

PhD Employment Survey 2022

Report on PhD graduates from Aarhus University

January 2023

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Revised version February 2023: Note added to table 2.3.

Faculties at Aarhus University (AU):

In 2022, there are five faculties at Aarhus University: Arts, Aarhus BSS, Health, Science and Technology.

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 2022 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 2017 and March 31st 2018; and PhD students that graduated between April 1st 2021 and March 31st 2022. The report describes the employment status of the PhD graduates as of October the 1st 2022 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.

Last year's report 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 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. There is almost no variation across the faculties.

Table 1.1. Employment status for PhD graduates, year 17/18. Percentages for AU total and by faculties. Weighted by faculty.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	97,5	100	96,4	97,4	97,6	96,3
Other education	0	0	0	0	0	0
Unemployed	1,5	0	3,6	1,3	2,4	0
Inactive	1,0	0	0	1,3	0	3,7
Total (%)	100	100	100	100	100	100
Number of responses	205	32	28	76	42	27

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 2022.

Table 1.2. presents the employment status for the 2021/22 graduates. It appears that the overall employment rate is only marginally lower for the newly educated graduates compared to the 2017/18 cohort. The employment rate is lower for newly educated PhDs from Arts, but the difference has evened out five years after completion of the PhD education.

Table 1.2. Employment status for PhD graduates, year 21/22. Percentages for AU total and by faculties. Weighted by faculty.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	96,9	90,6	100	98,5	95,2	100
Other education	0,4	0	0	0	1,6	0
Unemployed	2,1	5,7	0	1,5	3,2	0
Inactive	0,6	3,8	0	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	256	53	40	65	63	35

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 2022.

The unweighted results are very similar to the results found in table 1.1 and 1.2. 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 2022. The tables in section 2.1 and 2.2 include both cohorts. All the tables relate to the employment status per October 1st 2022. 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	91,2	84,4	94,0	89,9	94,1	93,3
Part-time job	8,8	15,6	6,0	10,1	5,9	6,7
Total (%)	100	100	100	100	100	100
Number of responses	443	77	67	138	101	60

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 2022.

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 Tech and BSS. Table 2.2.A. and table 2.2.B. in Appendix 3 also display considerable divergence between the two cohorts with more graduates from 21/22 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	54,1	50,6	61,2	47,8	54,5	65,0
Temporary/fixed-term position	39,6	42,9	32,8	42,8	39,6	35,0
Temporary substitute position	1,6	1,3	1,5	2,2	2,0	0
Subsidized employment	0,6	2,6	0	0	1,0	0
Self-employed	1,8	1,3	4,5	1,4	2,0	0
Other	2,4	1,3	0	5,8	1,0	0
Total (%)	100	100	100	100	100	100
Number of responses	443	77	67	138	101	60

Note: A temporary/fixed-term position is described as “Temporary/fixed-term position (e.g. project employment)”. Source: The PhD employment survey 2022.

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. Just below 30 % are employed in the private sector. There is a substantial variation across the faculties as just above 80 % 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	28,2	13,0	34,3	13,0	48,5	38,3
Employed in the public sector	63,8	67,5	65,7	81,2	40,6	56,7
Employed in a professional or non-profit organization	2,4	5,2	0	1,4	3,0	3,3
Other	5,6	14,3	0	4,3	7,9	1,7
Total (%)	100	100	100	100	100	100
Number of responses	443	77	67	138	101	60

Source: The PhD employment survey 2022.

Note: Compared to previous years, this year's report shows a lower percentage of graduates from Arts employed in the public sector, and a higher share of respondents in the 'Other' category. It is likely that this deviation can partly be explained by the fact that all data in the report is self-reported by the respondents, implying that random errors can occur in respondents' indication of own employment sector. Further, the distribution is based on responses of the respondents who answer the survey (only 77 from Arts), and the share of publicly employed respondents is likely to vary from year to year.

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	4,1	0	2,3	0	12,2	15,2
Central government	41,9	70,6	63,6	23,4	53,7	33,3
Region	34,3	3,9	6,8	69,4	9,8	9,1
Municipality	2,5	3,9	11,4	0	2,4	0
Other	17,2	21,6	15,9	7,2	22,0	42,4
Total (%)	100	100	100	100	100	100
Number of responses	280	51	44	111	41	33

Source: The PhD employment survey 2022.

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	9,4	11,8	11,9	5,1	15,0	5,1
Medium-sized enterprise/organization	9,3	9,2	16,4	2,9	11,0	15,3
Large enterprise/organization	81,3	78,9	71,6	92,0	74,0	79,7
Total (%)	100	100	100	100	100	100
Number of responses	439	76	67	137	100	59

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 2022.

Table 2.6 displays results showing whether the PhD graduates are employed inside or outside of Denmark. Overall, just below 80 % 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	21,1	18,4	17,9	12,4	29,0	33,9
Employed in Denmark	78,9	81,6	82,1	87,6	71,0	66,1
Total (%)	100	100	100	100	100	100
Number of responses	439	76	67	137	100	59

Source: The PhD employment survey 2022.

The graduates employed in Denmark were further asked about the psychical 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	15,2	19,4	17,0	8,5	18,8	23,1
Zealand and islands	4,7	11,3	3,8	2,5	5,8	2,6
Funen	4,2	8,1	5,7	2,5	4,3	2,6
Aarhus and eastern part of Jutland	63,9	41,9	62,3	76,3	59,4	61,5
Rest of Jutland	12,0	19,4	11,3	10,2	11,6	10,3
Total (%)	100	100	100	100	100	100
Number of responses	341	62	53	118	69	39

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 2022.

2.3. Employment – how fast?

A small block of questions was only a part of the newly educated PhD graduates' questionnaire. The 2021/22 graduates in employment October 1st were asked when they started their first job. The results are presented in table 2.8. It appears that around 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 smaller share of graduates from Nat began their first job before completion of the PhD education, whereas a comparatively higher percentage started after 7-12 months.

Table 2.8. Start time of first job for employed PhD graduates, year 20/21. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Before completion of PhD	49,4	55,8	48,6	48,4	39,7	60,6
Less than 3 months after completion of PhD	31,2	27,9	40,5	37,1	29,3	18,2
3-6 months after completion of PhD	10,1	9,3	5,4	9,7	10,3	15,2
7-12 months after completion of PhD	8,4	7,0	5,4	3,2	19,0	6,1
More than 12 months after completion of PhD	0,9	0	0	1,6	1,7	0
Total (%)	100	100	100	100	100	100
Number of responses	233	43	37	62	58	33

Source: The PhD employment survey 2022.

The 2021/22 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 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Supervisor	72,4	67,4	70,3	77,4	72,4	69,7
Head of department/ closest manager	17,1	34,9	21,6	14,5	10,3	12,1
Internal mentor	6,7	11,6	5,4	8,1	3,4	6,1
AU Career consulting	15,5	9,3	16,2	9,7	24,1	18,2
External collaborators	49,2	60,5	56,8	45,2	62,1	21,2
My colleagues	30,7	44,2	16,2	27,4	36,2	30,3
No one	11,4	9,3	13,5	11,3	6,9	18,2
Number of responses	233	43	37	62	58	33

Note: Multiple choices possible. Source: The PhD employment survey 2022.

