### UNIVERSITY OF HELSINKI CAREER MONITORING REPORT-DOCTORAL GRADUATES OF 2004–2017

Aki Hagelin Institutional Research and Analysis

Eric Carver Strategic Services for Teaching

Reference: Hagelin, Aki & Carver, Eric: University of Helsinki career-monitoring report – doctoral graduates of 2004–2017. University of Helsinki October 1<sup>st</sup> 2021.



- Accessibility of the report
- Basic information on the career monitoring surveys of Finnish universities
- Report description
- Results of career monitoring surveys of the University of Helsinki's doctoral graduates in 2004–2017:
  - Respondents to career monitoring surveys
  - Job market situation of 2017 graduates three years after graduation
  - Correlation between education and employment (education requirements, satisfaction with degree)
  - Factors affecting employment and professional skills needs
- Graduate employment statistics, register-based administrative data (Statistics Finland)



• The graphs in the report are not accessible. However, the data behind all graphs are appended to the final section of the report.

### CAREER MONITORING AT FINNISH UNIVERSITIES

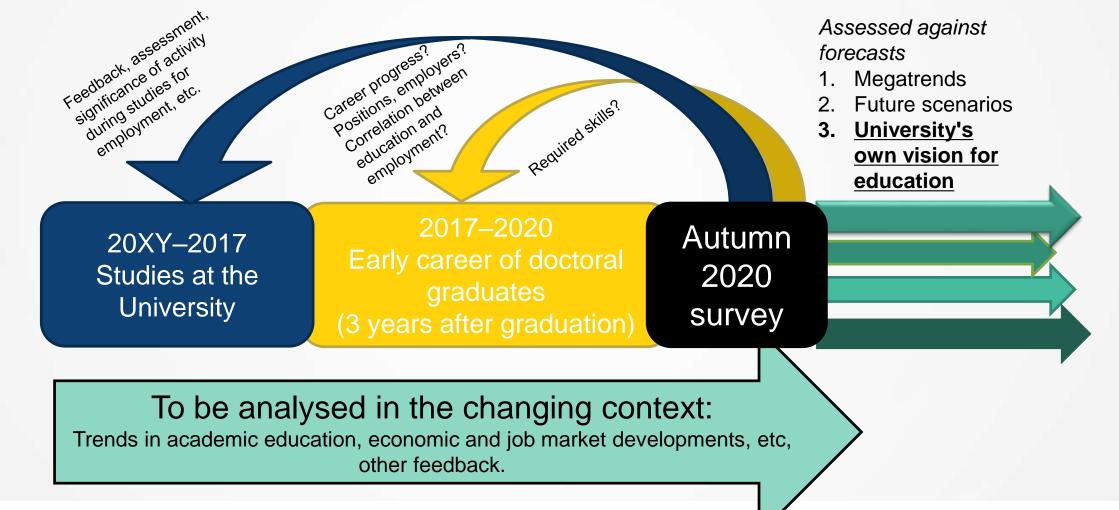
- Nationwide career monitoring surveys:
  - Surveys of master's graduates five years after graduation
  - Surveys of doctoral graduates two or three years after graduation (three years in the most recent surveys)
- The career monitoring group of the Aarresaari network of university career services is responsible for the surveys, while universities are responsible for utilising their data.
- The data on the töissä.fi website are based on career monitoring: https://toissa.fi/home-en-us/.
- Further information on career monitoring: <u>https://www.aarresaari.net/career\_monitoring</u>
- The latest career monitoring data on master's graduates: 2015 graduates (responses October– December 2020)
- The latest career monitoring data on doctoral graduates: 2017 graduates (responses October– December 2020)



#### CAREER MONITORING AT THE UNIVERSITY OF HELSINKI

- The University of Helsinki uses the data obtained from career monitoring surveys, for example, to develop education, guide and counsel students, provide career guidance and conduct research.
- Since 2016, career monitoring surveys have been conducted at the University through cooperation between several units. Career Services was previously responsible for coordinating the surveys, but this responsibility shifted to Strategic Services for Teaching at the beginning of 2019.
- Composition of the University's project group for career monitoring in the 2020–2021 academic year:
  - Eric Carver, Strategic Services for Teaching
  - Aki Hagelin, Institutional Research and Analysis
  - Jarkko Immonen, Career Services
  - Kirsi Korpiaho, Research Services
  - Jasmin Kopra/ Kati Salmivaara, Communications
  - Merja Savolainen, Digital Communications
  - Tarja Tuononen, Centre for University Teaching and Learning
  - Minnis Vierikko, Alumni Relations

#### USE OF CAREER MONITORING IN THE DEVELOPMENT OF EDUCATION (E.G., DOCTORAL EDUCATION)



HELSINGIN YLIOPISTO HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI

Eric Carver University of Helsinki Strategic Services for Teaching

# DATA COLLECTION IN CAREER MONITORING SURVEYS

- Career monitoring surveys are sent to all graduates in the relevant target group.
- The target group for master's graduate career monitoring includes all master's graduates as well as all those with a Bachelor of Science (Pharmacy) degree or a Bachelor of Arts (Education) degree in kindergarten teacher education.
- Doctoral graduate career monitoring surveys are sent to all graduates in the relevant target group.
- Information on the target group is obtained from the national VIRTA database (which combines data from the student records of Finnish universities).
- The background variables of respondents are supplemented with information from the student records (major subject, degree programme, department, faculty).
- Address details are retrieved from the Population Register.
- The 2020 surveys were sent to respondents by text message (to those whose phone number was known) or by mail (all others). Additionally, the universities distributed the survey by email to those in the target group whose details were found in alumni registers.
- The data were collected in a nationwide and central manner by Research Stats Service TUPA of the University of Tampere and CSC – the IT Centre for Science, in collaboration with the career monitoring group of the Aarresaari network.
- Responses are always processed confidentially and so that individual respondents cannot be identified.



### UNIVERSITY OF HELSINKI CAREER MONITORING REPORT- DOCTORAL GRADUATES OF 2004-2017

Aki Hagelin Institutional Research and Analysis

## CONTENT OF THE CAREER MONITORING REPORT

- The report focuses on the latest career monitoring survey, conducted in autumn 2020.
- The target group of the nationwide survey consisted of doctoral graduates of 2017.
- The report also uses the results of previous career monitoring surveys (graduates of 2004–2016) to enable a temporal comparison.
- In comparing the results, it is important to note that the graduates of 2005, 2007, 2009, 2011 and 2013 took the survey two years after graduation, while others completed the surveys three years after graduation. Until 2015, career-tracking surveys were conducted by alternately targeting those who had graduated two or three years ago. Since 2017, the survey has been conducted annually by focusing on those who have graduated three years ago.
- Faculty-level results are often reported by adding up the results of several survey years.
- The results of the University of Helsinki are reported in accordance with the faculty structures that have been in place since early 2017. In practice, this means that psychology and logopedics graduates are included in the results for the Faculty of Medicine, and phonetics and cognition science graduates are included in the results for the Faculty of Arts.
- There were significant differences in the response rates between those who graduated in 2017 from different faculties.



#### NOTES ON THE GRAPHS USED IN THE REPORT

- The graduates' employer sector and the primary nature of employment are reported using a model in which only the major response options 4–6 are displayed. All other responses are categorised under 'Other'. This solution makes it easier to interpret the graphs and identify the key response options.
- In the career-tracking report for doctoral graduates, the graphs for the University and doctoral school levels focus on the responses of the graduates of 2017. The reporting of faculty-level results mainly incorporates the responses of the graduates of 2016–2017.
- In the case of questions with six or seven response options, the responses are reported by classifying them so that options 4-6 (fully agree, agree, slightly agree) are added up. This same principle has also been used for the breakdown of responses to compare faculties and disciplines.



**UNIVERSITY OF HELSINKI** 

#### LEGEND

Symbol	Meaning
1	Increase, statistically significant
<b>*</b>	Increase, statistically insignificant
<b>+</b>	No change (change less than 1% unit)
÷	Decrease, statistically insignificant
Ļ	Decrease, statistically significant
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### **RESPONSE RATES 1/2**

Year of graduation (survey conducted)	Biological and Environmental Sciences		Pharmacy	Medicine	Agriculture and Forestry	Science	University total
2004-05							
(2007)	58 (61 %)	16 (73 %)	11 (65 %)	129 (61 %)	37 (67 %)	57 (46 %)	461 (59 %)
2006-07 (2009)	61 (50 %)	7 (37 %)	9 (47 %)	112 (51 %)	41 (68 %)	63 (48 %)	421 (51 %)
2008-09 (2011)	63 (53 %)	14 (58 %)	13 (48 %)	143 (52 %)	42 (55 %)	56 (46 %)	491 (53 %)
2010-11	44 (47 %)	17 (55 %)	9 (36 %)	122 (48 %)	29 (45 %)	55 (46 %)	435 (49 %)
2012-13		10 (50 %)	14 (50 %)	135 (52 %)	46 (58 %)	60 (47 %)	447 (50 %)
<b>2014</b> (2017/18)		10 (56 %)	6 (46 %)	53 (40 %)	19 (39 %)	27 (40 %)	200 (42 %)
2015 (2018)	28 (44 %)	10 (40 %)	9 (47 %)	67 (51 %)	25 (62 %)	38 (43 %)	260 (49 %)
<b>2016</b> (2019)	27 (45 %)	8 (44 %)	3 (19 %)	47 (44 %)	21 (45 %)	35 (44 %)	237 (47 %)
<b>2017</b> (2020)	23 (46 %)	9 (56 %)	10 (59 %)	48 (39 %)	19 (50 %)	35 (48 %)	233 (49 %)
Total	360	101	84	856	279	426	3185 12



### **RESPONSE RATES 2/2**

Year of graduation (survey conducted)	Arts	Educational Sciences	Law	Theology	Social Sciences	University total
2004-05 (2007)	45 (56 %)	25 (74 %)	13 (57 %)	22 (65 %)	48 (62 %)	461 (59 %)
2006-07						
(2009)	38 (49 %)	24 (69 %)	13 (50 %)	12 (46 %)	41 (51 %)	421 (51 %)
2008-09 (2011)	61 (56 %)	26 (67 %)	12 (57 %)	16 (59 %)	45 (55 %)	491 (53 %)
2010-11 (2013)	55 (49 %)	21 (57 %)	16 (53 %)	21 (66 %)	46 (57 %)	435 (49 %)
<b>2012-13</b> (2015)	56 (51 %)	16 (53 %)		15 (52 %)	43 (52 %)	447 (50 %)
2014 (2017/18)	31 (46 %)	8 (38 %)	2 (17 %)	9 (64 %)	21 (57 %)	200 (42 %)
<b>2015</b> (2018)	31 (53 %)	12 (67 %)	7 (32 %)	10 (67 %)	23 (49 %)	260 (49 %)
<b>2016</b> (2019)	28 (47 %)	23 (55 %)	9 (56 %)	9 (64 %)	27 (56 %)	237 (47 %)
<b>2017</b> (2020)	37 (66 %)	9 (50 %)	10 (53 %)	9 (47 %)	24 (53 %)	233 (49 %)
Total	382	164	92	123	318	3185 13



#### RESPONDENTS

- 70 % of the respondents were women (61 % of graduates).
- 85 % of the respondents were Finnish citizens (78 % of graduates).
- The average age of the respondents upon graduation was 39 (that of graduates was 37).

