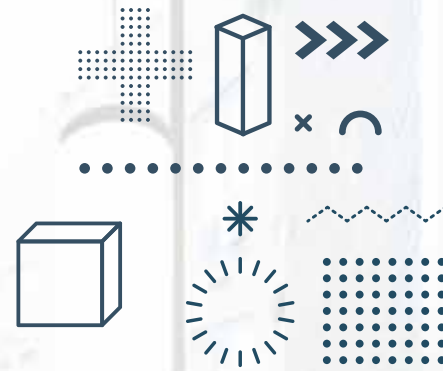


The logo for TEK, consisting of the letters 'T', 'E', and 'K' in a bold, sans-serif font. The 'E' is stylized with three horizontal bars.

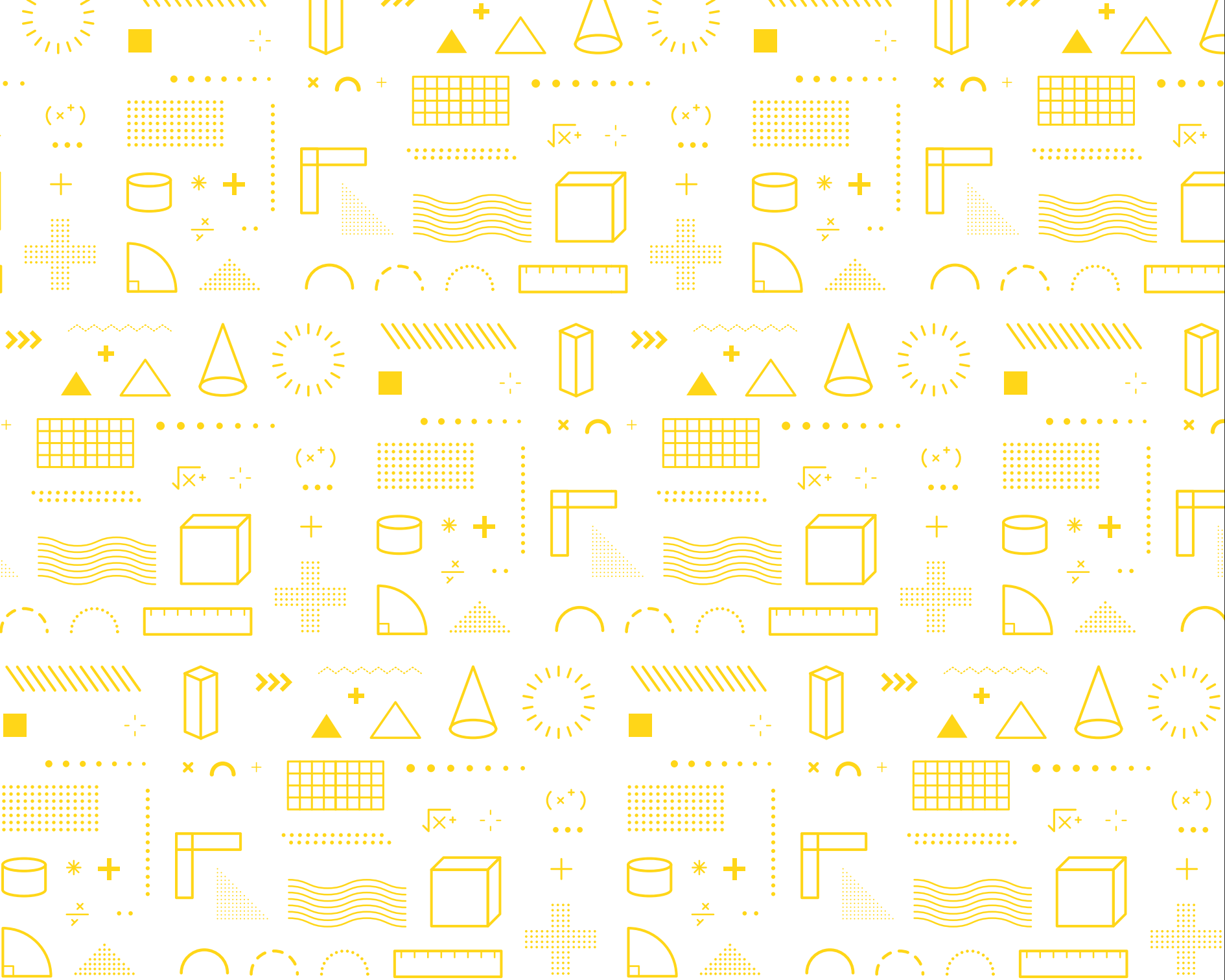
Powering your career



TEK Graduate Survey 2024

Perspective of international graduates





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Editors: Virve Murto and Owain Hopeaketo
Photos: Suvi-Tuuli Kankaanpää (p. 10, 14, 20, 30, 38, 66 and 74)
Teija Soini (p. 48)
Layout Designer: Sivupainajainen Kirsi Pääskylvuori
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Summary

The TEK Graduate Survey, conducted by Academic Engineers and Architects in Finland TEK in collaboration with Finnish universities, has been carried out annually since 2011. The 2024 survey focused particularly on the experiences of international graduates. The survey received responses from 2,457 graduates, representing a 62% response rate. Among the respondents, 22% were from non-EU countries and 4% from other EU countries. Data collection occurred from December 2023 to January 2025, and the results were analysed using quantitative methods.

This report explores various aspects of graduates' experiences, including their studies, well-being, master's thesis, working life, and future plans. More results can be found in the visualization: www.tek.fi/graduate-survey.

The results show that international graduates generally felt well-integrated into the university community, with active participation in student activities correlating

positively with their sense of integration. Satisfaction with university support, guidance, and information was high among international graduates. However, many international graduates, as well as Finnish graduates, reported high levels of stress and poor sleep due to study-related reasons, indicating challenges in their well-being.