To paint a picture of the pace with which the PhD graduates change jobs in the years after completion of their PhD program, the 2017/18 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 40,2 % 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 and Health have had more than three positions, and this corresponds to the results presented in table 2.2 showing that a larger percentage of Arts and Health graduates have temporary positions.

Table 2.10. Number of positions after PhD thesis hand-in for employed PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
One position	17,4	22,6	11,1	17,8	10,0	32,0
Two positions	40,5	29,0	51,9	39,7	45,0	36,0
Three positions	24,4	29,0	22,2	19,2	35,0	16,0
More than three positions	17,7	19,4	14,8	23,3	10,0	16,0
Total (%)	100	100	100	100	100	100
Number of responses	196	31	27	73	40	25

Source: The PhD employment survey 2022.

3. Job functions and usefulness of the PhD education

This final part of the 2022 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 2022. 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. A change from the 2021 report is the division of the response category “Universities, government research or other public research institution” resulting in the two separate categories “Universities” and “Government research or other public research institution”. This creates a more nuanced picture of the employment sectors for employed PhD graduates and further allows for an examination of the share of PhD graduates working in academia.

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	22,6	1,3	3,0	62,2	2,0	3,4
Pharmaceutical industry/biotech	5,2	0	0	6,7	10,0	3,4
Industry	4,3	2,6	0	0	7,0	15,3
Building and construction	1,2	1,3	0	0	0	6,8
IT and telecommunications	3,3	0	4,5	0,7	7,0	5,1
Trade and commerce	0,8	2,6	1,5	0	1,0	0
Finance and insurance	0,9	0	3,0	0	2,0	0
Law practice	0,4	0	3,0	0	0	0
Public administration	2,2	0	7,6	0	2,0	5,1
Culture and tourism	1,1	7,9	0	0	0	0
Media and communication	0,2	0	1,5	0	0	0
Consulting and counselling services	5,0	3,9	9,1	1,5	9,0	3,4
Transportation and services	0,4	0	3,0	0	0	0
Universities	34,0	47,4	47,0	18,5	34,0	45,8
Government research or other public research institution	5,3	5,3	3,0	4,4	8,0	5,1
Non-public research company	0,7	0	0	0	2,0	1,7
Teaching institution	5,0	21,1	4,5	1,5	4,0	0
Food industry	1,9	0	1,5	1,5	3,0	3,4
Other	5,4	6,6	7,6	3,0	9,0	1,7
Total (%)	100	100	100	100	100	100
Number of responses	436	76	66	135	100	59

Note: The category “advertising and marketing” is left out due to zero answers in that category. 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 2022.

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 25 % of the graduates from Nat and Tech.

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	78,2	85,5	71,2	74,8	84,0	76,3
Teaching	38,6	56,6	51,5	42,2	24,0	25,4
Managerial responsibility	19,9	13,2	25,8	20,7	17,0	23,7
None of the above	14,9	6,6	19,7	20,7	6,0	20,3
Number of responses	436	76	66	135	100	59

Note: Multiple answers possible. Source: The PhD employment survey 2022.

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 (64,4 %).

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	43,0	60,0	42,6	33,7	50,0	33,3
Applied research	64,4	66,2	72,3	75,2	45,2	66,7
Development	40,4	46,2	36,2	35,6	44,0	42,2
Number of responses	342	65	47	101	84	45

Note: Multiple answers possible. Source: The PhD employment survey 2022.

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	58,1	88,2	73,7	75,0	86,7
Other higher education institution	7,2	7,0	0	12,3	4,2	6,7
College of professional education	14,4	39,5	2,9	12,3	8,3	0
Gymnasium	2,6	0	0	0	16,7	0
Technical and vocational school	1,3	0	0	1,8	4,7	0
Folk high school	1,3	0	0	0	8,3	0
Elementary/primary school	0,6	0	0	0	4,7	0
Own training company	9,6	7,0	5,9	12,3	16,7	0
Other educational institution	12,5	9,3	8,8	19,3	4,7	13,3
Number of responses	173	43	34	57	24	15

Note: Multiple answers possible. 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 2022.

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 more than 80 % of the graduates. More than half of the PhD graduates with managerial responsibility have staff responsibility. Around a quarter of the graduates report that they have financial or production responsibility. Especially when it comes to financial, staff and project 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	26,3	30,0	35,3	17,9	41,2	14,3
Staff responsibility	56,2	40,0	58,8	57,1	64,7	50,0
Production responsibility	18,7	10,0	23,5	21,4	17,6	14,3
Project responsibility	80,6	100	82,4	64,3	88,2	92,9
Other	6,0	0	5,9	7,1	5,9	7,1
Number of responses	86	10	17	28	17	14

Note: Multiple answers possible. Source: The PhD employment survey 2022.

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 below 15 % and Tech the highest share with just below 50 %.

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	30,4	41,9	42,6	13,6	33,8	48,7
Employed outside academia	69,6	58,1	57,4	86,4	66,2	51,3
Total (%)	100	100	100	100	100	100
Number of respondents	344	62	54	118	71	39

Source: *The PhD employment survey 2022.*

Table 3.7 shows that PhD graduates working outside of Denmark with 37 % working in academia have a slightly greater tendency to work in academia. Here, Aarhus BSS stands out with almost 60 % 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	37,1	50,0	58,3	41,2	27,6	30,0
Employed outside academia	62,9	50,0	41,7	58,8	72,4	70,0
Total (%)	100	100	100	100	100	100
Number of respondents	92	14	12	17	29	20

Source: *The PhD employment survey 2022.*

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	2017/18	2021/22
Data collection and processing	54,8	69,8
Design and system development	6,5	9,3
Events	6,5	9,3
Research	80,6	74,4
Research management	19,4	2,3
Fundraising	22,6	14,0
HR	0	2,3
Communication and dissemination	58,1	48,8
Coordination and planning	35,5	39,5
Customer and citizen services	3,2	0
Courses	6,5	2,3
Marketing and/or advertising	0	2,3
Production of music, radio and TV	3,2	0
Project management and project work	48,4	41,9
Educational work	6,5	14,0
Editorial work	12,9	20,9
Advisory and consultancy services	16,1	7,0
Council, committee, board, etc. (participation)	9,7	2,3
Secretariat functions and/or public sector consultancy/management	0	2,3
Language and translation tasks	3,2	7,0
Team management	0	7,0
Excavation and finds processing	3,2	0
Exhibits, curation and archival work	6,5	7,0
Development and innovation	16,1	9,3
Teaching and guidance/supervision	48,4	58,1
Finance	3,2	2,3
Other	0	2,3
Number of respondents	31	43

Note: Up to five answers per respondent. The categories "Procurement and/or sales", "Directing and performance work", "IT support", "Church ceremonies", "Personnel management" and "Policy" are left out due to no responses. Source: The PhD employment survey 2022.