#### JOB MARKET SITUATION OF 2017 GRADUATES THREE YEARS AFTER GRADUATION

- 94 % employed, 1 % unemployed and 5 % outside the workforce
- Share of employed in the workforce: 99 %
- Most common employer sectors

University: 34 %

Private company: 25 %

State: 17 %

Most common primary nature of work

Research: 41%

All other classes of natures of work less than 10 %

• Median monthly salary: €4,000



#### KEY RESULTS/ OBSERVATIONS (JOB MARKET SITUATION OF THREE YEARS AFTER GRADUATION)

- The labor market situation of 2020 respondents is close to what it was in the 2019 survey, with few exceptions. There are fewer respondents with fixed-term full-time job and more respondents in the categories self-employed/entrepreneur/freelancer, scholarship researcher and family leave (with employment contract).
- It is possible that the unemployed are underrepresented in the survey data.
- The university sector is the most important employer sector for doctoral candidates who have graduated 3 years ago, followed by private companies and the state. Differences between faculties are substantial.
- Research is the leading nature of employment, with 41% of respondents reporting that their main duty is research. Most "research-intensive" faculties are Faculty of Agriculture and Forestry Faculty of Science (both with over 50% reporting to work mainly in research), and Faculty of Biological and Environmental Sciences, Faculty of Educational Sciences and Faculty of Social Sciences all around 50% (faculty comparison done using data from 2016-17 graduates).



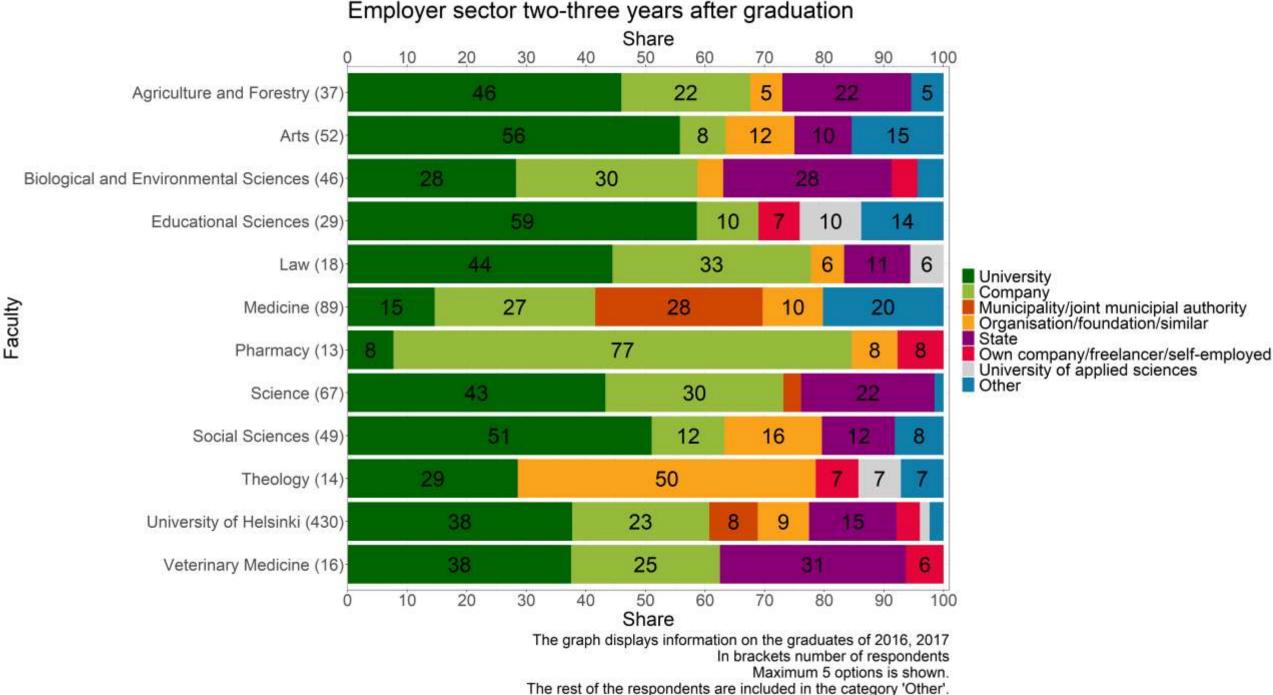
#### JOB MARKET SITUATION OF 2016 VS 2017 GRADUATES AT THE TIME OF THE SURVEY

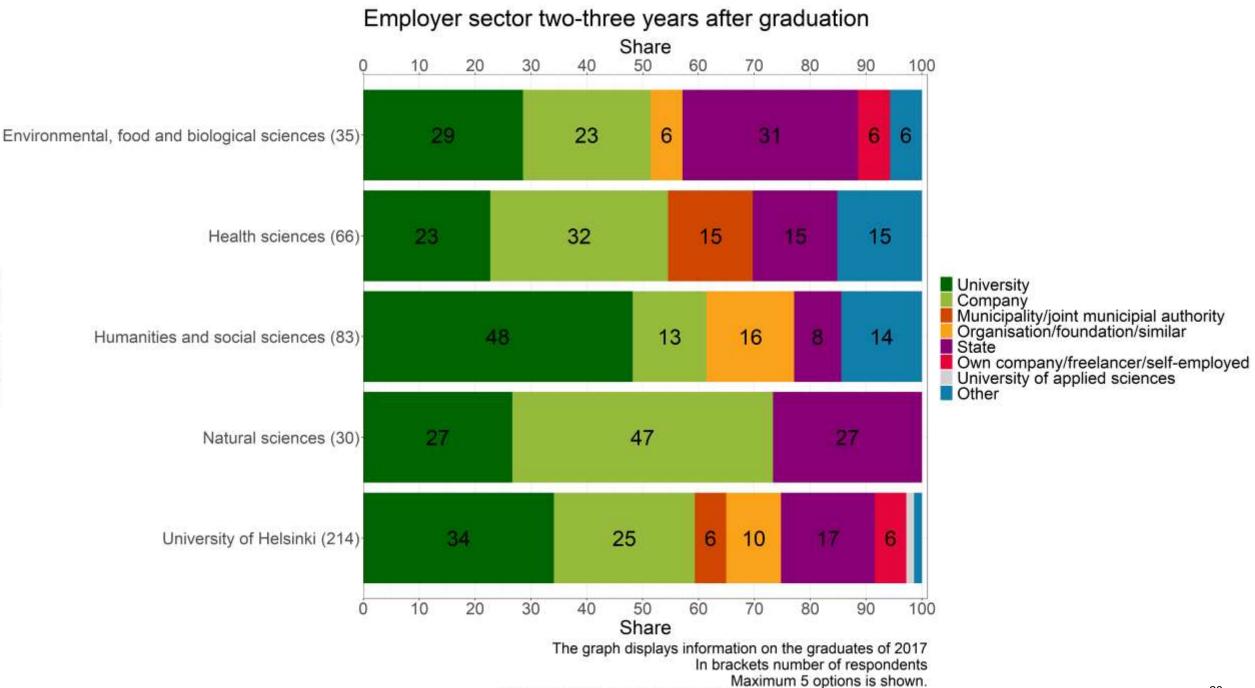
Share [%]	UH 2020 (N = 232)	UH 2019 (N = 234)	Other universities 2020 (N = 632)	Other universities 2019 (N = 590)
Permanent full-time job	47 %	43 %	51 %	40 %
Fixed-term full-time job	27 %	35 %	27 %	32 %
Permanent part-time job	3 %	3 %	1 %	0,8 %
Fixed-term part-time job	1 %	3 %	1 %	3 %
Self-employed/entrepreneur/freelancer	6 %	4 %	5 %	4 %
Scholarship researcher	6 %	5 %	5 %	7 %
Subsidised employment/practical training	0 %	0 %	0,2 %	0,2 %
Family leave (with employment contract)	4 %	0 %	2 %	0,7 %
Total employed	94 %	93 %	92 %	88 %
Unemployed jobseeker	1 %	2 %	2 %	8 %
Labour market training or equivalent	0 %	0 %	0 %	0 %
Total unemployed	1 %	2 %	2 %	8 %
Full-time study	1 %	0,4 %	0,5 %	0,5 %
Family leave (without employment contract)	0 %	0,4 %	0,6 %	2 %
Other	3 %	5 %	5 %	1 %
Total outside the workforce	5 %	6 %	6 %	4 %