International graduates were less likely to complete their master's thesis in collaboration, especially outside the university, compared to Finnish graduates. They also received financial support for their thesis work less often compared to Finnish graduates. While satisfaction with thesis guidance was high overall, other EU graduates were less satisfied with the guidance provided by organizations of outside university compared to non-EU graduates.

Employment rates were lower for international graduates compared to Finnish graduates, with other EU graduates having better employment prospects than non-EU graduates. Overall, the employment rate was

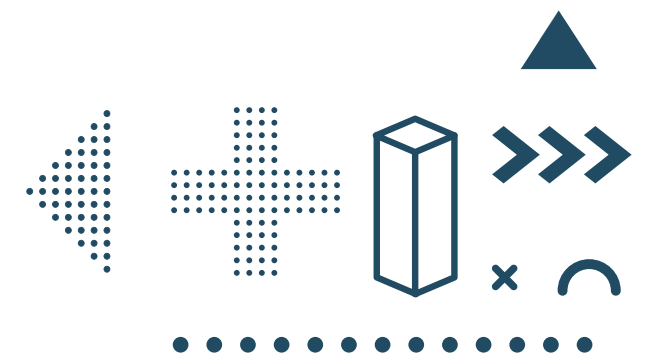
lower than in previous years. Despite these challenges, the quality of employment was high, with most graduates finding jobs that matched their field of education.

A significant proportion of international graduates, particularly those from other EU countries, considered working outside Finland within five years of graduation. Finnish graduates were more likely to plan to stay and work in Finland.

The survey underscores the need for enhanced support mechanisms for international graduates, particularly in facilitating their transition to the Finnish labour market and ensuring equitable financial support for thesis work. Addressing the well-being challenges faced by graduates is crucial for their academic success and overall quality of life. It is important to continue the good work of integrating international students into both the university community and the broader society.



Introduction



Introduction

Academic Engineers and Architects in Finland TEK and Finnish universities in technology together carry out a yearly feedback survey for graduated academic engineers and architects. The focus is to understand the employment situation of graduates, to gather their opinions on their studies, and to understand their wellbeing and coping during their time at university. The feedback and results are utilized in developing university education and in influencing the educational policy making. The survey is directed by an Advisory Board, which features a representative from every participating university.

In 2024, the focus of the TEK Graduate Survey is placed especially on international graduates, meaning those who do not have Finnish citizenship. This decision was based

on previous research having shown that international students face additional challenges in integrating into Finnish working life than Finnish students, as well as generally experiencing a worse wellbeing and integration into their university community. The primary research question of this report is therefore:

What are the experiences of international graduates during and after their studies in Finland?

The analysis will focus on four themes: experiences of studying, the master's thesis and transition to working life, coping, and satisfaction.

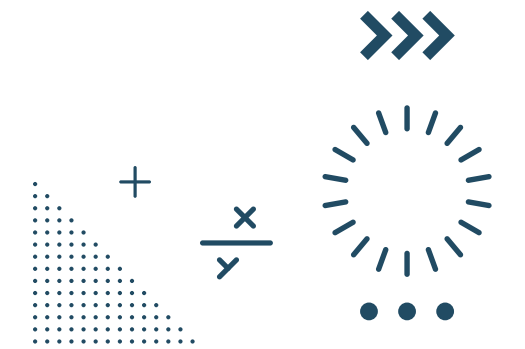
More results can be found in the visualization: www.tek.fi/graduate-survey.

Participating universities and schools		
Universities And Schools	Abbreviation	Local contact
1. Aalto University	Aalto ALL	
School of Chemical Engineering	Aalto CHEM	Kati Sumu
School of Electrical Engineering	Aalto ELEC	Antti Ojapelto
School of Engineering	Aalto ENG	Mari Martinmaa
School of Science	Aalto SCI	Päivi Koivunen
School of Arts, Design and Architecture	Aalto ARTS	Sari Tarvainen
2. Tampere University	TAU	Hanna-Leena Hietaranta-Luoma
3. LUT University	LUT	Annikka Nurkka
4. University of Oulu	UO	Reijo Saari
5. University of Turku	UTU	Riikka Matikainen
6. Åbo Akademi University	ÅAU	Kerstin Fagerström
7. University of Vaasa	UV	Kati Kangasniemi

Table 1: Participating universities and schools



Implementation of the TEK Graduate Survey 2024



Implementation of the TEK Graduate Survey 2024

Data collection and analysis

The data for the TEK Graduate Survey is collected through the collaboration of TEK and Finnish universities, with the results reported both nationally and as a part of the universities' internal activities. TEK is responsible for accomplishing the survey, while the universities are responsible for reaching their new graduates.

Data collection for 2024 was conducted from December 2023 to January 2025. Universities distributed the survey link sent by TEK to recent graduates in various ways: some sent separate emails to students at the graduation stage, while in other universities, the link was integrated into electronic systems. Graduates could respond to the Surveyppal questionnaire in Finnish, Swedish, or English.

The questionnaire primarily consisted of traditional multiple-choice questions and Likert scale statements. The collected material was analysed quantitatively, mainly using cross-tabulation. Statistical significance tests used were Pearson's χ^2 test. Statistical significance was set at 0.05 and expressed with asterisks or p-values as follows: $p < 0.001$ (***), $p < 0.01$ (**), and $p < 0.05$ (*).

In some Likert statements, three-category variables were used. In these cases, "Fully Agree" and "Somewhat Agree" were combined into "Agree", while "Fully Disagree" and "Somewhat Disagree" were combined into "Disagree". Those who answered "Cannot Say" were excluded from the analysis.