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	2017/18	2021/22
Analysis and/or evaluation	63,0	60,5
Data collection and/or processing	55,6	57,9
Business development	7,4	10,5
Research	48,1	52,6
Research management	7,4	5,3
Fundraising	3,7	2,6
Legal functions	11,1	10,5
Communication and/or dissemination	37,0	36,8
Courses	11,1	10,5
Marketing and/or advertising	3,7	0
Personnel management	7,4	0
Policy	3,7	0
Product and/or system development	14,8	0
Programming	18,5	13,2
Project and/or development work	25,9	23,7
Project management	37,0	23,7
Advisory and/or consultancy services	14,8	26,3
Case handling and/or documentation	3,7	7,9
Secretariat functions and/or public sector consultancy/management	7,4	7,9
Language and/or translations tasks	3,7	0
Strategy development and/or implementation	18,5	7,9
Support function (e.g. IT or customer service)	0	2,6
Therapy and interviews	3,7	13,2
Team management	14,8	7,9
Teaching and/or supervision	55,6	50,0
Development and efficiency measuring	0	5,3
Finance and/or accounting functions	3,7	5,3
Other	0	7,9
Number of respondents	27	38

Note: Up to five answers per respondent. The categories "Procurement and/or sales" and "Taxes" are left out due to no responses. Source: The PhD employment survey 2022.

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, data collection/processing, writing articles, and patient related clinical work are among the top five most frequent tasks. Other frequent tasks include analysis, research management and clinical work.

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

Tasks	2017/18	2021/22
Administration	8,2	9,7
Work at the outpatient clinic	27,4	17,7
Writing articles	17,8	37,1
Analysis	37,0	35,5
Data collection and/or processing	30,1	37,1
Diagnostics	20,5	16,1
Preparation	2,7	9,7
Dissemination	21,9	32,3
Research	21,9	16,1
Research management	46,6	40,3
Fundraising	12,3	9,7
Patient related clinical work	27,4	32,3
Coordination	6,8	12,9
Courses	1,4	0
Quality assurance/documentation	11,0	8,1
Laboratory work	8,2	14,5
Management	2,7	1,6
Study of literature	6,8	4,8
Clinical work	26,0	29,0
Meetings	6,8	11,3
Autopsies	16,4	0
Surgeries	6,8	4,8
Surgical assisting	0	3,2
Patient treatment	0	22,6
Patient administrative work	17,8	0
Communication with patients	21,9	12,9
Project management	1,4	16,1
Programming	5,5	6,5
Advisory and/or consultancy services	4,1	0
Software development	2,7	1,6
Specialist doctor	13,7	6,5
Course leader	1,4	3,2
Group leader	5,5	0
Therapy and interviews	1,4	1,6
Teaching	23,3	17,7
Supervision	20,5	16,1
Other	1,4	1,6
Number of respondents	73	62

Note: Up to five answers per respondent. The categories "Clinical dentistry", "Monitoring of medicine", "Secretariat functions and/or public sector consultancy/management" and "Economy" are left out due to no responses. Source: The PhD employment survey 2022.

Tables 3.11 and 3.12 on the following pages show the most frequent tasks for graduates from Nat and Tech, respectively. Table 3.11 shows that analysis, data collection/processing, and research are in the top five of most frequent tasks for both cohorts of graduates from Nat. Other frequent tasks include communication/dissemination, laboratory work, programming and project management.

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

Tasks	2017/18	2021/22
Administration	10,0	6,8
Analysis	45,0	47,5
Business care configuration	2,5	1,7
Data collection and/or processing	35,0	49,2
Research	45,0	59,3
Fundraising	12,5	1,7
Innovation	17,5	10,2
Inspection	2,5	0
Communication/dissemination	32,5	32,2
Coordination	20,0	8,5
Client support	0	5,1
Quality assurance/documentation	5,0	6,8
Laboratory work	30,0	42,4
Modelling	12,5	11,9
Personnel management	2,5	3,4
Product development	15,0	11,9
Programming	27,5	25,4
Project work	10,0	44,1
Project management	22,5	22,0
Advisory/consultancy work	10,0	3,4
Sales/procurement	2,5	1,7
Scrum master tasks	2,5	0
Software development	12,5	18,6
Team management	5,0	3,4
Technical tasks	7,5	13,6
Tests	5,0	5,1
Preparing applications/quotations	10,0	3,4
Development	17,5	15,3
Teaching including preparation	25,0	6,8
Guidance/supervision	25,0	15,3
Contact with customers/citizens/pupils/students/etc.	10,0	8,5
Other	2,5	0
Number of respondents	40	59

Note: Up to five answers per respondent. The categories "Calculation Engineer", "Design verification". "Offshore work" and "Secretariat functions and/or public sector consultancy/management" are left out due to no responses.

Source: The PhD employment survey 2022.

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 innovation, communication/dissemination, project work, project management and development.

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

Tasks	2017/18	2021/22
Administration	4,0	6,1
Analysis	32,0	54,5
Calculation Engineer	4,0	6,1
Business care configuration	4,0	3,0
Data collection and/or processing	52,0	45,5
Design verification	4,0	3,0
Research	40,0	60,6
Fundraising	4,0	3,0
Innovation	24,0	21,2
Inspection	16,0	0
Communication/dissemination	20,0	27,3
Coordination	20,0	15,2
Quality assurance/documentation	16,0	12,1
Laboratory work	16,0	24,2
Modelling	8,0	9,1
Personnel management	8,0	0
Product development	16,0	12,1
Programming	16,0	27,3
Project work	40,0	27,3
Project management	20,0	21,2
Advisory/consultancy work	8,0	12,1
Sales/procurement	4,0	3,0
Secretariat functions and/or public sector consultancy/management	0	3,0
Software development	4,0	18,2
Team management	8,0	0
Technical tasks	8,0	9,1
Tests	4,0	9,1
Preparing applications/quotations	16,0	3,0
Development	28,0	18,2
Teaching including preparation	8,0	21,2
Guidance/supervision	20,0	15,2
Contact with customers/citizens/pupils/students/etc.	12,0	0
Number of respondents	25	33

Note: Up to five answers per respondent. The categories "Offshore work", "Scrum master tasks" and "Other" are left out due to no responses. Source: The PhD employment survey 2022.

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 70 % 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	73,2	84,9	76,2	78,5	59,2	70,7
Partially relevant	11,1	8,2	11,1	8,9	16,3	10,3
Not relevant	15,7	6,8	12,7	12,6	24,5	19,0
Total (%)	100	100	100	100	100	100
Number of responses	427	73	63	135	98	58

Source: *The PhD employment survey 2022.*

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	66,5	82,2	68,3	71,9	52,0	62,1
Job is outside the academic field of the PhD, but requires general qualifications acquired through the PhD	25,7	12,3	22,2	18,5	42,9	29,3
No clear connection between the academic content of the PhD and job	7,8	5,5	9,5	9,6	5,1	8,6
Total (%)	100	100	100	100	100	100
Number of responses	427	73	63	135	98	58

Source: *The PhD employment survey 2022.*

Table 3.15 displays results showing to which degree the PhD program prepared the PhD graduates for working life. 93 % 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 Arts 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.