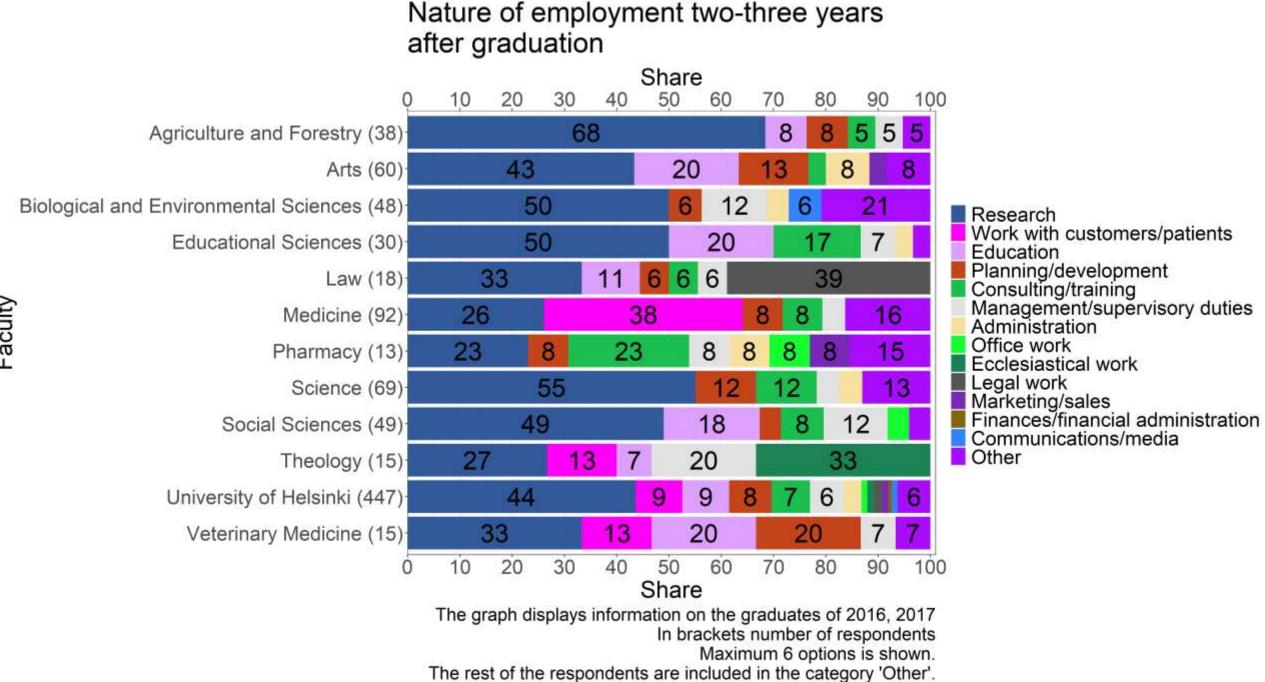
#### JOB MARKET SITUATION OF 2017 GRADUATES AT THE TIME OF THE SURVEY

Share [%]	Biol & Env (23)	Vet Med (9)	Phar (10)	Arts (37)	Educ (9)	Med (48)	Agr & For (19)	Sc (35)	Law (10)	Theo (9)	Soc Sc (24)	UH (233)
Permanent full-time job	39 %	78 %	60 %	17 %	44 %	54 %	37 %	63 %	50 %	67 %	46 %	47 %
Fixed-term full-time job	35 %	11 %	30%	42 %	33 %	21 %	16 %	31 %	30 %	0 %	21 %	27 %
Permanent part-time job	0 %	0 %	0 %	3 %	0 %	2 %	5 %	3 %	10 %	0 %	8 %	3 %
Fixed-term part-time job	0 %	0 %	0 %	0 %	0 %	4 %	0 %	0 %	0 %	0 %	4 %	1 %
Self-employed/entrepreneur/freelancer	9 %	11 %	10 %	11 %	11 %	8 %	5 %	0 %	0 %	0 %	0 %	6 %
Scholarship researcher	4 %	0 %	0 %	11 %	0 %	2 %	21 %	0 %	0 %	0 %	13 %	6 %
Subsidised employment/practical training	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Family leave (with employment contract)	9 %	0 %	0 %	6 %	0 %	6 %	11 %	3 %	0 %	0 %	0 %	4 %
Total employed	96 %	100 %	100 %	90 %	89 %	98 %	95 %	100 %	90 %	67 %	92 %	94 %
Unemployed jobseeker	4 %	0 %	0 %	0 %	0 %	2 %	5 %	0 %	0 %	0 %	0 %	1 %
Labour market training or equivalent	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total unemployed	4 %	0 %	0 %	0 %	0 %	2 %	5 %	0 %	0 %	0 %	0 %	1 %
Full-time study	0 %	0 %	0 %	8 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1 %
Family leave (without employment contract)	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Other	0 %	0 %	0 %	3 %	11 %	0 %	0 %	0 %	10 %	33 %	8 %	3 %
Total outside the workforce	0 %	0 %	0 %	11 %	11 %	0 %	0 %	0 %	10 %	33 %	8 %	<b>5 %</b> 18



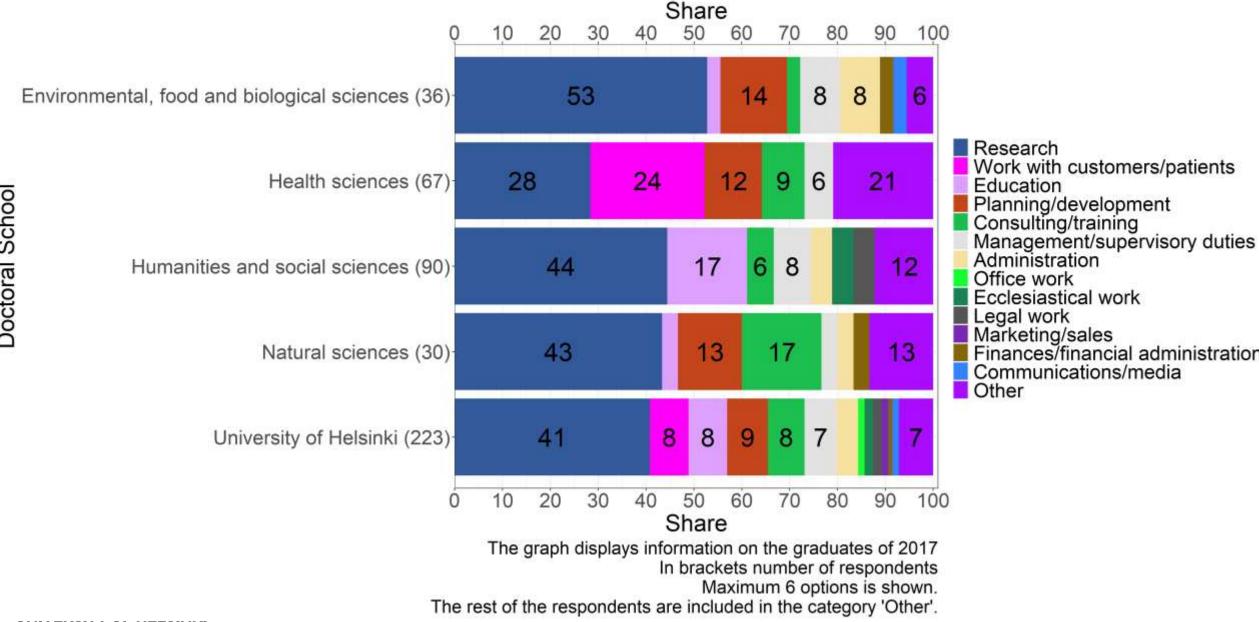


The rest of the respondents are included in the category 'Other'.

