	0	0	0
Self-employed	0,8	0	2,4	1,4	0	0
Other	3,0	3,0	2,4	5,6	1,8	0
Total (%)	100	100	100	100	100	100
Number of responses	232	33	41	71	57	30

Note: A temporary/fixed-term position is described as "Temporary/fixed-term position (e.g. project employment)".

Source: The PhD employment survey 2023.

Section 2.2. Employment – where?

Table 2.3.A. Employment sector for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in private sector	28,1	0	34,4	9,6	54,2	38,5
Employed in the public sector	66,2	90,5	53,1	87,7	39,6	59,0
Employed in a professional or non-profit organization	3,4	0	6,3	1,4	6,3	2,6
Other	2,3	9,5	6,3	1,4	0	0
Total (%)	100	100	100	100	100	100
Number of responses	213	21	32	73	48	39

Source: The PhD employment survey 2023.

Table 2.3.B. Employment sector for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in private sector	22,4	9,1	24,4	11,3	45,6	20
Employed in the public sector	71,1	84,8	65,9	85,9	49,1	66,7
Employed in a professional or non-profit organization	2,7	6,1	0	0	3,5	6,7
Other	3,8	0	9,8	2,8	1,8	6,7
Total (%)	100	100	100	100	100	100
Number of responses	232	33	41	71	57	30

Source: The PhD employment survey 2023.

Which part of the public sector?

Table 2.4.A. Different parts of the public sector for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
EU	2,2	0	5,9	3,1	0	0
Central government	41,5	63,2	70,6	14,1	57,9	69,6
Region	39,6	10,5	11,8	76,6	5,3	4,3
Municipality	2,8	0	5,9	1,6	5,3	4,3
Other	13,9	26,3	5,9	4,7	31,6	21,7
Total (%)	100	100	100	100	100	100
Number of responses	142	19	17	64	19	23

Source: The PhD employment survey 2023. A majority of the respondents who answered "other" further elaborate that they are employed at a university.

Table 2.4.B. Different parts of the public sector for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
EU	3,5	3,6	7,4	3,3	3,6	0
Central government	44,4	71,4	63,0	21,3	53,6	50
Region	29,4	7,1	11,1	62,3	3,6	10
Municipality	5,5	14,3	0	3,3	7,1	5
Other	17,3	3,6	18,5	9,8	32,1	35
Total (%)	100	100	100	100	100	100
Number of responses	164	28	27	61	28	20

Source: The PhD employment survey 2023. A majority of the respondents who answered "other" further elaborate that they are employed at a university.

Size of workplace organization

Table 2.5.A. Size of organization for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Small enterprise/organization	10,9	0	9,4	2,7	22,9	17,9
Medium-sized enterprise/organization	8,9	9,5	12,5	8,2	8,3	7,7
Large enterprise/organization	80,1	90,5	78,1	89,0	68,8	74,4
Total (%)	100	100	100	100	100	100
Number of responses	213	21	32	73	48	39

Note: A small enterprise/organization is described as a “small enterprise/organization (less than 50 employees)”, a medium-sized enterprise/organization as a “medium-sized enterprise/organization (50-250 employees)” and a large enterprise/organization as a “large enterprise/organization (more than 250 employees)”. Source: The PhD employment survey 2023.

Table 2.5.B. Size of organization for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Small enterprise/organization	7,2	6,1	9,8	2,8	10,5	10
Medium-sized enterprise/organization	11,2	9,1	12,2	8,5	14,0	13,3
Large enterprise/organization	81,6	84,8	78,0	88,7	75,4	76,7
Total (%)	100	100	100	100	100	100
Number of responses	232	33	41	71	57	30

Note: A small enterprise/organization is described as a “small enterprise/organization (less than 50 employees)”, a medium-sized enterprise/organization as a “medium-sized enterprise/organization (50-250 employees)” and a large enterprise/organization as a “large enterprise/organization (more than 250 employees)”. Source: The PhD employment survey 2023.

Employment country

Table 2.6.A. Employment country for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed outside of Denmark	28,4	38,1	40,6	11,0	35,4	38,5
Employed in Denmark	71,6	61,9	59,4	89,0	64,6	61,5
Total (%)	100	100	100	100	100	100
Number of responses	213	21	32	73	48	39

Source: The PhD employment survey 2023.

Table 2.6.B. Employment country for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed outside of Denmark	19,7	27,3	31,7	2,8	22,8	33,3
Employed in Denmark	80,3	72,7	68,3	97,2	77,2	66,7
Total (%)	100	100	100	100	100	100
Number of responses	232	33	41	71	57	30

Source: The PhD employment survey 2023.