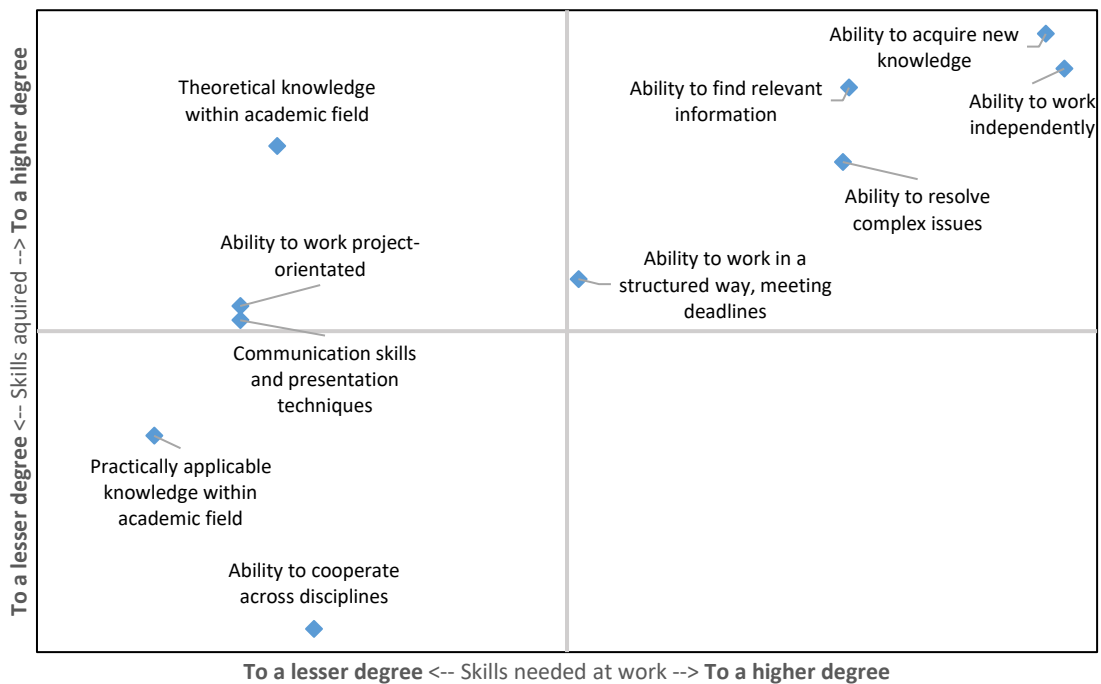
	AU	Arts	Aarhus BSS	Health	Nat	Tech
To a high degree	59,7	77,0	60,9	57,0	55,6	55,2
To some degree	33,5	17,6	32,8	34,1	39,4	37,9
Only a little	6,1	4,1	6,3	8,1	5,1	5,2
Not at all	0,7	1,4	0	0,7	0	1,7
Total (%)	100	100	100	100	100	100
Number of responses	430	74	64	135	99	58

Source: *The PhD employment survey 2022.*

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.

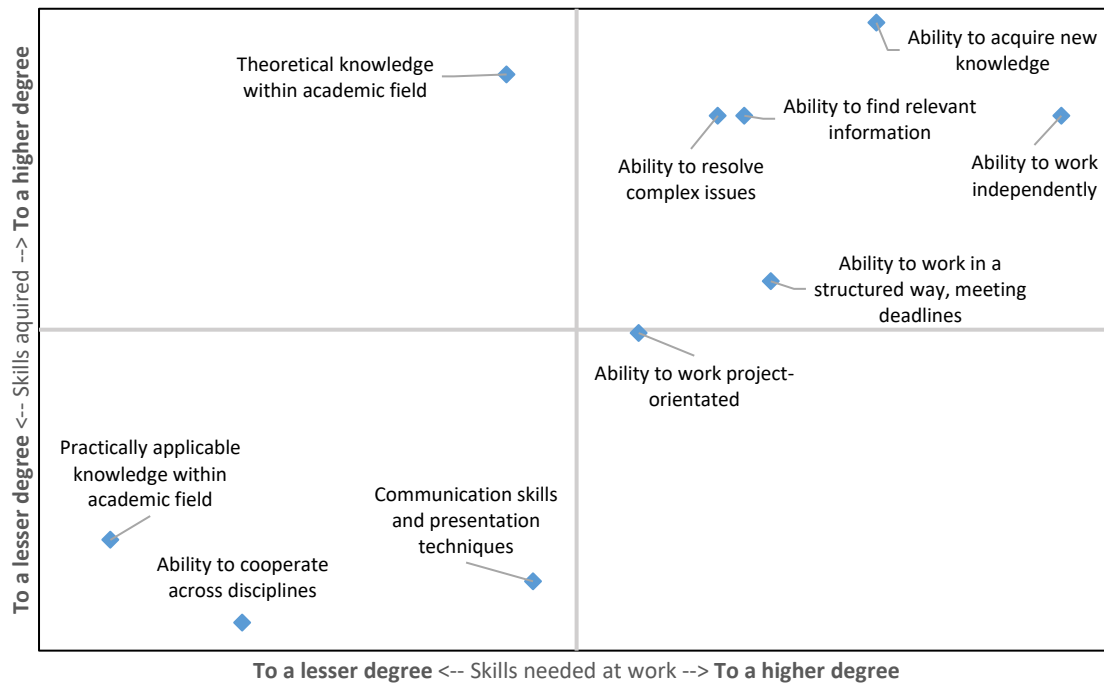
Figure 3.1. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, **AU** total.



Source: *The PhD employment survey 2022.*

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 work project-orientated, as well as theoretical knowledge within their academic field, compared to graduates from other faculties.

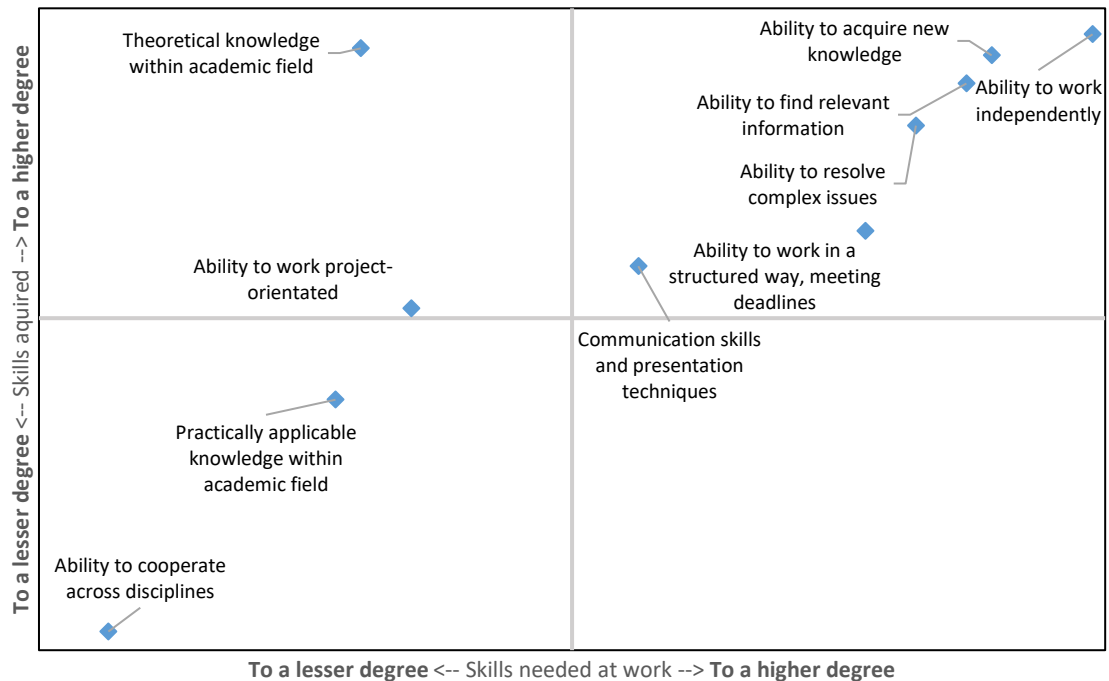
Figure 3.2. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of Arts.