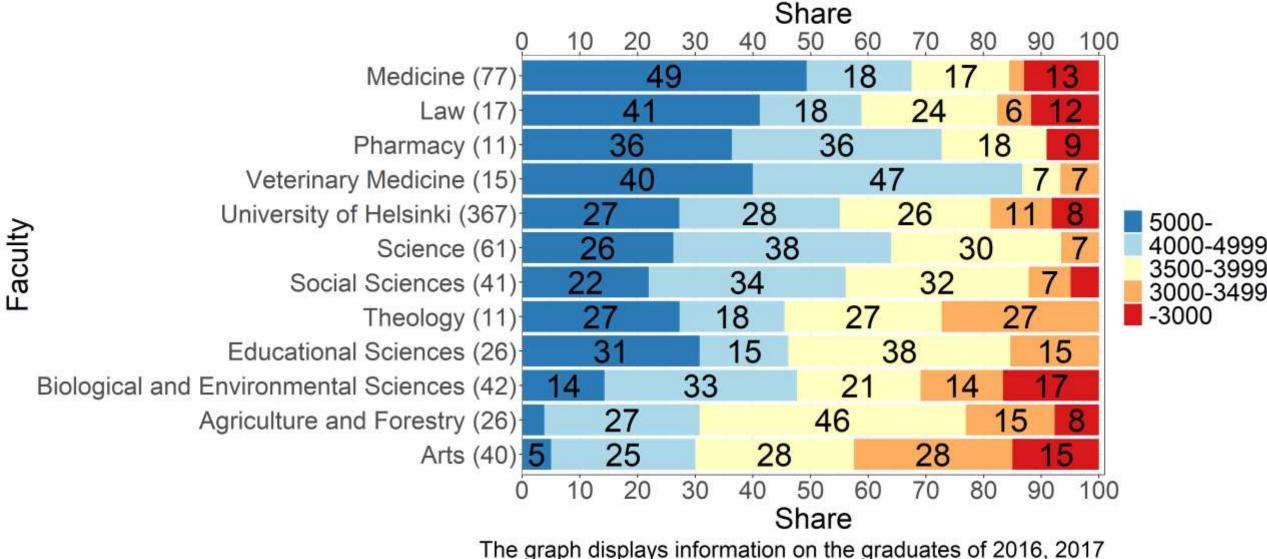


Faculty

#### Nature of employment two-three years after graduation

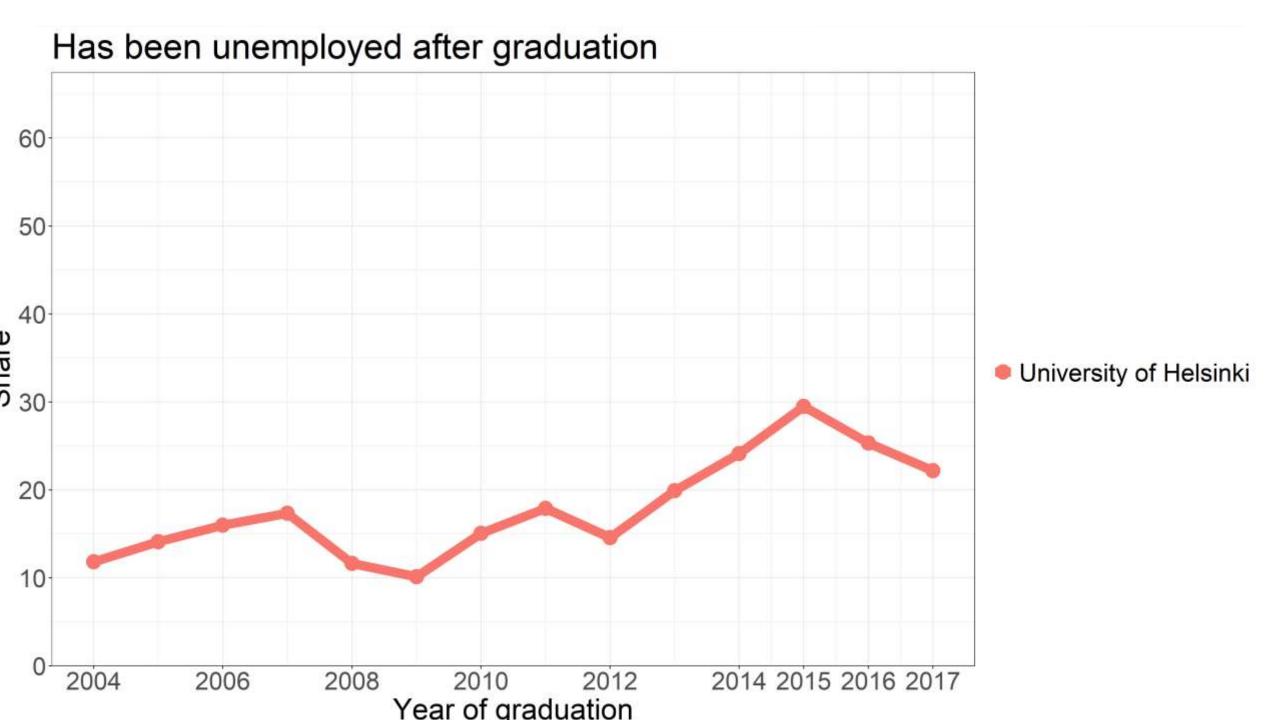


# Salary classification organised according to the median



In brackets number of respondents

The figures include those in full-time employment as well as entrepreneurs/self-employed/freelancers.



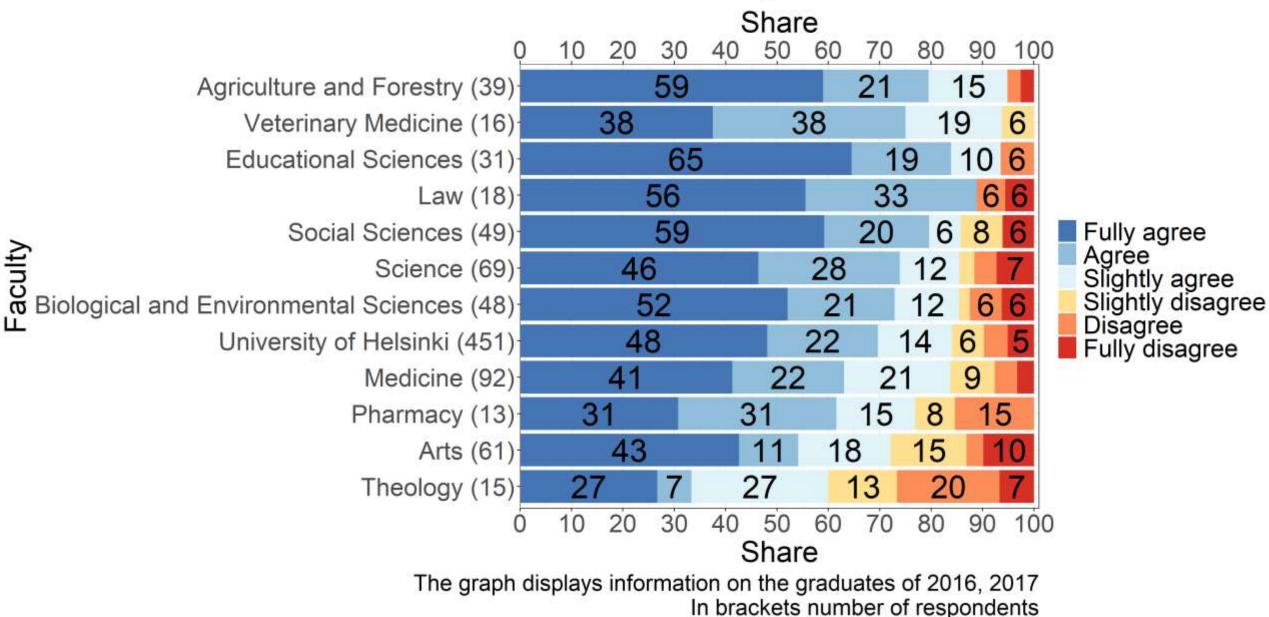
### CORRELATION BETWEEN EDUCATION AND EMPLOYMENT AMONG 2017 GRADUATES

- Respondents used a six-level scale. The figures show response options 4–6 (slightly satisfied-very satisfied/somewhat agree-fully agree).
- Requirements of current job matches well with academic qualifications: 81 % respondents
- Able to use the knowledge and skills acquired at the University in current job: 85 %
- Satisfied with the degree from a career perspective: 86 %

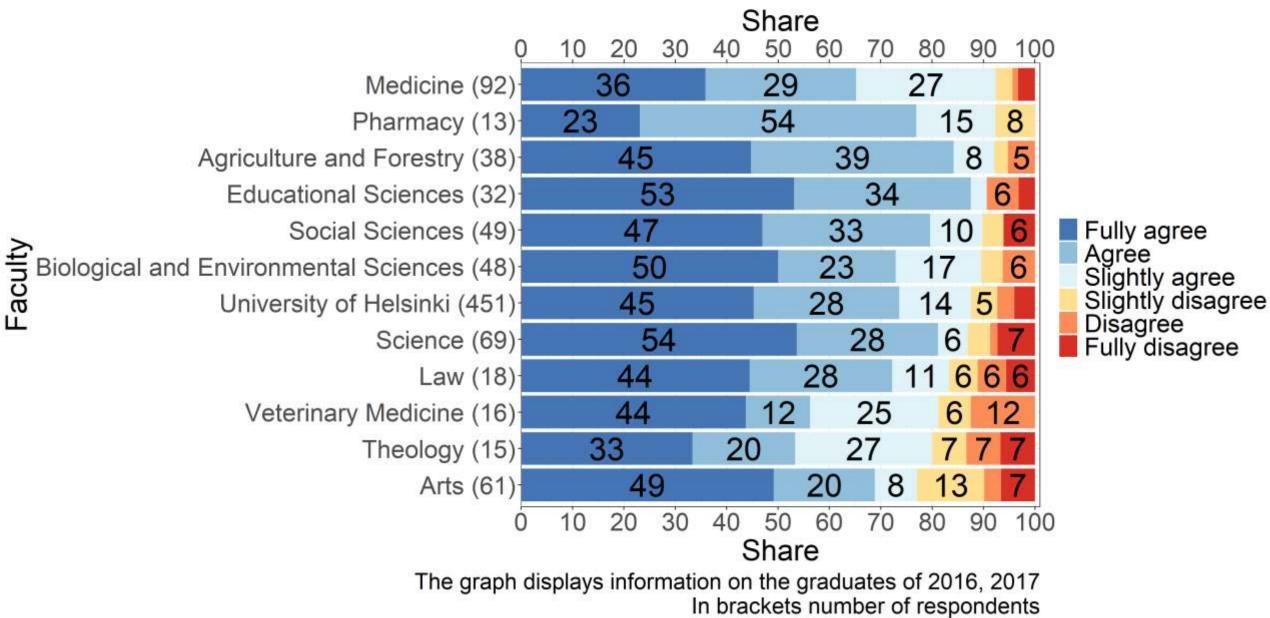


- 1. Degree satisfaction is high. 86% are satisfied with their doctoral degree from a career perspective.
- 2. However, doctoral graduates of 2017 report somewhat lower levels of correlation between job and education than the cohort of 2016 surveyed in 2019. The only statistically significant change is how the respondents view the match between the requirements of current job matches with their academic qualifications.
- 3. Over 20% Faculty of Arts doctoral graduates report that they their work does NOT match well with their academic qualifications and they are NOT able to use the knowledge and skills acquired at the University in the current job. Over 20% are not satisfied with the degree from a career perspective. This is a sign of "career polarization". (Please note that faculty comparisons are done using survey data from 2016 <u>and</u> 2017 graduates).