Physical location of workplace

Table 2.7.A. Physical location of workplace for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Greater Copenhagen	11,2	23,1	5,3	10,8	12,9	8,3
Zealand and islands	2,6	7,7	0	1,5	3,2	4,2
Funen	3,2	0	10,5	3,1	0	4,2
Aarhus and eastern part of Jutland	64,5	46,2	52,6	67,7	64,5	75
Rest of Jutland	18,6	23,1	31,6	16,9	19,4	8,3
Total (%)	100	100	100	100	100	100
Number of responses	152	13	19	65	31	24

Note: Postal codes under 3000 are defined as Greater Copenhagen, postal codes between 3000 and 4999 as Zealand and islands, postal codes between 5000 and 5999 as Funen, postal codes between 8000 and 8999 as Aarhus and the eastern part of Jutland, and postal codes between 6000 and 7999 and above 9000 as the rest of Jutland. Source: The PhD employment survey 2023.

Table 2.7.B. Physical location of workplace for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Greater Copenhagen	14,7	37,5	17,9	10,3	13,6	5
Zealand and islands	3,3	4,2	3,6	2,9	2,3	5
Funen	2,2	4,2	0	4,4	0	0
Aarhus and eastern part of Jutland	66,0	41,7	67,9	61,8	77,3	80
Rest of Jutland	13,8	12,5	10,7	20,6	6,8	10
Total (%)	100	100	100	100	100	100
Number of responses	184	24	28	68	44	20

Note: Postal codes under 3000 are defined as Greater Copenhagen, postal codes between 3000 and 4999 as Zealand and islands, postal codes between 5000 and 5999 as Funen, postal codes between 8000 and 8999 as Aarhus and the eastern part of Jutland, and postal codes between 6000 and 7999 and above 9000 as the rest of Jutland. Source: The PhD employment survey 2023.

Section 3.1. Employment sectors and job functions

Table 3.1.A. Employment sectors for employed PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Health sector	25,3	0	9,4	65,8	2,1	2,6
Pharmaceutical industry/biotech	8,4	0	0	9,6	18,8	2,6
Industry	4,3	0	6,3	0	10,4	5,1
Building and construction	0,4	0	0	0	0	2,6
IT and telecommunications	3,4	0	3,1	0	10,4	2,6
Trade and commerce	0,5	0	0	0	2,1	0
Finance and insurance	2,3	0	3,1	0	4,2	5,1
Law practice	0,9	0	6,3	0	0	0
Public administration	1,4	0	0	0	2,1	5,1
Culture and tourism	0,4	4,8	0	0	0	0
Consulting and counselling services	1,4	0	0	0	2,1	5,1
Universities	32,7	66,7	37,5	17,8	31,3	43,6
Government research or other public research institution	7,4	14,2	6,3	4,1	8,3	10,3
Non-public research company	1,4	0	6,3	0	0	2,6
Teaching institution	1,8	4,8	0	1,4	2,1	2,6
Food industry	2,0	0	0	0	6,3	2,6
Other	5,9	9,5	21,9	1,4	0	7,7
Total (%)	100	100	100	100	100	100
Number of responses	213	21	32	73	48	39

Note: The categories "Media and communication", "Advertising and marketing" and "Transportation and services" are left out due to zero answers in those categories. The categories "Government research or other public research institution" and "Teaching institutions" are in the questionnaire described as "Teaching institution (colleges of education, grammar/high school, primary/elementary school or similar)" and "Government research or other public research institution (not university)", respectively. Source: The PhD employment survey 2023.

Table 3.1.B. Employment sectors for employed PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Health sector	19,9	0	4,89	58,6	0	0
Pharmaceutical industry/biotech	5,8	0	0	5,7	14,0	3,4
Industry	2,6	3,0	2,4	0	5,3	3,4
IT and telecommunications	3,8	3,0	2,4	0	10,5	3,4
Trade and commerce	1,1	0	7,3	0	0	0
Finance and insurance	2,0	0	4,9	0	5,3	0
Public administration	1,1	3,0	4,9	0	0	0
Culture and tourism	0,8	6,1	0	0	0	0
Media and communication	0,8	3,0	2,4	0	0	0
Consulting and counselling services	2,9	0	2,4	1,4	8,8	0
Universities	46,3	57,6	56,1	28,6	42,1	72,4
Government research or other public research institution	2,0	6,1	4,9	0	1,8	0
Non-public research company	0,8	0	2,4	0	1,8	0
Teaching institution	2,5	9,1	0	1,4	3,5	0
Food industry	2,7	0	2,4	4,3	1,8	3,4
Other	4,9	9,1	2,4	0	5,3	13,8
Total (%)	100	100	100	100	100	100
Number of responses	230	33	41	70	57	29

Note: The categories "Building and construction", "Law practice", "Advertising and marketing" and "Transportation and services" are left out due to zero answers in those categories. The categories "Government research or other public research institution" and "Teaching institutions" are in the questionnaire described as "Teaching institution (colleges of education, grammar/high school, primary/elementary school or similar)" and "Government research or other public research institution (not university)", respectively. Source: The PhD employment survey 2023.