Source: The PhD employment survey 2022.

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 seem to be more important for graduates from BSS in their current job.

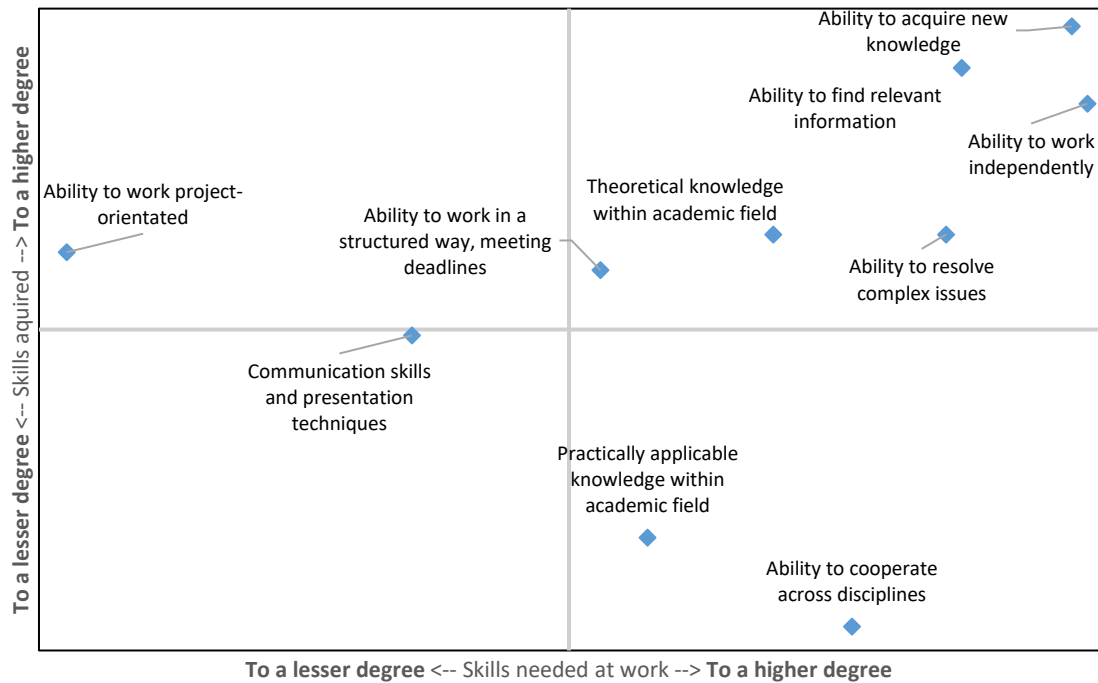
Figure 3.3. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Aarhus BSS.



Source: The PhD employment survey 2022.

Figure 3.4 shows the competency map for graduates from Health. The pattern is 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, but they only experience to acquire this competence 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.

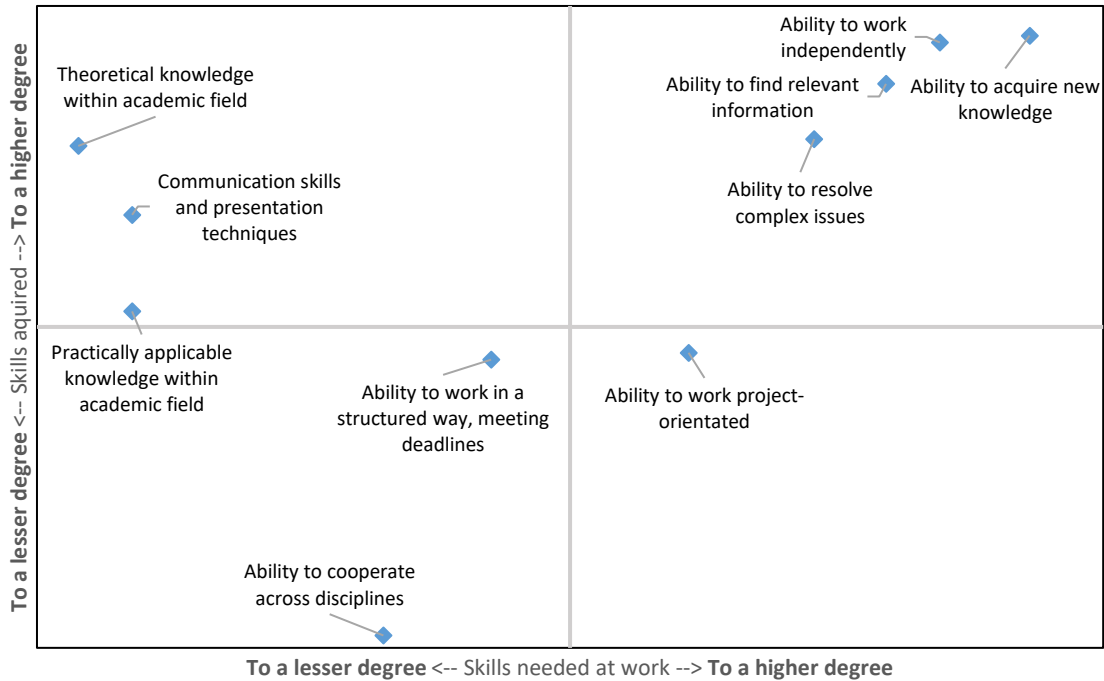
Figure 3.4. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of Health.



Source: The PhD employment survey 2022.

Figure 3.5 shows the competency map for graduates from Nat. Again, the four most needed competences are the same as for AU overall. Three competences are placed further away from the diagonal: Practically applicable knowledge within the academic field, 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.

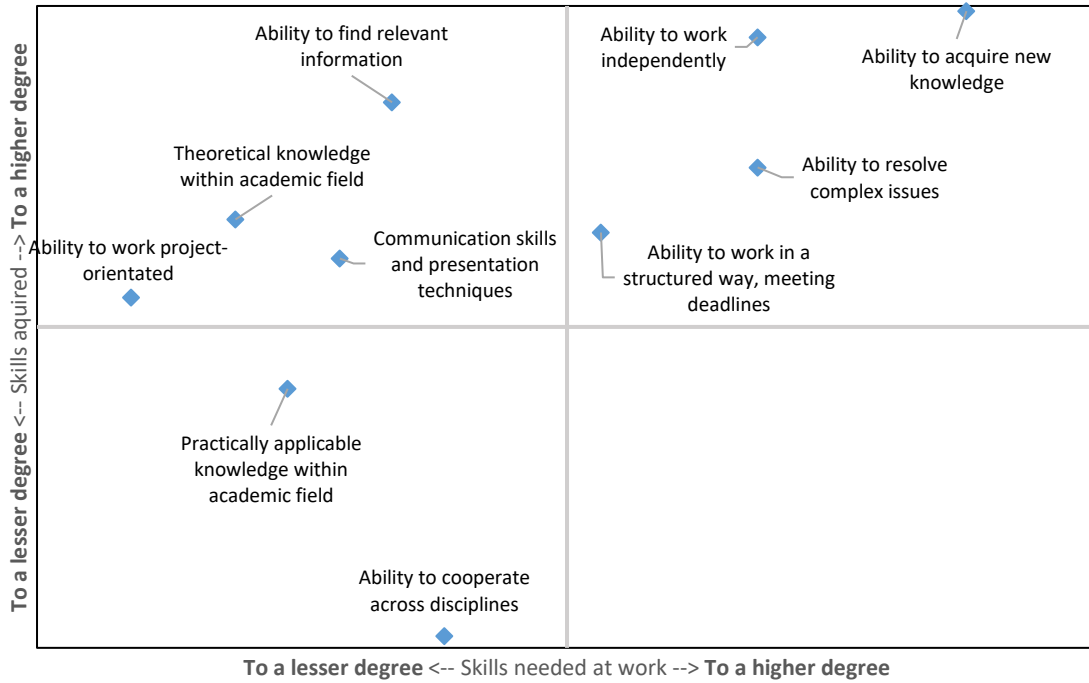
Figure 3.5. Competency map. Qualifications and competences needed at work compared to acquired qualifications and competences during PhD program. Both cohorts, Faculty of **Natural Sciences**.