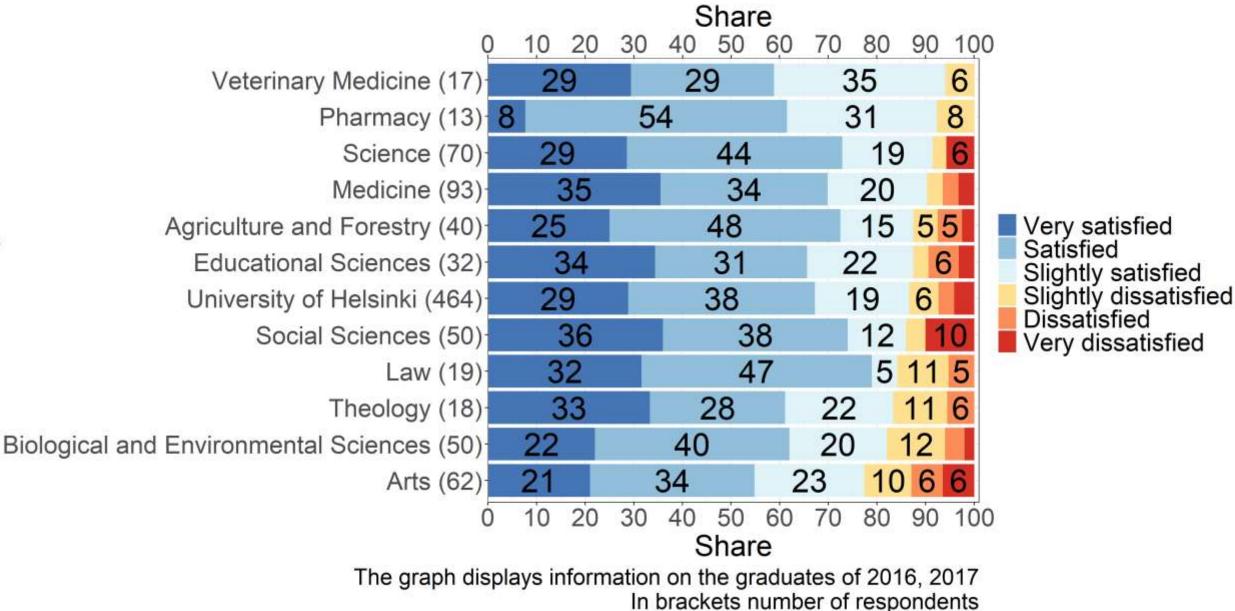
# The requirements of current job correspond well with academic qualifications



#### The skills and knowledge I learned at the university can be applied well in my current job



# Overall satisfaction with the degree in terms of career



# **CORRELATION BETWEEN EDUCATION AND EMPLOYMENT, 2016–2017 GRADUATES BY FACULTY**

Faculty, number of respondents in brackets	Requirements of current job matches well with academic qualifications*	skills acquired at the University in	from a career
Biological and Environmental Sciences (52-55)	85 %	90 %	82 %
Veterinary Medicine (17-18)		81 %	94 %
Pharmacy (12)	77 %	92 %	92 %
Arts (55-58)	72 %	77 %	77 %
Educational Sciences (33-35)	94 %	91 %	88 %
Medicine (110-111)	84 %	92 %	90 %
Agriculture and Forestry (43-46)	95 %	92 %	88 %
Science(72-73)	86 %	87 %	91 %
Law (16)	89 %	83 %	84 %
Theology (17-19)	60 %	80 %	83 %
Social Sciences (48-49)	86 %	90 %	86 %
University of Helsinki (476-492)	84 %	88 %	87 %

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Share of options 4–6 (slightly agree/agree/fully agree) on a six-level scale

#### CORRELATION BETWEEN EDUCATION AND EMPLOYMENT, 2017 GRADUATES BY DOCTORAL SCHOOL

Doctoral school, number of respondents in brackets	Requirements of current job matches well with academic qualifications*	Able to use the knowledge and skills acquired at the University in the current job*	Satisfied with the degree from a career perspective*
Humanities and Social Sciences			
(95-99)	77 %	82 %	81 %
Natural Sciences (30-31)	83 %	87 %	97 %
Health Sciences (61-62)	82 %	90 %	86 %
Environmental, Food and Biological Sciences (40-42)	89 %	89 %	87 %
University of Helsinki (227-234)	81 %	95 %	86 %

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Share of options 4-6 (slightly agree/agree/fully agree) on a six-level scale

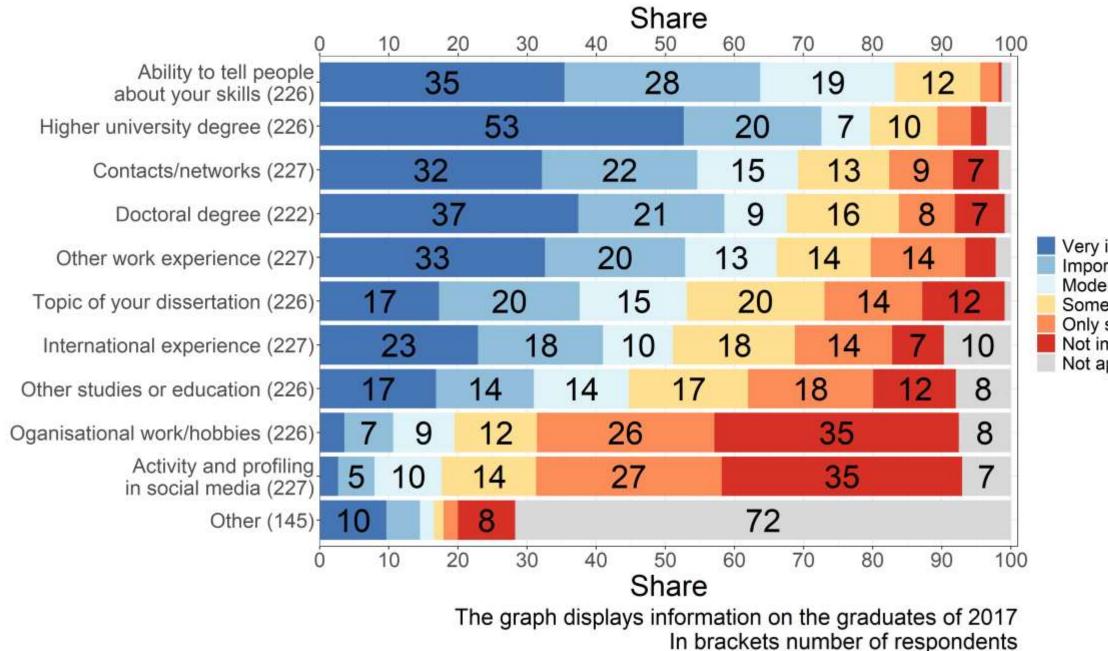
### FACTORS AFFECTING EMPLOYMENT AND PROFESSIONAL SKILLS NEEDS, 2017 GRADUATES

- Most important factors affecting employment\*
  - Ability to describe one's knowledge and skills
  - Second-cycle degree
  - Contacts and networks
  - Doctoral degree
- Most important skills areas in employment:
  - Analytical and systematic thinking skills
  - Self-direction/initiative
  - Ability to learn and take in new information
  - Problem-solving skills
  - Co-operations skills
  - Ability to withstand stress



- According to the respondents, the ability to describe one's knowledge and skills is the has been most important factor that affected their employment after graduation. Contacts and networks also affect employment.
- Doctoral degree and second-cycle (master's level) degree are both seen as important for employment. Their relevance differs based on the type of position and organization doctoral graduates have sought to work in.. Doctoral graduates working in the university sector and in research positions (in all sectors) see their doctoral degree as highly important, while graduates working outside the university sector and in other expert positions than research tend to highlight the importance of their second-cycle degree more than their doctoral degree (please see the previous doctoral career monitoring report, Kangas, Carver, & Sarasjärvi 2020i).:
- Doctoral graduates highlight the importance of analytical and systematic thinking skills, selfdirection/initiative, ability to learn and take in new information, problem-solving skills, cooperations skills and Ability to withstand stress in their work. Skills-needs differ based on the main duties/ tasks at work.

#### The factors that have affected employment

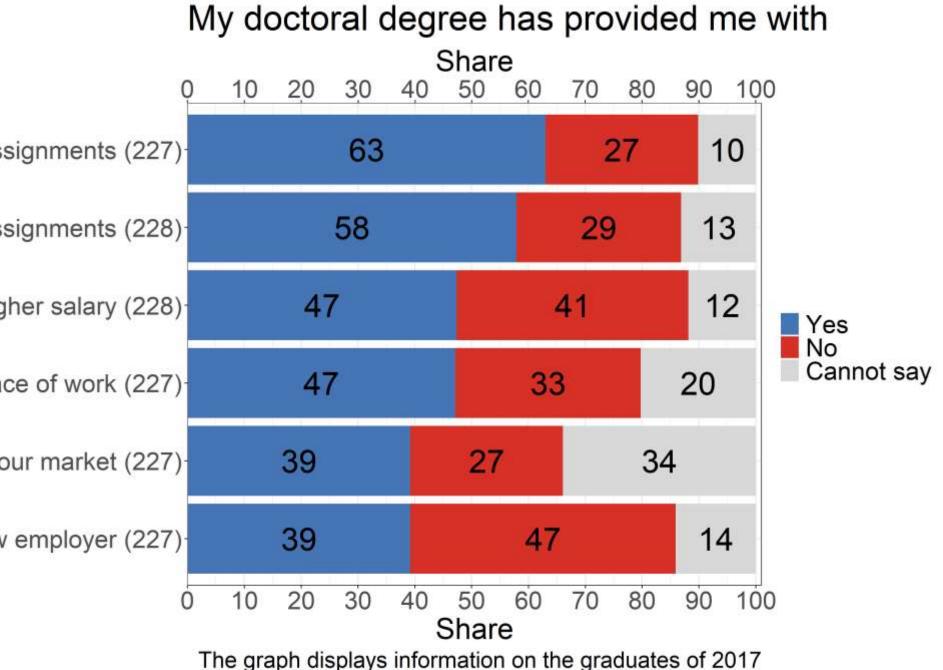


Very important Important Moderately important Somewhat important Only slightly important Not important at all Not applicable

# **FACTORS AFFECTING EMPLOYMENT, 2016-2017 GRADUATES**

	Humanities and Social Sciences	Natural Sciences	Health Sciences	Environmental, Food and Biological Sciences	All
Ability to describe one's knowledge and skills	85 %	80 %	73 %	89 %	82 %
Second-cycle degree	80 %	75 %	86 %	76 %	80 %
Doctoral degree	71 %	88 %	68 %	71 %	72 %
Contacts and networks	68 %	74 %	53 %	78 %	66 %
Other work experience	69 %	44 %	70 %	63 %	65 %
Dissertation topic	57 %	54 %	49 %	58 %	54 %
International experience	52 %	62 %	34 %	54 %	49 %
Other studies or training	44 %	30 %	52 %	46 %	45 %
Experience related to NGO activities or hobbies	25 %	15 %	13 %	22 %	20 %
Activity and profile on social media	21 %	13 %	14 %	21 %	18 %