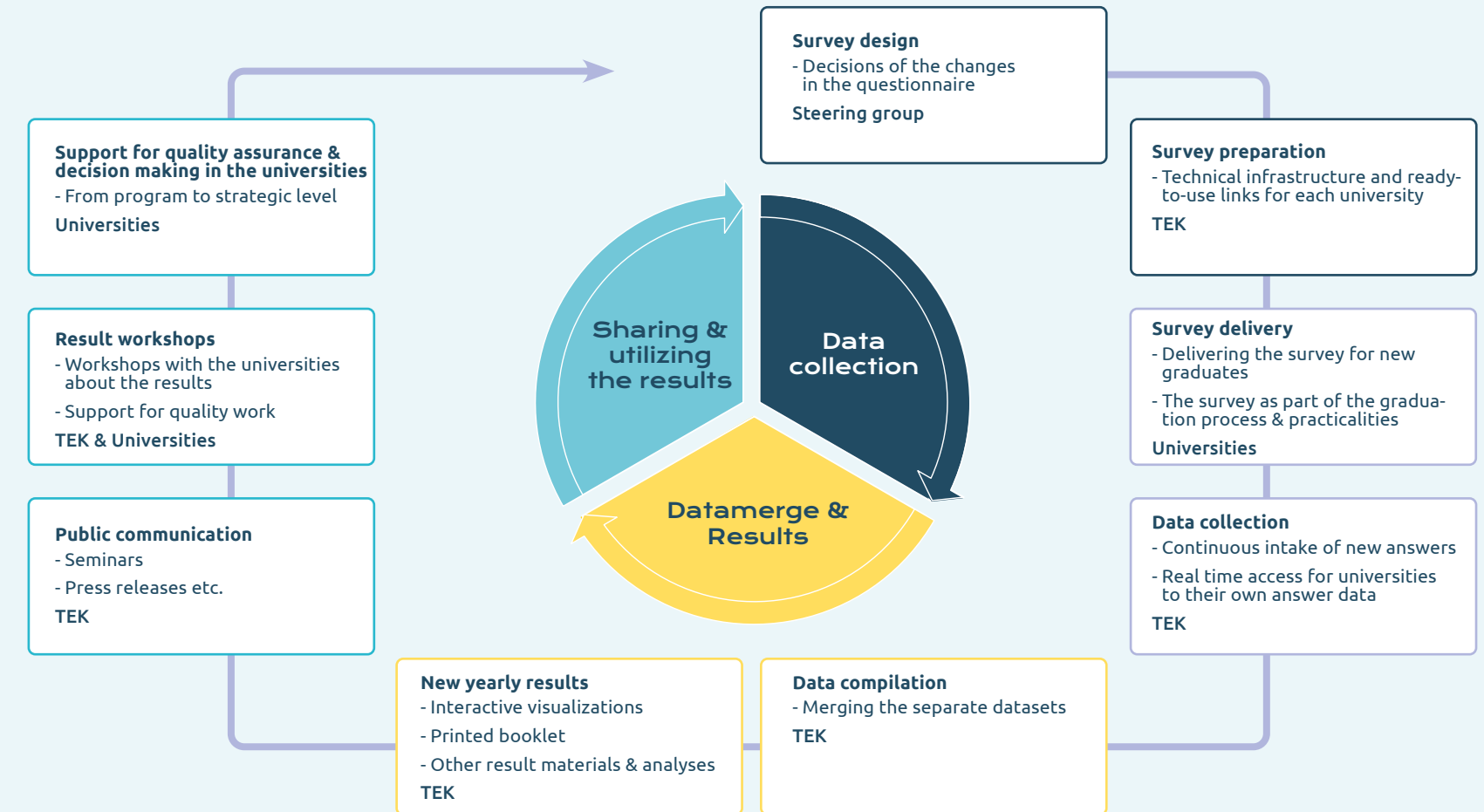


Figure 1: The yearly cycle of collaboration

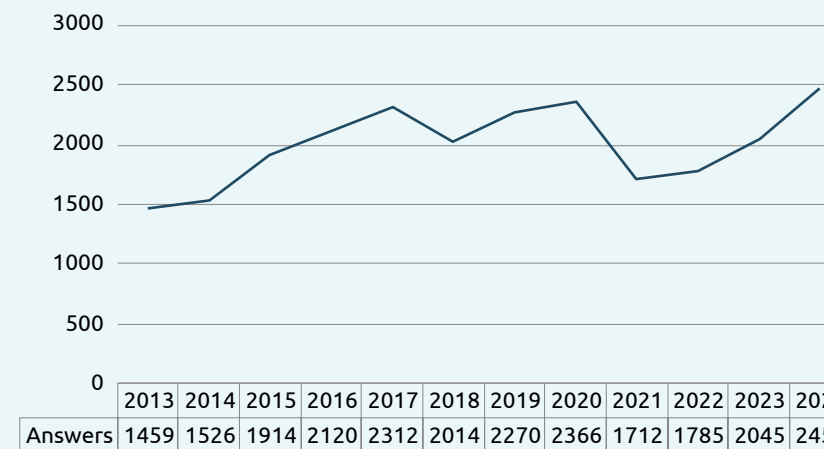
Number of graduates and responses 2024

A total of 3,973 academic engineers and architects graduated from participating universities in 2024. Of them, 2,457 answered the TEK Graduate Survey, making a response rate of 62%.

The response rate represents an increase from last year (59%), and the number of respondents in 2024 was the highest number ever in a TEK Graduate Survey. (Figures 2 & 3).

Between universities, the response rate can also be seen to vary greatly (see Table 2). The University of Oulu had the lowest response rate with 34%, while LUT University had the highest with 84%. Nevertheless, the response rate at the University of Oulu increased compared to recent years (19–30%).