Source: The PhD employment survey 2022.

Lastly, figure 3.6 displays the competency map for graduates from Tech. Most competences are located close to the diagonal, and the three most needed competences are the same as for AU overall. However, the ability to find relevant information is perceived to be a bit less needed in the current job and theoretical knowledge within the academic field and the ability to work project-orientated are further away from the diagonal.

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 2022.*

Appendix 1. Identification and response rate

The total number of PhD graduates in the two cohorts is presented in table A.1.1.

Table A.1.1. Number of PhD graduates by faculty and cohort. Absolute numbers.

Faculties	2017/18	2021/22
Arts	56	68
Aarhus BSS	44	65
Health	157	120
Science	103	102
Technology	48	69
Total	408	424

Source: *The PhD employment survey 2022.*

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 A.1.2.

Table A.1.2. Non-response caused by a lack of identification. Both cohorts. Absolute numbers and percentages.

	Number	Percentage
Identified	832	100
Not identified	0	0
Total	832	100

Note: "Not identified" includes respondents with an unknown e-mail address and no Digital Post account. Source: *The PhD employment survey 2022.*

Table A.1.3 presents the identified respondents' response rates divided into faculty and cohort.

Table A.1.3. Response rates by faculty and cohort. Percentages.

Faculties	2017/18	2021/22
Arts	60,7	77,9
Aarhus BSS	63,6	63,1
Health	49,0	54,2
Science	42,7	61,8
Technology	56,3	50,7
Total	51,5	60,6

Note: *Partially answered surveys count as a response.* Source: *The PhD employment survey 2022.*

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 0.1.A. Employment status for PhD graduates, year 17/18. Percentages for AU total and by faculties. Not weighted.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	97,6	100	96,4	97,4	97,6	96,3
Other education	0	0	0	0	0	0
Unemployed	1,5	0	3,6	1,3	2,4	0
Inactive	1,0	0	0	1,3	0	3,7
Total (%)	100	100	100	100	100	100
Number of responses	205	32	28	76	42	27

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 2022.

Table 0.2.A. Employment status for PhD graduates, year 21/22. Percentages for AU total and by faculties. Not weighted.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed	96,5	90,6	100	98,5	95,2	100
Other education	0,4	0	0	0	1,6	0
Unemployed	2,3	5,7	0	1,5	3,2	0
Inactive	0,8	3,8	0	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	256	53	40	65	63	35

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 2022.

Appendix 3. Tables divided into cohorts

Table numbers refer to the corresponding tables in the report added an A for cohort 17/18 and B for cohort 21/22, 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	97,1	94,1	98,5	97,9	96,2	98,4
Other education	0,2	0	0	0	1,0	0
Unemployed	1,9	3,5	1,5	1,4	2,9	0
Inactive	0,8	2,4	0	0,7	0	1,6
Total (%)	100	100	100	100	100	100
Number of responses	461	85	68	141	105	62

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 2022.

Section 2.1. Type of position

Table 2.1.A. Number of working hours for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Full-time job	89,6	84,4	92,6	90,5	90,2	88,0
Part-time job	10,4	15,6	7,4	9,5	9,8	12,0
Total (%)	100	100	100	100	100	100
Number of responses	199	32	27	74	41	25

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 2022.

Table 2.1.B. Number of working hours for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Full-time job	92,5	84,4	95,0	89,1	96,7	97,1
Part-time job	7,5	15,6	5,0	10,9	3,3	2,9
Total (%)	100	100	100	100	100	100
Number of responses	244	45	40	64	60	35

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 2022.

Table 2.2.A. Type of position for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Permanent position/tenure	65,6	65,6	74,1	54,1	73,2	80,0
Temporary/fixed-term position	27,5	25,0	18,5	35,1	24,4	20,0
Temporary substitute position	1,6	0	0	4,1	0	0
Subsidized employment	1,5	6,3	0	0	2,4	0
Self-employed	2,3	3,1	7,4	2,7	0	0
Other	1,6	0	0	4,1	0	0
Total (%)	100	100	100	100	100	100
Number of responses	199	32	27	74	41	25

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

Source: The PhD employment survey 2022.

Table 2.2.B. Type of position for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Permanent position/tenure	45,0	40,0	52,5	40,6	41,7	54,3
Temporary/fixed-term position	49,3	55,6	42,5	51,6	50,0	45,7
Temporary substitute position	1,5	2,2	2,5	0	3,3	0
Subsidized employment	0	0	0	0	0	0
Self-employed	1,2	0	2,5	0	3,3	0
Other	3,0	2,2	0	7,8	1,7	0
Total (%)	100	100	100	100	100	100
Number of responses	244	45	40	64	60	35

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

Source: The PhD employment survey 2022.

Section 2.2. Employment – where?

Table 2.3.A. Employment sector for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in private sector	28,6	12,5	25,9	14,9	51,2	48,0
Employed in the public sector	63,0	59,4	74,1	81,1	36,6	52,0
Employed in a professional or non-profit organization	2,8	12,5	0	1,4	2,4	0
Other	5,6	15,6	0	2,7	9,8	0
Total (%)	100	100	100	100	100	100
Number of responses	199	32	27	74	41	25

Source: The PhD employment survey 2022.

Table 2.3.B. Employment sector for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in private sector	27,9	13,3	40,0	10,9	46,7	31,4
Employed in the public sector	64,1	73,3	60,0	81,3	43,3	60,0
Employed in a professional or non-profit organization	2,2	0	0	1,6	3,3	5,7
Other	5,8	13,3	0	6,3	6,7	2,9
Total (%)	100	100	100	100	100	100
Number of responses	244	45	40	64	60	35

Source: *The PhD employment survey 2022.*

Which part of the public sector?