THELSINGIN TLICTION CLASSIFIED CLASSIFIED based on the response option that best describes the respondent's primary duties. QNIVERSITE OF IGELISING PORTS (INTERSITE OF IGELISING PORTS) OF A six-level scale for all responses



In brackets number of respondents

More demanding job assignments (227)

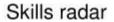
More meaningful job assignments (228)

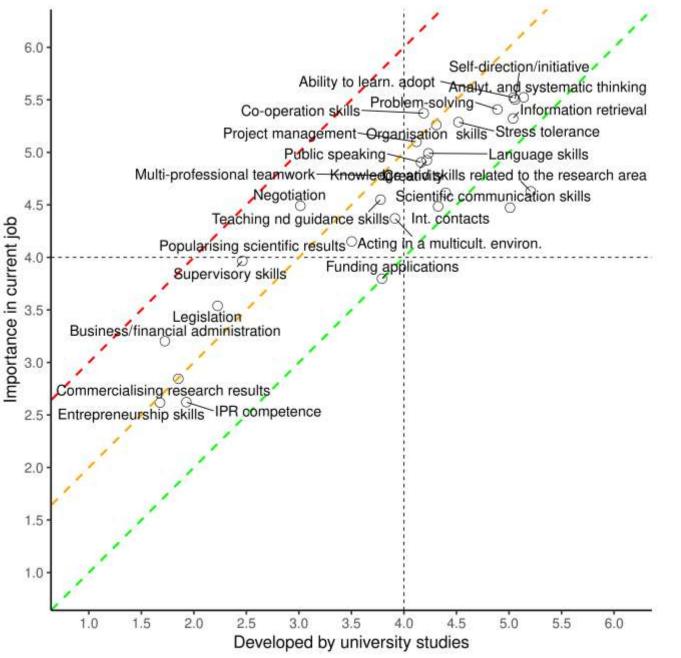
A higher salary (228)

Better status at my place of work (227)

A better position on the labour market (227)

A job with a new employer (227)





# REGISTER-BASED TRACKING OF EMPLOYMENT AND THE JOB MARKET SITUATION

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#### JOB MARKET SITUATION OF GRADUATES OF 2012 AND 2013 ONE, THREE AND FIVE YEARS AFTER GRADUATION

Job market situation	One year after graduation	Three years after graduation	Five years after graduation
Employed	66 %	67 %	70 %
Employed students	9 %	6 %	5 %
Unemployed	4 %	4 %	2 %
Share of employed in the workforce	95 %	95 %	97 %
Full-time study	1 %	0,8 %	0,7 %
Other or not known	8 %	9 %	8 %
Emigrated	12 %	14 %	14 %
Number 995			

Number: 885

#### JOB MARKET SITUATION ONE YEAR AFTER GRADUATION, EACULTY, GRADUATION YEARS OF 2016 AND 2017

Faculty	Employed	Employed students	Unemploy ed	Full-time study	Other or not known	Emigrated
Biol & Env Sc (110)	55 %	4 %	7 %	0,9 %	15 %	18 %
Vet Med (34)	76 %	3 %	0 %	3 %	6 %	12 %
Phar (33)	61 %	3 %	3 %	0 %	3 %	30 %
Arts (116)	63 %	5 %	8 %	0,9 %	12 %	11 %
Educ Sc (61)	77 %	2 %	5 %	0 %	8 %	8 %
Med (125)	87 %	5 %	0 %	1 %	6 %	2 %
Med (PhD) (88)	61 %	9 %	3 %	1 %	10 %	15 %
Psyc/speech ther. (17)	76 %	18 %	0 %	0 %	0 %	6 %
Agr & For (85)	73 %	6 %	5 %	1 %	11 %	5 %
Science (153)	66 %	1 %	3 %	0 %	8 %	22 %
Law (35)	71 %	11 %	3 %	3 %	6 %	6 %
Theo (33)	73 %	3 %	0 %	3 %	18 %	3 %
Soc Sc (93)	72 %	4 %	5 %	1 %	9 %	9 %
UH (983)	69 %	5 %	4 %	0,9 %	9 %	<b>12 %</b> 40



### SHARE OF EMPLOYED IN THE WORKFORCE

Year of graduation	One year after graduation	Three years after graduation	Five years after graduation
2009	98 %	98 %	96 %
2010	97 %	95 %	94 %
2011	98 %	95 %	95 %
2012	95 %	95 %	96 %
2013	95 %	95 %	98 %
2014	93 %	96 %	
2015	91 %	96 %	
2016	92 %		
2017	98 %		
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#### JOB MARKET SITUATION, BY NATIONALITY, GRADUATES OF 2010– 2013

Job market situation	One year aft graduation	er	Three years a graduation	lfter	Five years after graduation		
Nationality	Finnish	Other	Finnish	Other	Finnish	Other	
Employed	72 %	36 %	72 %	28 %	77 %	25 %	
Employed students	11 %	2 %	9 %	1 %	5 %	1 %	
Unemployed	3 %	2 %	4 %	4 %	3 %	4 %	
Share of employed in the workforce	96 %	96 %	95 %	87 %	96 %	86 %	
Full-time study	1 %	1 %	1 %	1 %	1 %	0 %	
Other or not known	6 %	22 %	6 %	24 %	6 %	22 %	
Emigrated	8 %	37 %	8 %	42 %	8 %	47 %	
Number:	1 516	245	1 516	245	1 516	245	



### ANNUAL INCOME (MEDIAN), BY YEAR OF GRADUATION

Year of graduation	One year after graduation	Three years after graduation	Five years after graduation
2009	43 900	49 100	52 900
2010	43 300	48 500	52 600
2011	43 500	48 900	52 600
2012	44 400	48 700	51 500
2013	44 900	49 800	54 100
2014	44 500	48 300	
2015	43 600	47 100	
2016	43 800		
2017	46 600		

HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI

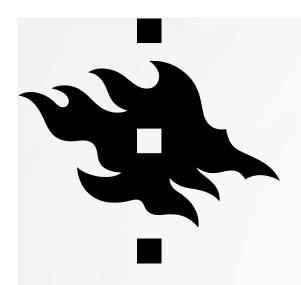
#### ANNUAL INCOME (AVERAGE), BY FACULTY, GRADUATES OF 2012–2013

Faculty	One year after graduation	Three years after graduation	Five years after graduation
Biological and Environmental Sciences (N = 64–65)	35 000	39 000	44 000
Veterinary Medicine (N = 13–15)	53 000	64 000	68 000
Pharmacy (N = $18-21$ )	50 000	74 000	76 000
Arts (N = 75–80)	36 000	39 000	41 000
Educational Sciences (N = 29)	56 000	56 000	53 000
Medicine (N = 126–130)	83 000	90 000	93 000
Medicine (PhD) (N = $65-70$ )	42 000	48 000	50 000
Psychologist/speech therapist (N = 11–12)	41 000	44 000	52 000
Agriculture and Forestry ( $N = 58-66$ )	43 000	48 000	51 000
Science (N = 74–86)	41 000	52 000	70 000
Law (N = 18–19)	75 000	78 000	90 000
Theology (N = $23-25$ )	40 000	44 000	51 000
Social Sciences (N = 62–64)	42 000	49 000	54 000
University of Helsinki (N = 645–665)	51 000	57 000	<b>62 000</b> 44



### COMMENTS ON SUBSEQUENT DEGREES

• An examination of the degrees completed after the doctorate revealed that their number was close to zero. Consequently, these figures are not discussed in more detail.



### **APPENDICES**



### MAIN EMPLOYER SECTOR AT THE TIME OF RESPONDING, BY YEAR OF GRADUATION

	Own company/freelancer/ self-employed		Organisation/founda tion/similar	Municipality/joint municipal authority	Other	State	Private company	University
2010	4	3	9	19	3	13	17	33
2011	5	0.9	8	12	4	15	12	44
2012	7	2	14	14	1	7	14	40
2013	4	2	14	15	3	13	19	30
2014	5	2	10	17	5	8	18	36
2015	2	0.9	11	16	3	10	21	37
2016	2	2	7	11	3	12	21	41
2017 F	6	1	10	6	1	17	25	34
HELSINGFORS UNI								



## MAIN EMPLOYER SECTOR AT THE TIME OF RESPONDING, BY FACULTY

	Own company/freelancer/ self-employed		Organisation/founda tion/similar	Municipality/joint municipal authority	Other	State	Private company	University
Biological and Environmental Sciences	4	0	4	0	4	28	30	28
Veterinary Medicine	6	0	0	0	0	31	25	38
Pharmacy	8	0	8	0	0	0	77	8
Arts	6	0	12	4	6	10	8	56
Educational Sciences	7	10	3	3	3	3	10	59
Medicine	7	2	10	28	2	9	27	15
Agriculture and Forestry	3	0	5	3	0	22	22	46
Science	0	0	0	3	1	22	30	43
Law	0	6	6	0	0	11	33	44
Theology	7	7	50	0	7	0	0	29
Social Sciences	0	0	16	8	0	12	12	51
University of Helsinki	4	2	9	8	2	15	23	38



	Own company/freelancer/ self-employed	conversity of applied	Organisation/founda tion/similar	Municipality/joint municipal authority	Other	State	Private company	University
Humanities and Social Sciences		4	16	1	2	8	13	48
Natural Sciences	0	0	0	0	0	27	47	27
Health Sciences	6	0	9	15	0	15	32	23
Environmental, Food and Biological Sciences	6	0	6	3	3	31	23	29
University of Helsinki	6	5 1	10	6	1	17	25	34
HELSINGFORS UN UNIVERSITY OF H								49