Answers



Response rate



Figures 2 and 3: Answers and response rates 2013–2024

	ALL	Aalto ARTS*	Aalto CHEM	Aalto ELEC	Aalto ENG	Aalto SCI	Aalto ALL	TAU	LUT	UO	UTU	ÅAU	UV
Graduates 2024 in the scope of the TEK Graduate Survey	3974	54	186	270	409	517	1436	961	782	477	165	88	65
Answers (n)	2457	21	116	167	222	227	753	696	657	161	72	71	47
Answer rate (%)	62 %	39 %	62 %	62 %	54 %	44 %	52 %	72 %	84 %	34 %	44 %	81 %	72 %

* Includes only M.Sc (Architecture) and M.Sc (Landscape Architecture) graduates from Aalto ARTS.

Table 2: Number of graduates and responses 2024



Background of Respondents

Field of Education

Nationality

Gender

Age at the time of graduation

Earlier degree

Exchange studies or working abroad

Absence from the studies during studies in Finland



Background of Respondents

Field of Education

Responses to the survey were received from all different fields of engineering education (Table 3).

As in previous years, the most respondents were from Information Technology, representing 19%, and Industrial Management, representing 15%. The least respondents came from Landscape Architecture, which is only studied in a form applicable to this survey at Aalto ARTS.

The variety of studies focused upon in different universities can also be seen from the responses. For example, both the Universities of Vaasa and Turku had respondents only from four fields, while Åbo Akademi University has respondents only from Chemical Engineering and Information Technology. Factoring in all its schools, Aalto University covered almost every field in its respondents.

Educational area		ALL	Aalto CHEM	Aalto ELEC	Aalto ENG	Aalto SCI	Aalto ARTS	Aalto ALL	TAU	LUT	UO	UTU	ÅAU	UV
Mechanical & Energy Engineering	Mechanical Engineering	11 %			36 %			10 %	10 %	15 %	20 %	7 %		
	Energy Engineering	5 %	4 %		13 %			4 %		13 %				28 %
Electrical & Automation Engineering	Electrical Engineering	11 %		65 %				14 %	10 %	10 %	7 %			34 %
	Automation Engineering	2 %		1 %					6 %					4 %
	Engineering Physics	3 %				36 %		11 %						
	Science and Engineering	3 %	1 %					1 %	5 %	6 %				
Information & Telecommunications Technology	Information Technology	19 %		14 %		51 %		19 %	21 %	12 %	9 %	60 %	52 %	
	Telecommunications Technology	2 %		19 %				4 %			5 %			
Process & Materials Engineering	Chemical Engineering	5 %	32 %					15 %		9 %			48 %	
	Process Engineering	1 %	3 %								17 %			
	Environmental Engineering	4 %							5 %	8 %	2 %			
	Wood Processing Technology	1 %	13 %					2 %						
	Materials Technology, Rock Engineering	3 %	23 %					4 %	5 %			14 %		
Biotechnology	3 %	22 %					3 %	5 %			19 %			
Building Construction & Surveying Technology	Building Construction, Community Development	5 %			14 %			4 %	9 %		10 %			
	Surveying Technology	3 %			37 %			11 %						
Industrial Management	Industrial management	15 %				13 %		4 %	19 %	28 %	10 %			34 %
Architecture	Architecture	3 %					62 %	2 %	5 %		19 %			
	Landscape Architecture						38 %	1 %						

Table 3: Educational areas within the universities and schools

Nationality

Around one quarter of respondents had nationalities that were non-Finnish. This is a figure that is approximately in proportion to the percentage of academic engineering and architecture graduates who are international, according to official figures (Vipunen 2025).

In total, 22% of respondents were from non-EU nationalities, while a further 4% were from EU countries other than Finland (Figure 4). The proportion of graduates and respondents from non-EU nationalities has increased in recent years, while those from other EU countries has stayed at around the same figure.

There are statistically significant differences between universities in terms of the nationalities of their respondents ($p < 0.001$). At the University of Oulu, only around one tenth of respondents were non-Finnish, whereas at Aalto University, the proportion was closer to one third. Nevertheless, the number of international respondents has increased at nearly all participating universities.

Within the schools of Aalto University, differences are also visible, with Aalto SCI at only 25% non-Finnish, and Aalto ELEC at over 40%. This difference is found largely in the non-EU respondents. Overall, 61% of respondents from other EU countries graduated from Aalto University.

In terms of the field of education of non-Finnish respondents, just over one third graduated from Information & Telecommunications Technology. In contrast, Architecture as the least common field represented only 3% of international graduates.