Which job functions

Table 3.2.A. Job functions for PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Research and development	83,9	90,5	81,3	83,6	81,3	87,2
Teaching	43,9	66,7	50	54,8	25	30,8
Managerial responsibility	32,3	33,3	28,1	30,1	33,3	38,5
None of the above	8,0	4,8	15,6	6,8	6,3	7,7
Number of responses	213	21	32	73	48	39

Note: Multiple answers possible. Source: The PhD employment survey 2023.

Table 3.2.B. Job functions for PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Research and development	83,7	72,7	80,5	80	91,2	93,1
Teaching	34,6	48,5	53,7	37,1	14,0	31,0
Managerial responsibility	12,4	3,0	4,9	12,9	12,3	27,6
None of the above	13,7	18,2	19,5	17,1	7,0	6,9
Number of responses	230	33	41	70	57	29

Note: Multiple answers possible. Source: The PhD employment survey 2023.

Which types of research and development

Table 3.3.A. Which type of R&D for PhD graduates working with R&D, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Basic research	36,3	63,2	57,7	18,0	46,2	26,5
Applied research	66,2	57,9	80,8	75,4	46,2	67,6
Development	46,0	31,6	42,3	34,4	64,1	55,9
Number of responses	179	19	26	61	39	34

Note: Multiple answers possible. Source: The PhD employment survey 2023.

Table 3.3.B. Which type of R&D for PhD graduates working with R&D, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Basic research	47,4	75	69,7	32,1	50	33,3
Applied research	64,7	50	51,5	71,4	57,7	85,2
Development	39,8	41,7	21,2	39,3	53,8	33,3
Number of responses	192	24	33	56	52	27

Note: Multiple answers possible. Source: The PhD employment survey 2023.

In which type of institution did you teach?

Table 3.4.A. Which type of teaching for employed PhD graduates working with teaching, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
University	70,4	71,4	75	62,5	91,7	66,7
Other higher education institution	8,7	0	0	15	8,3	8,3
College of professional education	10,3	21,4	0	12,5	0	16,7
Own training company	3,1	0	0	5	0	8,3
Other educational institution	18,5	0	25	30	8,3	0
Number of responses	94	14	16	40	12	12

Note: Multiple answers possible. The answer categories "Technical and vocational school", "Folk high school", "Elementary/primary school" and "Gymnasium" are left out due to no responses. "College of professional education" is described as "College of professional education (University College)" Source: The PhD employment survey 2023.

Table 3.2.B. Which type of teaching for employed PhD graduates working with teaching, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
University	79,8	68,8	95,5	69,2	75	100
Other higher education institution	3,7	0	4,5	7,7	0	0
College of professional education	8,6	25	0	7,7	12,5	0
Gymnasium	1,2	0	0	0	12,5	0
Own training company	3,9	6,3	0	7,7	0	0
Other educational institution	9,3	6,3	0	23,1	0	0
Number of responses	81	16	22	26	8	9

Note: Multiple answers possible. The answer categories "Technical and vocational school", "Folk high school" and "Elementary/primary school" are left out due to no responses. Gymnasium is described as "Upper secondary education, i.e. grammar school/high school". "College of professional education" is described as "College of professional education (University College)" Source: The PhD employment survey 2023.

Which types of managerial responsibility

Table 3.5.A. Which type of managerial responsibility for PhD graduates with managerial responsibility, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Financial responsibility	25,0	42,9	44,4	18,2	31,3	6,7
Staff responsibility	56,9	57,1	66,7	63,6	56,3	40
Production responsibility	32,3	0	33,3	45,5	31,3	26,7
Project responsibility	75,5	85,7	66,7	68,2	87,5	73,3
Other	14,4	14,3	55,6	0	12,5	13,3
Number of responses	69	7	9	22	16	15

Note: Multiple answers possible. Source: The PhD employment survey 2023.

Table 3.5.B. Which type of managerial responsibility for PhD graduates with managerial responsibility, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Financial responsibility	29,3	100	0	44,4	28,6	12,5
Staff responsibility	53,7	100	100	66,7	57,1	25
Production responsibility	23,0	0	0	55,6	0	12,5
Project responsibility	74,8	0	100	55,6	71,4	100
Other	0	0	0	0	0	0
Number of responses	27	1	2	9	7	8

Note: Multiple answers possible. Source: The PhD employment survey 2023.