#### NATURE OF DUTIES AT THE TIME OF RESPONDING, BY YEAR OF GRADUATION

		Administrati	Manageme nt/supervis ory duties			Legal work	Marketing/s ales		Education	Finances/fin ancial adminstrati on	Planning/de velopment		Office work		Communica tions/media
2010	17	6	3	2	4	4	1	4	13	1	4	0.5	1	40	0.5
2011	13	4	. 2	0.5	2	0.9	0.5	4	11	. 0	8	0.5	0.9	52	0.5
2012	17	1	6	3	3	0.5	1	2	11	. 0	7	0.5	0	46	0.5
2013	17	3	4	0.5	6	0.9	0.5	5	6	0	11	0	0.5	45	1
2014	15	4	. 4	0	3	0.5	1	3	10	0.5	5	0	1	50	2
2015	14	. 2	4	2	4	2	0.8	4	10	0.8	10	0	2	45	0.8
2016	10	2	6	0.9	7	1	0.9	5	10	0.4	8	0	0.9	46	0.9
2017			7	2	8	2	1	7	2			0		41	50 1

### NATURE OF DUTIES AT THE TIME OF RESPONDING, BY FACULTY

	Work with customers/p atients	Administrati	Managemen t/supervisory duties	Ecclestiastica	Consulting/tr aining		Marketing/s ales	Other		Finances/fin ancial adminstratio n	Planning/dev elopment	Office work		Communicati ons/media
Biological and Environmental Sciences	2	2 4	. 12	2 C	2	C	) 0	15	5 2	2 C	) 6	0	50	6
Veterinary Medicine	13	s 0	) 7	, c	C	C	0 0		7 20	) C	20	0	33	0
Pharmacy	C	8	8 8	в С	23	C	8	15	5 0	) C	8	8	23	0
Arts	(	) 8	з С	) 2	3	с	) 3	Ę	5 20	) (	) 13	0	43	2
Educational Sciences	(	) 3	3 7	, c	17	с.	0 0		3 20	) C	0 0	0	50	0
Medicine	38	3 3	3 4	c	8	C	) 2	7	7 1	C	) 8	2	26	1
Agriculture and Forestry	C	0 0	) 5	5 C	5	C	0 0	3	3 6	. 3	8 8	0	68	0
Science	C	) 4	4	c	12	C	0 0	ç	9 3	5 1	12	0	55	0
Law	(	0	) 6	с с	6	39	0	(	) 11	C	) 6	0	33	0
Theology	13	в О	) 20	) 33	C	C	0 0	C	7 (	, c	) 0	0	27	0
Social Sciences	C	0 0	) 12	2 C	8	C	0 0	2	2 18	2	2 4	4	49	0
University of Helsinki	ç	9 3	3 6	5 1	7	2	2 1	e	6 9	0.7	, 8	1	44	51 1



#### NATURE OF DUTIES AT THE TIME OF **RESPONDING, BY DOCTORAL SCHOOL**

	Work with customers/p atients	Administrati on	Managemen t/supervisor y duties	Ecclestiastica	Consulting/tr aining		Marketing/s ales		Education	Finances/fin ancial adminstratio n	Planning/dev	, Office work		Communicat ions/media
Humanitie														
s and														
Social	_				C		2	2	4-		2	1		1
Sciences	2	2 4	. 8	8 4	6	4	2	3	17	C	2	L	. 44	1
Natural														
Sciences	C	) 3	3	0	17	0	0	13	3	3	13	0	43	0
Health														
Sciences	24	ļ З	6	6 0	9	0	1	10	1	. C	12	. 3	28	1
Environme ntal, Food and Biological														
Sciences	C	) 8	8	s 0	3	0	0	6	3	3	14	0	53	3
University of Helsinki	8	4	7	2	8	2	1	7	8	0.9	9	1	41	1
HELSINGIN HELSINGFO UNIVERSIT	ORS UNIVE	RSITET												52



## SALARY AT THE TIME OF RESPONDING, BY FACULTY

	-3000	3000-3499	3500-3999	4000-4999	5000-
Biological and Environmental Sciences	17	14	21	33	3 14
Veterinary Medicine	0	7	7	47	40
Pharmacy	9	0	18	36	36
Arts	15	28	28	25	5 5
Educational Sciences	0	15	38	15	31
Medicine	13	3	17	18	49
Agriculture and Forestry	8	15	46	27	4
Science	0	7	30	38	
Law	12	6	24		
Theology	0	27	27	18	27
Social Sciences	5	7	32	34	22
University of Helsinki	8	11	26	28	27 5

# Y.

#### HAS BEEN UNEMPLOYED AFTER GRADUATION, BY YEAR OF GRADUATION

Year of gradution	Share
2004	12
2005	14
2006	16
2007	17
2008	12
2009	10
2010	15
2011	18
2012	15
2013	20
2014	24
2015	29
2016	25
2017	22

HELSINGIN YLIOPISTO HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI

#### THE REQUIREMENTS OF MY CURRENT JOB CORRESPOND WELL WITH MY ACADEMIC QUALIFICATIONS, BY FACULTY

	Fully disagree	Disagree	Slightly disagree	Slightly agree	Agree	Fully agree
Biological and Environmental Sciences	6	6	2	12	21	52
Veterinary Medicine	0	0	6	19	38	38
Pharmacy	0	15	8	15	31	31
Arts	10	3	15	18	11	43
Educational Sciences	0	6	0	10	19	65
Medicine	3	4	9	21	22	41
Agriculture and Forestry	3	3	0	15	21	59
Science	7	4	3	12	28	46
Law	6	6	0	0	33	56
Theology	7	20	13	27	7	27
Social Sciences	6	0	8	6	20	59
University of Helsinki	5	5	6	14	22	48
IELSINGFURS UNIVE						

#### THE SKILLS AND KNOWLEDGE I LEARNED AT UNIVERSITY CAN BE APPLIED WELL IN MY CURRENT JOB, BY FACULTY

	Fully disagree	Disagree	Slightly disagree	Slightly agree	Agree	Fully agree
Biological and Environmental Sciences	0		4	17	23	50
Veterinary Medicine	0	12	6	25	12	44
Pharmacy	0	0	8	15	54	23
Arts	7	3	13	8	20	49
Educational Sciences	3	6	0	3	34	53
Medicine	3	1	3	27	29	36
Agriculture and Forestry	0	5	3	8	39	45
Science	7	1	4	6	28	54
Law	6	6	6	11	28	44
Theology	7	7	7	27	20	33
Social Sciences	6	0	4	10	33	47
University of Helsinki	4	3	5	14	28	45

#### SHARE OF THOSE SATISFIED WITH THEIR DEGREE IN TERMS OF THEIR CAREER, BY FACULTY

	Very dissatisfied	Dissatisfied	Slightly dissatisfied	Slightly satisfied	Satisfied	Fully satisfied
Arts	6	6	10	23	34	21
Pharmacy	0	0	8	31	54	8
Biological and Environmental Sciences	2	4	12	20	40	22
Science	6	0	3	19	44	29
Social Sciences	10	0	4	12	38	36
Educational Science	3	6	3	22	31	34
Medicine	3	3	3	20	34	35
Theology	0	6	11	22	28	33
Agriculture and Forestry	2	5	5	15	48	25
Law	0	5	11	5	47	32
Veterinary Medicine	0	0	6	35	29	29
University of Helsinki	4	3	6	19	38	29



#### FACTORS AFFECTING EMPLOYMENT, 2017 GRADUATES

	Not applicable	Not important at all	Only slightly important	Somewhat important	Moderately important	Important	Very important
Activity and profile on social media	7	35	27	14	10	5	3
Experience related to NGO activities or hobbies	8	35	26	12	9	7	4
International experience	10	7	14	18	10	18	23
Contacts and networks	2	7	9	13	15	22	32
Ability to describe one's knowledge and skills	1	0.4	3	12	19	28	35
Other	72	8	2	1	2	5	10
Other work experience	2	4	14	14	13	20	33
Other studies or training	8	12	18	17	14	14	17
Doctoral degree	0.9	7	8	16	9	21	37
Dissertation topic	0.9	12	14	20	15	20	17
Second-cycle degree	4	2	5	10	7	20	53
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### HAVING A DOCTORAL DEGREE HAS GIVEN ME, 2017 GRADUATES

	l don't know	No	Yes
A higher salary	12	41	47
More demanding job assignments	10	27	63
More meaningful job assignments	13	29	58
Better status at my place of work	20	33	47
A job with a new employer	14	47	39
A better position on the labour market	34	27	39



#### GRADUATE WORKFORCE 2002–2018, SOURCE: STATISTICS FINLAND, EDUCATION RECORDS

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lower level tertiary education	185588	201160	216837	232063	246595	262402	280916	295108	309035	324455	338413	352928	365681	377246	389434	402649	420495
Higher level tertiary education	208388	216458	224472	232150	240233	249130	265334	271058	279421	286909	295564	306687	315799	321953	329968	340254	353927
Researcher																	
HELSINGIN YLIOPISTO HELSINGFORS UNIVER UNIVERSITY OF HELSI	RSITET	21786	22723	23593	24461	25318	26296	27063	27592	28295	28935	29788	30526	30901	31358	32199	33946