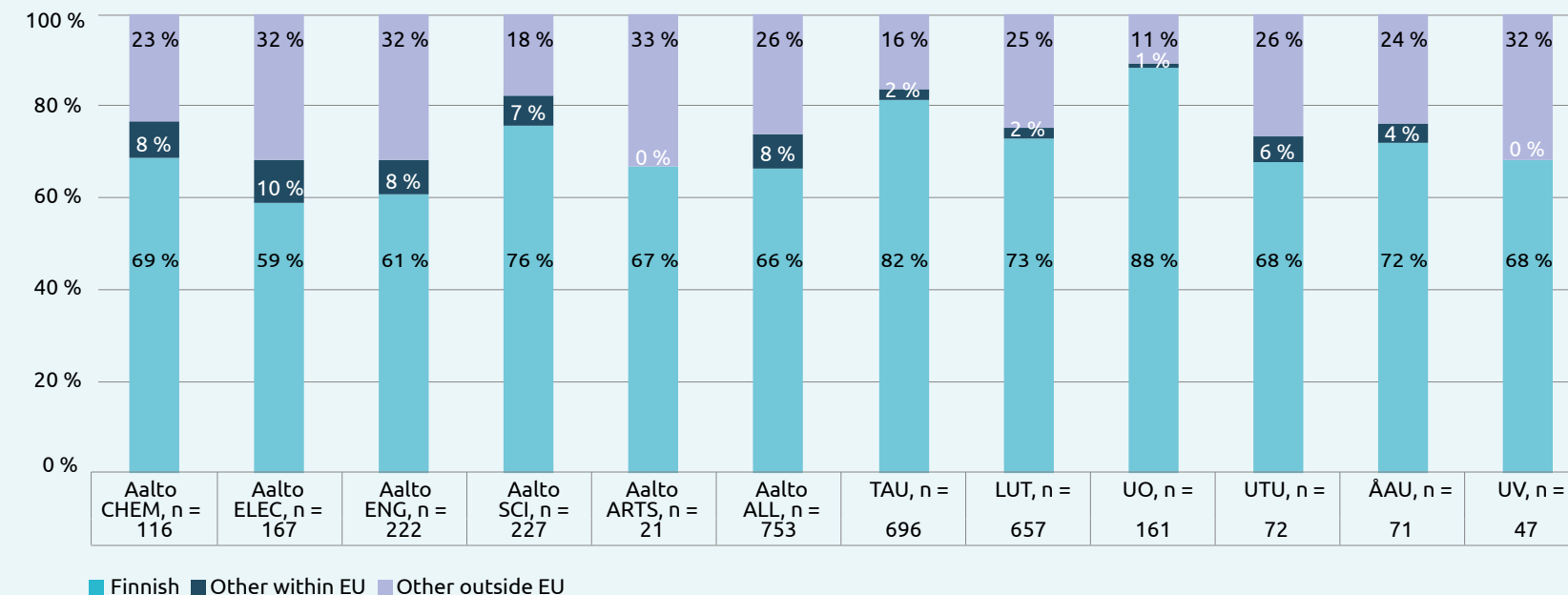


Figure 4: Nationality

Gender and age

Of the respondents, about 69% were male and 30% were female. Less than 1% chose the option ‘other’. Therefore, gender differences were examined in a binary manner. The highest number of female respondents was at University of Turku (43%), while the proportion of female respondents was the lowest at Åbo Akademi (23%).

The age distribution was also very similar to previous years. As could be expected, by far the most respondents were under 35 years old at the time of graduation, with a median respondent age of 27 years and a mean respondent age of 28,77 (SD 5.6). In LUT University had the highest average age of respondents (31.0 years), while Aalto University had the lowest (27.1 years).

Neither gender nor age had a statistically significant association with nationality.

Earlier degree

Before pursuing their master’s degree, 55% of respondents had completed a bachelor’s degree at the same university (Figure 5).

For Finnish respondents, this percentage was higher (66%). Notably, around one quarter had a bachelor’s degree from a university of applied science, rather than from the same university. Under 10% switched between two universities between bachelor’s and master’s degrees.

For international respondents, as expected, the bachelor’s degree was more likely to have been completed at a different university ($p < 0.001$). Around one tenth of international respondents had a bachelor’s degree from a university of applied science and around one fifth from the same university.

Within the international graduates, respondents from other EU countries were more likely to have completed their bachelor’s degree at the same university, or at a university of applied science, than those from non-EU countries ($p < 0.001$).

Within this analysis, a variable is used based on an earlier degree in three categories: “same university”, “other university” and “university of applied science”.

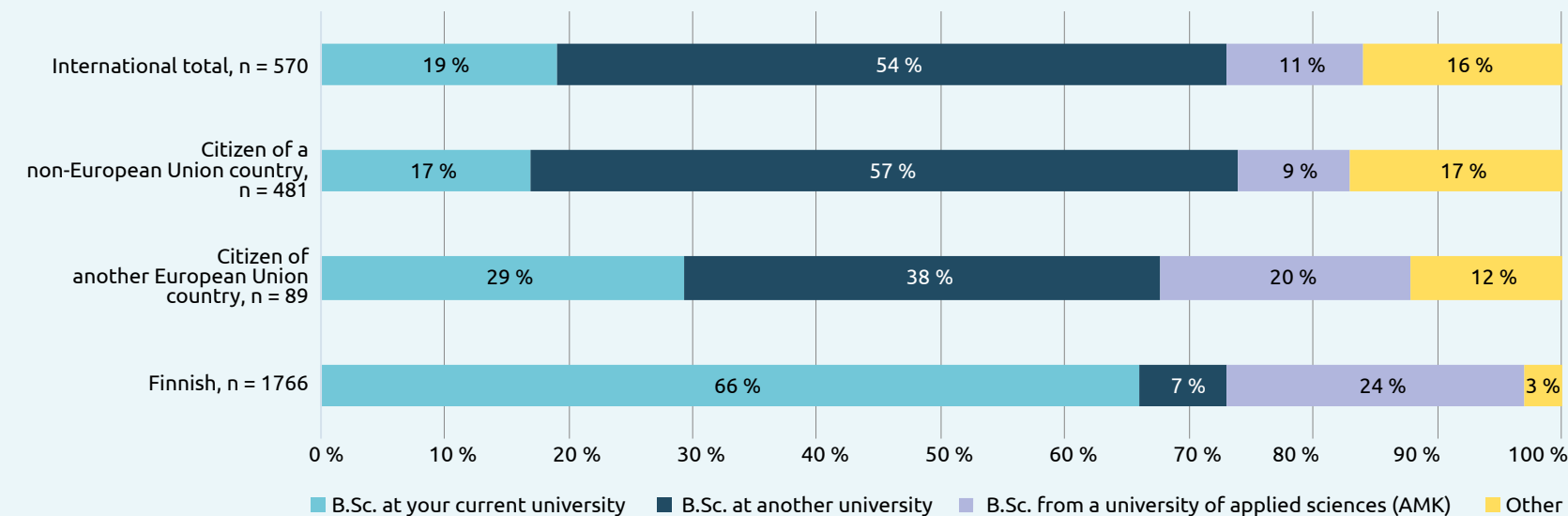


Figure 5: Degree and location of studies before master’s degree by nationality

International experiences during studies in Finland

Studying or working abroad during their studies was more common among international graduates. 58% of the international graduates had studied or worked abroad during their studies, compared to one third of Finnish respondents ($p < 0.001$). This should not include studies or work abroad that took place during a previous degree.