Table 2.4.A. Different parts of the public sector for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
EU	1,5	0	0	0	0	15,4
Central government	45,5	73,7	70,0	28,8	60,0	38,5
Region	39,0	5,3	15,0	62,7	20,0	23,1
Municipality	2,0	5,3	10,0	0	0	0
Other	12,0	15,8	5,0	8,5	20,0	23,1
Total (%)	100	100	100	100	100	100
Number of responses	126	19	20	59	15	13

Source: *The PhD employment survey 2022.*

Table 2.4.B. Different parts of the public sector for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
EU	6,1	0	4,2	0	19,2	15,0
Central government	38,9	68,8	58,3	17,3	50,0	30,0
Region	29,9	3,1	0	76,9	3,8	0
Municipality	3,0	3,1	12,5	0	3,8	0
Other	22,1	25,0	25,0	5,8	23,1	55,0
Total (%)	100	100	100	100	100	100
Number of responses	154	32	24	52	26	20

Source: *The PhD employment survey 2022.*

Size of workplace organization

Table 2.5.A. Size of organization for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Small enterprise/organization	9,7	21,9	14,8	5,5	9,8	4,0
Medium-sized enterprise/organization	9,4	12,5	18,5	2,7	14,6	8,0
Large enterprise/organization	80,9	65,6	66,7	91,8	75,6	88,0
Total (%)	100	100	100	100	100	100
Number of responses	198	32	27	73	41	25

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 2022.

Table 2.5.B. Size of organization for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Small enterprise/organization	9,0	4,5	10,0	4,7	18,6	5,9
Medium-sized enterprise/organization	9,7	6,8	15,0	3,1	8,5	20,6
Large enterprise/organization	81,2	88,6	75,0	92,2	72,9	73,5
Total (%)	100	100	100	100	100	100
Number of responses	241	44	40	64	59	34

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 2022.

Employment country

Table 2.6.A. Employment country for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed outside of Denmark	22,5	18,8	18,5	15,1	31,7	36,0
Employed in Denmark	77,5	81,3	81,5	84,9	68,3	64,0
Total (%)	100	100	100	100	100	100
Number of responses	198	32	27	73	41	25

Source: The PhD employment survey 2022.

Table 2.6.B. Employment country for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed outside of Denmark	20,0	18,2	17,5	9,4	27,1	32,4
Employed in Denmark	80,0	81,8	82,5	90,6	72,9	67,6
Total (%)	100	100	100	100	100	100
Number of responses	241	44	40	64	59	34

Source: The PhD employment survey 2022.

Physical location of workplace

Table 2.7.A. Physical location of workplace for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Greater Copenhagen	16,1	26,9	18,2	4,8	25,9	25,0
Zealand and islands	5,3	19,2	4,5	3,2	0	6,3
Funen	7,0	7,7	13,6	4,8	7,4	6,3
Aarhus and eastern part of Jutland	58,6	34,6	50,0	75,8	51,9	43,8
Rest of Jutland	13,1	11,5	13,6	11,3	14,8	18,8
Total (%)	100	100	100	100	100	100
Number of responses	153	26	22	62	27	16

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 2022.

Table 2.7.B. Physical location of workplace for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Greater Copenhagen	15,0	13,9	16,1	12,5	14,3	21,7
Zealand and islands	4,0	5,6	3,2	1,8	9,5	0
Funen	1,8	8,3	0	0	2,4	0
Aarhus and eastern part of Jutland	68,4	47,2	71,0	76,8	64,3	73,9
Rest of Jutland	10,9	25,0	9,7	8,9	9,5	4,3
Total (%)	100	100	100	100	100	100
Number of responses	188	36	31	56	42	23

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 2022.

Section 3.1. Employment sectors and job functions

Table 0.1.A. Employment sectors for employed PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Health sector	25,7	3,1	7,4	58,9	4,9	4,0
Pharmaceutical industry/biotech	5,0	0	0	5,5	9,8	4,0
Industry	4,0	0	0	0	4,9	24,0
IT and telecommunications	2,2	0	3,7	1,4	4,9	0
Trade and commerce	1,5	6,3	0	0	2,4	0
Finance and insurance	1,6	0	3,7	0	4,9	0
Public administration	2,3	0	11,1	0	2,4	4,0
Culture and tourism	2,1	15,6	0	0	0	0
Media and communication	0,4	0	3,7	0	0	0
Consulting and counselling services	6,2	6,3	7,4	2,7	12,2	4,0
Transportation and services	0,4	0	3,7	0	0	0
Universities	28,3	31,3	44,4	20,5	24,4	44,0
Government research or other public research institution	5,6	9,4	3,7	4,1	7,3	4,0
Non-public research company	1,1	0	0	0	2,4	4,0
Teaching institution	6,4	21,9	3,7	1,4	9,8	0
Food industry	2,6	0	3,7	1,4	4,9	4,0
Other	4,5	6,3	3,7	4,1	4,9	4,0
Total (%)	100	100	100	100	100	100
Number of responses	198	32	27	73	41	25

Note: The categories "Building and construction", "Law practice" and "Advertising and marketing" 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 2022.

Table 0.2.B. Employment sectors for employed PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Health sector	19,6	0	0	66,1	0	2,9
Pharmaceutical industry/biotech	5,3	0	0	8,1	10,2	2,9
Industry	4,2	4,5	0	0	8,5	8,8
Building and construction	2,3	2,3	0	0	0	11,8
IT and telecommunications	4,3	0	5,1	0	8,5	8,8
Trade and commerce	0,4	0	2,6	0	0	0
Finance and insurance	0,4	0	2,6	0	0	0
Law practice	0,8	0	5,1	0	0	0
Public administration	2,2	0	5,1	0	1,7	5,9
Culture and tourism	0,3	2,3	0	0	0	0
Consulting and counselling services	4,1	2,3	10,3	0	6,8	2,9
Transportation and services	0,4	0	2,6	0	0	0
Universities	38,5	59,1	48,7	16,1	40,7	47,1
Government research or other public research institution	5,2	2,3	2,6	4,8	8,5	5,9
Non-public research company	0,4	0	0	0	1,7	0
Teaching institution	4,2	20,5	5,1	1,6	0	0
Food industry	1,4	0	0	1,6	1,7	2,9
Other	5,9	6,8	10,3	1,6	11,9	0
Total (%)	100	100	100	100	100	100
Number of responses	238	44	39	62	59	34

Note: The categories "Media and communication" and "Advertising and marketing" 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 2022.

Which job functions

Table 3.2.A. Job functions for PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Research and development	75,7	84,4	74,1	75,3	75,6	68,0
Teaching	40,7	56,3	55,6	42,5	34,1	16,0
Managerial responsibility	24,3	21,9	29,6	26,0	17,1	32,0
None of the above	15,2	12,5	18,5	19,2	4,9	24,0
Number of responses	198	32	27	73	41	25

Note: Multiple answers possible. Source: The PhD employment survey 2022.

Table 3.2.B. Job functions for PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Research and development	80,3	86,4	69,2	74,2	89,8	82,4
Teaching	37,5	56,8	48,7	41,9	16,9	32,4
Managerial responsibility	15,9	6,8	23,1	14,5	16,9	17,6
None of the above	14,7	2,3	20,5	22,6	6,8	17,6
Number of responses	238	44	39	62	59	34

Note: Multiple answers possible. Source: The PhD employment survey 2022.

Which types of research and development

Table 3.3.A. Which type of R&D for PhD graduates working with R&D, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Basic research	37,6	63,0	30,0	29,1	41,9	29,4
Applied research	68,8	77,8	80,0	80,0	45,2	58,8
Development	44,3	51,9	45,0	34,5	48,4	58,8
Number of responses	150	27	20	55	31	17

Note: Multiple answers possible. Source: The PhD employment survey 2022.