#### GRADUATE WORKFORCE IN VARIOUS FIELDS OF EDUCATION 2002–2018 SOURCE: STATISTICS FINLAND, EDUCATION RECORDS

• •

-	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Master of Science (Technology)	37 171	38 663	40 128	41 648	43 253	44 951	46 405	47 744	50 683	51 435	52 460	53 462	54 527	55 307	56 384	57 569	58 446
Master of Science (Economics and Business and Administration)	23 186	24 434	25 721	27 035	28 515	29 955	33 102	33 722	34 727	35 930	37 324	38 978	40 490	41 555	42 895	44 850	47 102
Master of Arts (Education)	21 397	22 823	24 173	25 433	26 670	28 031	30 256	31 079	31 944	33 007	34 130	35 293	36 486	37 573	38 446	39 330	40 318
Master of Arts (Humanities)	24 707	25 793	26 841	27 675	28 543	29 639	31 876	32 528	33 288	34 179	35 081	36 182	37 256	37 960	38 682	39 485	39 977
Master of Social Sciences	19 312	19 977	20 548	21 101	21 686	22 283	23 878	24 004	24 175	24 608	25 068	25 613	26 320	26 851	27 356	28 009	29 453
Master of Science Licentiate of Medicine	21 152 15 639	21 938 15 946	22 498 16 414	23 205 16 726	23 954 16 825	24 556 17 203	26 658 17 615	26 745 17 903	26 846 18 256	27 166 18 612	27 520 18 930	27 839 19 173	28 121 19 399	28 357 19 533	28 548 19 693	28 807 19 693	29 207 19 713
Bachelor/Master of Laws	11 800	11 962	12 154	12 263	12 451	12 675	12 925	12 947	13 010	13 213	13 343	13 490	13 639	13 696	13 873	14 069	14 274
Early childhood ed. teacher	13 015	12 994	12 967	12 821	12 709	12 643	12 795	13 036	13 053	13 126	13 064	13 053	12 958	12 974	12 874	12 887	12 715
Arts subjects (second- cycle university degree)	5 145	5 450	5 889	6 192	6 552	6 934	7 561	7 924	8 210	8 554	8 916	9 386	9 808	10 044	10 395	10 548	10 798
Master of Science (Agriculture and Forestry)	5 029	5 094	5 157	5 182	5 292	5 315	5 601	5 579	5 623	5 642	5 668	5 706	5 733	5 728	5 688	5 878	5 897
Master of Theology	3 877	3 952	4 031	4 082	4 105	4 165	4 315	4 356	4 382	4 357	4 425	4 483	4 587	4 616	4 653	4 671	4 661
Licentiate of Dentistry Bachelor of Science	4 450	4 392	4 355	4 342	4 273	4 286	4 288	4 264	4 230	4 184	4 219	4 258	4 270	4 283	4 233	4 209	4 237
(Pharmacy) Architect	1 596 2 458	1 869 2 527	2 084 2 553	2 259 2 593	2 477 2 607	2 703 2 646	2 857 2 696	3 043 2 722	3 212 2 879	3 389 2 887	3 542 2 927	3 712 2 939	3 762 2 974	3 817 2 968	3 893 2 967	4 048 2 966	4 180 2 968

### SHARE OF UNEMPLOYED GRADUATES IN THE WORKFORCE

AT VARIOUS EDUCATION LEVELS 2004–2019, % SOURCES: STATISTICS FINLAND, EMPLOYMENT STATISTICS; MINISTRY OF ECONOMIC AFFAIRS AND EMPLOYMENT, EMPLOYMENT SERVICE STATISTICS. 12 MONTH AVERAGE OF TOTAL NUMBER OF UNEMPLOYED JOB-SEEKERS. CALCULATION: AKAVA

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All unempl oyed	10,8 %	10,3 %	9,4 %	8,2 %	7,6 %	9,0 %	9,5 %	8,9 %	9,2 %	10,5 %	11,5 %	12,4 %	12,5 %	11,1 %	9,4 %	8,8 %
Lower level tertiary educati																
on	6,2 %	5,8 %	5,2 %	4,3 %	3,9 %	4,8 %	5,0 %	4,5 %	4,6 %	5,5 %	6,3 %	7,0 %	7,0 %	6,0 %	4,9 %	4,4 %
Higher level tertiary educati	4,3 %	4,2 %	4,0 %	270/	270/	4 2 9/	A E 9/	4 2 9/	4 6 9/	E 6 9/	6 1 %	6 9 %	6 9 %	50%	4 9 9/	4 5 9/
on	4,3 %	4,2 70	4,0 %	3,7 %	3,7 %	4,2 %	4,5 %	4,3 %	4,6 %	5,6 %	6,1 %	6,8 %	6,8 %	5,9 %	4,8 %	4,5 %
Resear cher	07.0/	0.0.0/	0.7.0/		0.0.0/	0.0.0/	0.4.0/				4.0.00			E 0.04	4.0.04	0.7.0/
level	2,7 %	2,8 %	2,7 %	2,6 %	2,6 %	2,8 %	3,1 %	3,2 %	3,3 %	4,0 %	4,8 %	5,3 %	5,6 %	5,0 %	4,0 %	3,7 %
HELSING	IN YLIOPIS FORS UNI\ ITY OF HEI	/ERSITET														62

#### SHARE OF UNEMPLOYED GRADUATES IN THE WORKFORCE IN CERTAIN FIELDS OF EDUCATION IN 2004-2019

SOURCES: STATISTICS FINLAND, EMPLOYMENT STATISTICS; MINISTRY OF ECONOMIC AFFAIRS AND EMPLOYMENT, EMPLOYMENT SERVICE STATISTICS. 12-MONTH AVERAGE OF TOTAL NUMBER OF UNEMPLOYED. CALCULATION: AKAVA.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Arts subjects (second-																
cycle university degree)	11,7 %	10,7 %	9,6 %	8,0 %	8,1 %	8,7 %	9,0 %	8,4 %	8,7 %	10,2 %	11,9 %	13,4 %	14,3 %	12,9 %	11,1 %	10,9 %
Master of Arts																
(Humanities)	6,3 %	6,5 %	6,1 %	5,7 %	5,8 %	6,0 %	6,0 %	5,8 %	6,3 %	7,3 %	8,1 %	9,0 %	9,0 %	8,1 %	6,7 %	6,1 %
Master of Science	4,7 %	5,0 %	4,9 %	4,5 %	4,7 %	4,7 %	5,0 %	4,7 %	5,1 %	6,0 %	6,7 %	7,9 %	8,0 %	7,1 %	5,6 %	5,1 %
Master of Science (Economics and Business and																
Administration)	5,3 %	4,8 %	4,4 %	3,7 %	3,4 %	3,9 %	4,2 %	3,7 %	4,2 %	5,0 %	5,6 %	6,3 %	6,3 %	5,6 %	4,7 %	4,5 %
Higher level tertiary																
education	4,3 %	4,2 %	4,0 %	3,7 %	3,7 %	4,2 %	4,5 %	4,3 %	4,6 %	5,6 %	6,1 %	6,8 %	6,8 %	5,9 %	4,8 %	4,5 %
Master of Theology	3,2 %	3,1 %	3,0 %	3,1 %	2,9 %	3,2 %	3,2 %	3,1 %	3,4 %	4,2 %	5,1 %	6,1 %	6,8 %	6,3 %	5,3 %	4,5 %
Lower level tertiary education	6,2 %	5,8 %	5,2 %	4,3 %	3,9 %	4,8 %	5,0 %	4,5 %	4,6 %	5,5 %	6,3 %	7,0 %	7,0 %	6,0 %	4,9 %	4,4 %
Master of Social Sciences	4,3 %	4,7 %	4,4 %	3,9 %	3,9 %	4,0 %	4,0 %	4,0 %	4,2 %	5,0 %	5,6 %	6,5 %	6,5 %	5,9 %	4,8 %	4,4 %
Researcher level	2,7 %	2,8 %	2,7 %	2,6 %	2,6 %	2,8 %	3,1 %	3,2 %	3,3 %	4,0 %	4,8 %	5,3 %	5,6 %	5,0 %	4,0 %	3,7 %
Master of Science																
(Agriculture and Forestry)	4,0 %	4,2 %	4,3 %	3,7 %	3,3 %	3,3 %	3,3 %	3,2 %	3,6 %	4,0 %	4,3 %	5,4 %	5,5 %	4,9 %	4,1 %	3,7 %
Architect	6,1 %	5,2 %	4,6 %	3,7 %	3,3 %	4,3 %	4,6 %	3,7 %	3,6 %	3,9 %	4,4 %	5,1 %	5,1 %	4,4 %	3,3 %	3,1 %
Master of Science									·		·					
(Technology)	3,4 %	3,2 %	2,9 %	2,4 %	2,2 %	3,1 %	3,8 %	3,3 %	3,4 %	4,2 %	4,8 %	5,3 %	5,3 %	4,3 %	3,3 %	3,1 %
Bachelor/Master of Laws	3,3 %	3,1 %	2,8 %	2,5 %	2,3 %	2,3 %	2,3 %	2,3 %	2,4 %	2,7 %	3,1 %	3,6 %	3,4 %	3,3 %	2,7 %	2,8 %
Master of Arts (Education)	2,7 %	2,7 %	2,8 %	2,8 %	3,0 %	2,7 %	2,7 %	2,6 %	2,6 %	3,0 %	3,3 %	3,8 %	4,0 %	3,6 %	3,0 %	2,8 %
Early childhood ed.	4,0 %	3,8 %	3,3 %	2,9 %	2,5 %	2,6 %	2,7 %	2,2 %	2,1 %	2,4 %	2,8 %	3,0 %	3,1 %	2,8 %	2,3 %	2,1 %
Bachelor of Science	.,0 70	0,0 /0	0,0 /0	_,0 ,0	_,0 ,0	_,. ,.	_,. ,.	_,_ /0	_, . , o	_, . , o	_,0 70	0,0 /0	0,. /0	_,0 /0	_,0 /0	_,. /
(Pharmacy)	3,5 %	2,5 %	2,4 %	2,3 %	2,0 %	2,3 %	2,4 %	2,1 %	2,2 %	2,3 %	2,9 %	3,4 %	3,9 %	3,2 %	2,5 %	2,1 %
Licentiate of Dentistry	0,6 %	0,5 %	0,5 %	0,4 %	0,5 %	0,5 %	0,5 %	0,5 %	0,4 %	0,4 %	0,5 %	0,6 %	0,8 %	0,7 %	0,8 %	0,8 %
Licentiate of Medicine	0,5 %	0,5 %	0,5 %	0,4 %	0,4 %	0,4 %	0,4 %	0,4 %	0,4 %	0,5 %	0,5 %	0,7 %	0,7 %	0,7 %	0,6 %	0,5 %