Respondents from other EU countries were slightly more likely to study abroad during their studies compared to those from non-EU countries (61% vs. 57%, $p < 0.05$).

International respondents who had studied or worked abroad most often did so for over two semesters, while Finnish graduates were most commonly abroad for 1–6 months.

The differences between Finnish and international students were statistically significant, even when considering double degree programs. Overall, three out of four graduates who studied in double degree programs were non-Finnish, and almost all graduated from LUT University.

Absences

There were also nationality-based differences in terms of absences from studies (see **Figure 6**).

Overall, less than one fifth (17%) of international respondents had been absent during their studies, compared to nearly a quarter (24%) of Finnish respondents ($p < 0.001$).

Of the international respondents with an absence during their studies, around one third had an absence of over two semesters. For Finnish respondents with at least one absence, around one fifth had absences of over two semesters.

Respondents from other EU countries had the lowest chance of having had no absences, with only 71%, much lower than the 85% for non-EU respondents ($p < 0.01$).

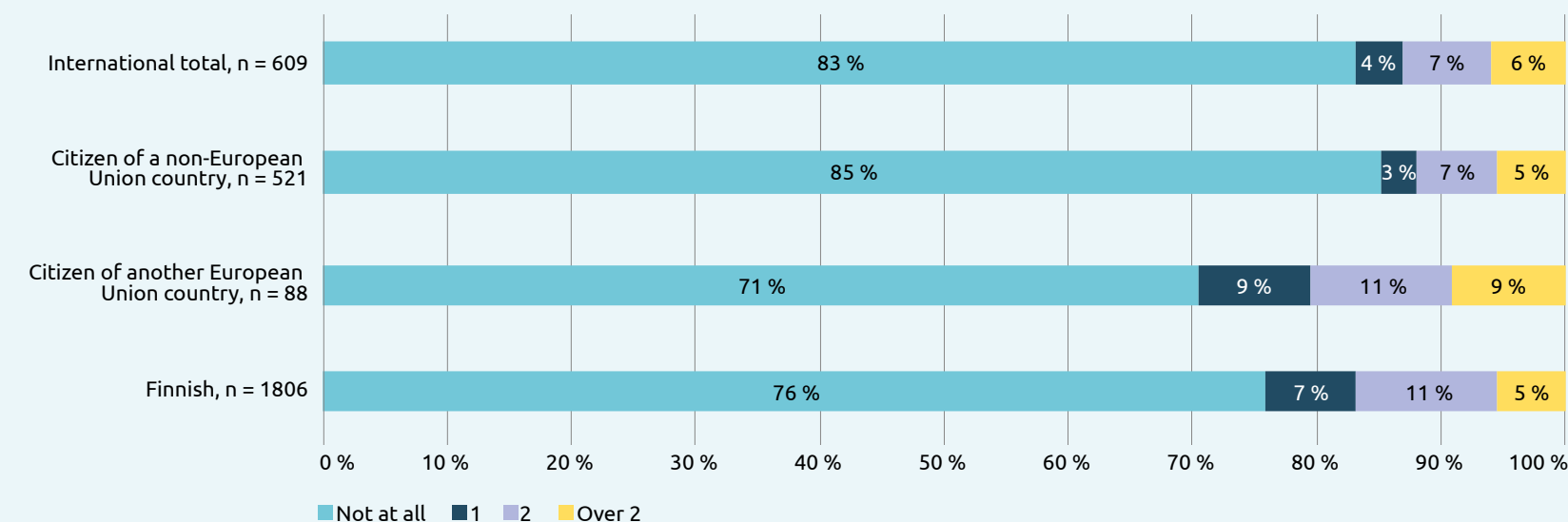


Figure 6: Absence from the studies during studies in Finland (semesters) by nationality



Experiences about studying

Delays in studies or graduation

Reasons for delays in studies or graduation

Support, guidance and information in university studies



Experiences about studying

Delays in studies or graduation

International graduates were in general far less likely to report having experienced a delay in their studies compared to Finnish graduates. While almost two thirds of international respondents had not experienced a delay, only around one-third of Finnish respondents reported the same ($p < 0.001$). (Figure 7.)

Finnish respondents were also far more likely to have long delays. In total, over one quarter of Finnish graduates experienced delays of over 12 months, compared to only 7% of international respondents. Respectively, these represent around 40% and 20% of those who reported a delay in their studies or graduation.

Graduates with non-Finnish EU nationalities were more likely (53%) than non-EU nationalities (36%) to report a delay in their studies or graduation ($p < 0.001$).

Comparing the results of 2024 to previous years, it is evident that there have been no significant changes in the delays in studies.