Graduates working in academia

Table 3.6.A. Employed PhD graduates working in academia in Denmark, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	23,3	30,8	47,4	13,8	19,4	33,3
Employed outside academia	76,7	69,2	52,6	86,2	80,6	66,7
Total (%)	100	100	100	100	100	100
Number of respondents	152	13	19	65	31	24

Source: The PhD employment survey 2023.

Table 3.6.B. Employed PhD graduates working in academia in Denmark, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	39,9	45,8	42,9	29,4	43,2	57,9
Employed outside academia	60,1	54,2	57,1	70,6	56,8	42,1
Total (%)	100	100	100	100	100	100
Number of respondents	183	24	28	68	44	19

Source: The PhD employment survey 2023.

Table 3.7.A. Employed PhD graduates working in academia outside of Denmark, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	43,6	87,5	23,1	37,5	41,2	46,7
Employed outside academia	56,4	12,5	76,9	62,5	58,8	53,3
Total (%)	100	100	100	100	100	100
Number of respondents	61	8	13	8	17	15

Source: The PhD employment survey 2023.

Table 3.7.B. Employed PhD graduates working in academia outside of Denmark, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	63,8	66,7	84,6	0	30,8	90
Employed outside academia	36,2	33,3	15,4	100	69,2	10
Total (%)	100	100	100	100	100	100
Number of respondents	47	9	13	2	13	10

Source: The PhD employment survey 2023.

Section 3.2. Relevance and relation between PhD dissertation and current job

Table 3.13.A. Relevance between PhD topic or research method and current job for employed PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Relevant	73,3	80	74,2	86,1	50	76,9
Partially relevant	6,3	10	6,5	5,6	8,3	2,6
Not relevant	20,4	10	19,4	8,3	41,7	20,5
Total (%)	100	100	100	100	100	100
Number of responses	210	20	31	72	48	39

Source: The PhD employment survey 2023.

Table 3.13.B. Relevance between PhD topic or research method and current job for employed PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Relevant	77,2	78,8	80	81,3	74,5	69,0
Partially relevant	9,3	12,1	17,5	4,7	5,5	13,8
Not relevant	13,5	9,1	2,5	14,1	20	17,2
Total (%)	100	100	100	100	100	100
Number of responses	221	33	40	64	55	29

Source: The PhD employment survey 2023.

Relation between PhD and job

Table 3.14.A. Relation between PhD and current job for employed PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Job is within the academic content of the PhD	65,8	85	67,7	73,6	47,9	64,1
Job is outside the academic field of the PhD, but requires general qualifications acquired through the PhD	25,6	0	19,4	23,6	37,5	30,8
No clear connection between the academic content of the PhD and job	8,7	15	12,9	2,8	14,6	5,1
Total (%)	100	100	100	100	100	100
Number of responses	210	20	31	72	48	39

Source: The PhD employment survey 2023.

Table 3.14.B. Relation between PhD and current job for employed PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Job is within the academic content of the PhD	70,9	72,7	77,5	76,6	61,8	65,5
Job is outside the academic field of the PhD, but requires general qualifications acquired through the PhD	21,6	18,2	12,5	17,2	30,9	27,6
No clear connection between the academic content of the PhD and job	7,6	9,1	10	6,3	7,3	6,9
Total (%)	100	100	100	100	100	100
Number of responses	221	33	40	64	55	29

Source: The PhD employment survey 2023.

PhD has prepared for working life

Table 3.15.A. Has PhD prepared for working life? For employed PhD graduates, year 18/19. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
To a high degree	63,1	60	64,5	67,1	50	74,4
To some degree	32,0	40	29,0	26,0	43,8	25,6
Only a little	3,4	0	6,5	5,5	2,1	0
Not at all	1,5	0	0	1,4	4,2	0
Total (%)	100	100	100	100	100	100
Number of responses	211	20	31	73	48	39

Source: The PhD employment survey 2023.

Table 3.15.B. Has PhD prepared for working life? For employed PhD graduates, year 22/23. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
To a high degree	59,1	66,7	75,6	49,3	51,8	69,0
To some degree	34,6	33,3	17,1	42,0	42,9	24,1
Only a little	4,9	0	7,3	5,8	3,6	6,9
Not at all	1,4	0	0	2,9	1,8	0
Total (%)	100	100	100	100	100	100
Number of responses	228	33	41	69	56	29

Source: *The PhD employment survey 2023.*