Table 3.3.B. Which type of R&D for PhD graduates working with R&D, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Basic research	47,3	57,9	51,9	39,1	54,7	35,7
Applied research	61,1	57,9	66,7	69,6	45,3	71,4
Development	37,2	42,1	29,6	37,0	41,5	32,1
Number of responses	192	38	27	46	53	28

Note: Multiple answers possible. Source: The PhD employment survey 2022.

In which type of institution did you teach?

Table 0.3.A. Which type of teaching for employed PhD graduates working with teaching, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
University	69,1	50,0	93,3	71,0	64,3	75,0
Other higher education institution	12,3	16,7	0	16,1	7,1	25,0
College of professional education	16,9	38,9	0	16,1	14,3	0
Gymnasium	6,0	0	0	0	28,6	0
Technical and vocational school	2,8	0	0	3,2	7,1	0
Folk high school	3,0	0	0	0	14,3	0
Elementary/primary school	1,5	0	0	0	7,1	0
Own training company	11,3	16,7	6,7	6,5	21,4	0
Other educational institution	14,5	16,7	13,3	19,4	7,1	0
Number of responses	82	18	15	31	14	4

Note: Multiple answers possible. 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 2022.

Table 0.4.B. Which type of teaching for employed PhD graduates working with teaching, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
University	79,1	64,0	84,2	77,0	90,0	90,9
Other higher education institution	2,5	0	0	7,7	0	0
College of professional education	12,2	40,0	5,3	7,7	0	0
Gymnasium	0	0	0	0	0	0
Technical and vocational school	0	0	0	0	0	0
Folk high school	0	0	0	0	0	0
Elementary/primary school	0	0	0	0	0	0
Own training company	8,4	0	5,3	19,2	10,0	0
Other educational institution	10,8	4,0	5,3	19,2	0	18,2
Number of responses	91	25	19	26	10	11

Note: Multiple answers possible. 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 2022.

Which types of managerial responsibility

Table 3.5.A. Which type of managerial responsibility for PhD graduates with managerial responsibility, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Financial responsibility	34,8	42,9	50,0	26,3	57,1	12,5
Staff responsibility	60,2	42,9	50,0	63,2	71,4	62,5
Production responsibility	24,5	14,3	25,0	31,6	14,3	25,0
Project responsibility	78,0	100	87,5	63,2	71,4	100
Other	8,3	0	12,5	5,3	14,3	12,5
Number of responses	49	7	8	19	7	8

Note: Multiple answers possible. Source: The PhD employment survey 2022.

Table 3.5.B. Which type of managerial responsibility for PhD graduates with managerial responsibility, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Financial responsibility	15,9	0	22,2	0	30,0	16,7
Staff responsibility	50,7	33,3	66,7	44,4	60,0	33,3
Production responsibility	10,2	0	22,2	0	20,0	0
Project responsibility	83,0	100	77,8	66,7	100	83,3
Other	2,9	0	0	11,1	0	0
Number of responses	37	3	9	9	10	6

Note: Multiple answers possible. Source: The PhD employment survey 2022.

Graduates working in academia

Table 0.6.A. Employed PhD graduates working in academia in Denmark, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	25,4	34,6	45,5	12,9	25,0	43,8
Employed outside academia	74,6	65,4	54,5	87,1	75,0	56,3
Total (%)	100	100	100	100	100	100
Number of respondents	154	26	22	62	28	16

Source: The PhD employment survey 2022.

Table 0.6.B. Employed PhD graduates working in academia in Denmark, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	35,3	47,2	40,6	14,3	39,5	52,2
Employed outside academia	64,7	52,8	59,4	85,7	60,5	47,8
Total (%)	100	100	100	100	100	100
Number of respondents	190	36	32	56	43	23

Source: The PhD employment survey 2022.

Table 0.7.A. Employed PhD graduates working in academia outside of Denmark, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	29,5	16,7	40,0	45,5	23,1	22,2
Employed outside academia	70,5	83,3	60,0	54,5	76,9	77,8
Total (%)	100	100	100	100	100	100
Number of respondents	44	6	5	11	13	9

Source: The PhD employment survey 2022.

Table 0.7.B. Employed PhD graduates working in academia outside of Denmark, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Employed in academia	44,1	75,0	71,4	33,3	31,3	36,4
Employed outside academia	55,9	25,0	28,6	66,7	68,8	63,6
Total (%)	100	100	100	100	100	100
Number of respondents	48	8	7	6	16	11

Source: The PhD employment survey 2022.

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 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Relevant	72,7	86,7	80,8	80,8	55,0	60,0
Partially relevant	7,0	6,7	3,8	5,5	12,5	4,0
Not relevant	20,3	6,7	15,4	13,7	32,5	36,0
Total (%)	100	100	100	100	100	100
Number of responses	194	30	26	73	40	25

Source: The PhD employment survey 2022.

Table 3.13.B. Relevance between PhD topic or research method and current job for employed PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Relevant	73,7	83,7	73,0	75,8	62,1	78,8
Partially relevant	14,7	9,3	16,2	12,9	19,0	15,2
Not relevant	11,6	7,0	10,8	11,3	19,0	6,1
Total (%)	100	100	100	100	100	100
Number of responses	233	43	37	62	58	33

Source: The PhD employment survey 2022.

Relation between PhD and job

Table 3.14.A. Relation between PhD and current job for employed PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Job is within the academic content of the PhD	66,6	90,0	80,8	72,6	47,5	48,0
Job is outside the academic field of the PhD, but requires general qualifications acquired through the PhD	24,3	3,3	15,4	19,2	40,0	40,0
No clear connection between the academic content of the PhD and job	9,1	6,7	3,8	8,2	12,5	12,0
Total (%)	100	100	100	100	100	100
Number of responses	194	30	26	73	40	25

Source: The PhD employment survey 2022.

Table 3.14.B. Relation between PhD and current job for employed PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
Job is within the academic content of the PhD	66,5	76,7	59,5	71,0	55,2	72,7
Job is outside the academic field of the PhD, but requires general qualifications acquired through the PhD	26,4	18,6	27,0	17,7	44,8	21,2
No clear connection between the academic content of the PhD and job	7,1	4,7	13,5	11,3	0	6,1
Total (%)	100	100	100	100	100	100
Number of responses	233	43	37	62	58	33

Source: The PhD employment survey 2022.

PhD has prepared for working life

Table 3.15.A. Has PhD prepared for working life? For employed PhD graduates, year 17/18. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
To a high degree	57,9	64,5	59,3	54,8	57,5	60,0
To some degree	34,5	32,3	29,6	35,6	37,5	32,0
Only a little	6,6	3,2	11,1	8,2	5,0	4,0
Not at all	1,0	0	0	1,4	0	4,0
Total (%)	100	100	100	100	100	100
Number of responses	196	31	27	73	40	25

Source: The PhD employment survey 2022.

Table 3.15.B. Has PhD prepared for working life? For employed PhD graduates, year 21/22. Percentages for AU total and by faculties.

	AU	Arts	Aarhus BSS	Health	Nat	Tech
To a high degree	61,1	86,0	62,2	59,7	54,2	51,5
To some degree	32,9	7,0	35,1	32,3	40,7	42,4
Only a little	5,7	4,7	2,7	8,1	5,1	6,1
Not at all	0,3	2,3	0	0	0	0
Total (%)	100	100	100	100	100	100
Number of responses	234	43	37	62	59	33

Source: The PhD employment survey 2022.