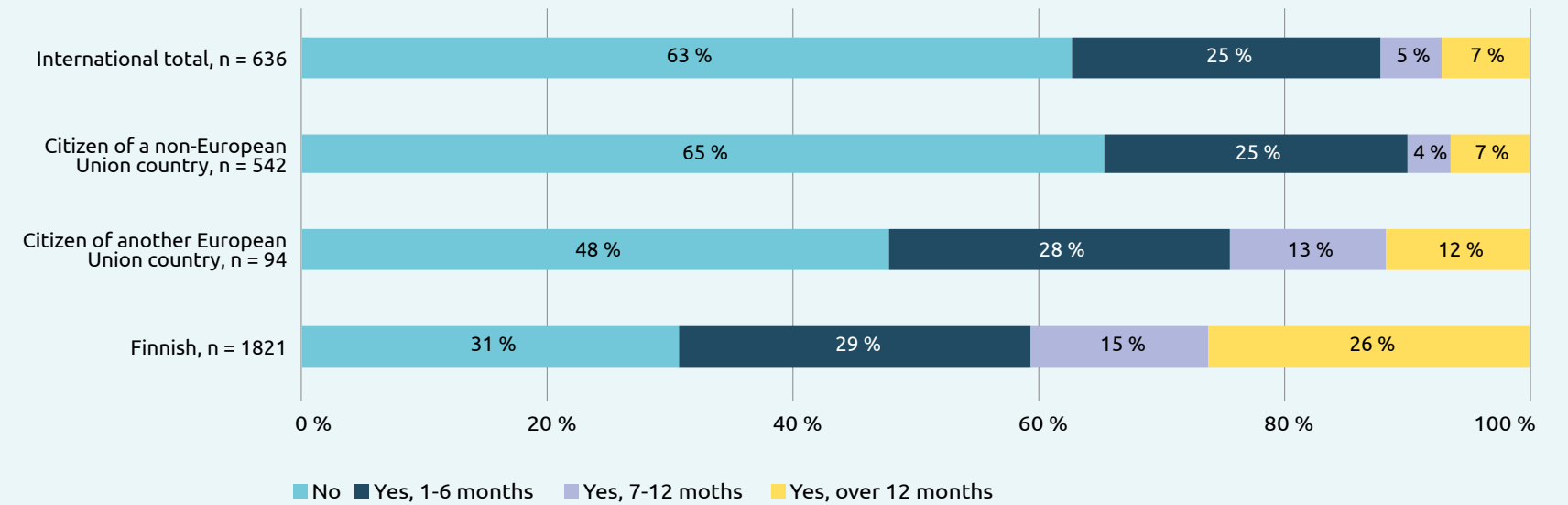


Figure 7: Delays in studies or graduation by nationality

Reasons for delays in studies or graduation

Both similarities and differences can be seen in the reasons why Finnish and international respondents reported experiencing delays in their studies.

For both groups, the main source of delays was working during studies. However, while this was the reason for over half of Finnish graduate reported delays (51%), it was the reason for less than a third attributed to international respondents (32%).

The second most common reason was also the same for both groups, with delays due to finding a thesis subject or workplace. This was more often a reason for international graduates (30%) than for Finnish ones (24%).

Both groups were also impacted by the COVID-19 pandemic, at 20% and 16% of delays for Finnish and non-Finnish respondents respectively.

However, personal issues, such as health problems, and insufficient motivation were both in the top five causes of delays for Finnish graduates, but not for international ones. Instead, other thesis related matters, and reasons concerning their study, work or personal life, were given.

For both groups, neither student organization activities nor active free time were in the top five reasons for delays. Insufficient guidance in studies or the thesis were also less likely to be reasons given.

In total, the given reasons can be seen as similar as in recent years.

Finnish, n = 1261		NonFinnish, n = 237	
Working during the studies.	51 %	Working during the studies.	32 %
Delay in finding a place or subject for the thesis work.	24 %	Delay in finding a place or subject for the thesis work.	30 %
COVID-19	20 %	Some other reason.	18 %
Insufficient motivation for studies.	17 %	Other matters related to master's thesis or graduation.	17 %
Personal issues, eg. health problems.	17 %	COVID-19	16 %

Table 4: most important reasons for delays, if delayed, % mentioned

Support, guidance and information in university studies

International graduates were generally satisfied with the support, guidance, and information provided by their university. There were no statistically significant differences between respondents from EU and non-EU countries or between international respondents based on their previous higher education institution.

However, when examining the variables in three categories¹, it was found that international graduates were slightly more satisfied with the information they received from the university compared to Finnish graduates. (Figure 8.)

International respondents were more satisfied with the student information systems and how easy it was to find information and support regarding different aspects of their studies.

A larger difference was observed in receiving feedback. 77% of international graduates agreed that the feedback from the teaching staff had helped with their studies, which is 12 percentage points higher than for Finnish graduates (65%). Conversely, a slightly higher proportion of them also disagreed with the statement (16% vs. 14%).

A slightly higher proportion of international respondents were satisfied with the opportunities to influence their study program, such as participating in curriculum planning and providing feedback. Additionally, 76% of Finnish graduates were satisfied with the communication with the teaching staff, compared to 79% of international graduates.”

On the other hand, there were no statistically significant differences in the availability of sufficient guidance for organization of studies or the preparation of the master’s thesis. Similarly, four out of five international graduates, as well as Finnish graduates, agreed that there was always someone available to ask for help when needed.

¹ Those who answered “cannot say” were excluded from the analysis. Their proportion was about 1–2%, except for the statement regarding the opportunities to influence studies, where it was about 7%. Some respondents also chose not to express an opinion on the statements at all.

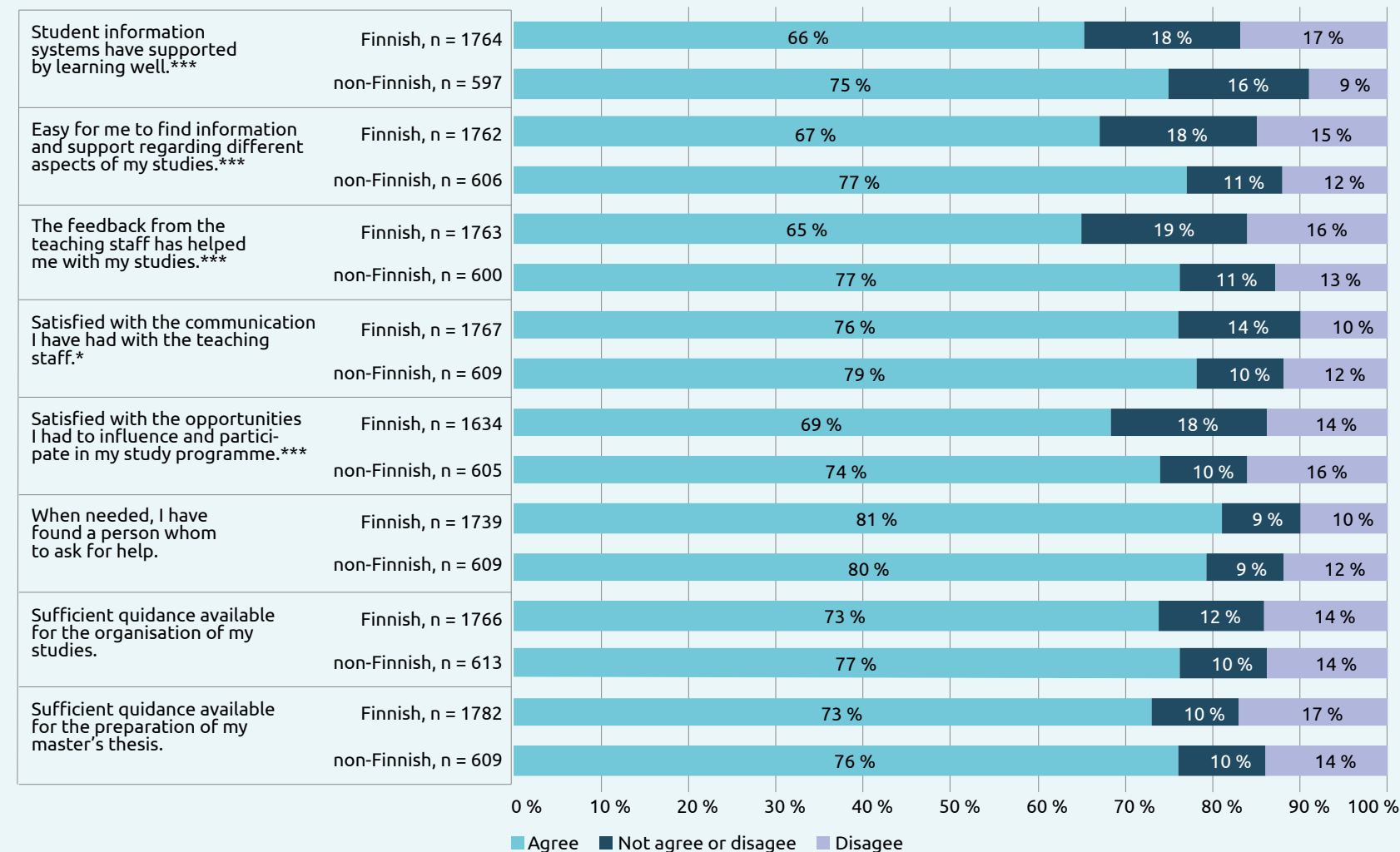


Figure 8: Statements of support, guidance and information



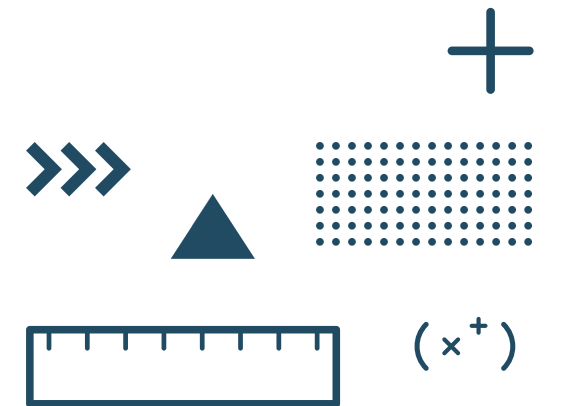
Well-being, coping and inclusion

Well-being

Coping

Voluntary engagement and activity

Part of the university community



Well-being, coping and inclusion

Well-being

The wellbeing statements presented both causes for positive and concern among international respondents as well as Finnish respondents (Figure 9).

85% of international graduates reported having felt comfortable at their university, ten percentage points higher than for Finnish graduates (75%). In addition, the pressure from their studies was rarely reported to have caused problems in their relationships at only 23%, close to the 28% for Finnish graduates.

On the other hand, many international graduates found their studies stressful. Nearly half (47%) had felt overwhelmed or in over their head in their studies, a number reflected also in the Finnish graduates. Over one-third of international graduates reported having often slept poorly due to matters related to their studies. This proportion was slightly higher than among Finnish respondents.

Graduates from other EU countries were slightly less often overwhelmed by their studies (39% vs. 49%) and slept better (54% vs 39%) than those from outside the EU ($p < 0.05$).

As seen in previous sections, international graduates were also more likely to be satisfied with their studies than Finnish graduates, at 82% and 76% respectively.

Differences in well-being based on gender were also observed. Overall, women were more often stressed than men (55% vs. 42%) and frequently experienced poor sleep (46% vs. 33%) ($p < 0.001$). Additionally, study pressures more often caused problems in women's relationships compared to men's (32% vs. 24%, $p < 0.001$). Interestingly, the gender differences were statistically significant only among Finnish respondents, not among international respondents.

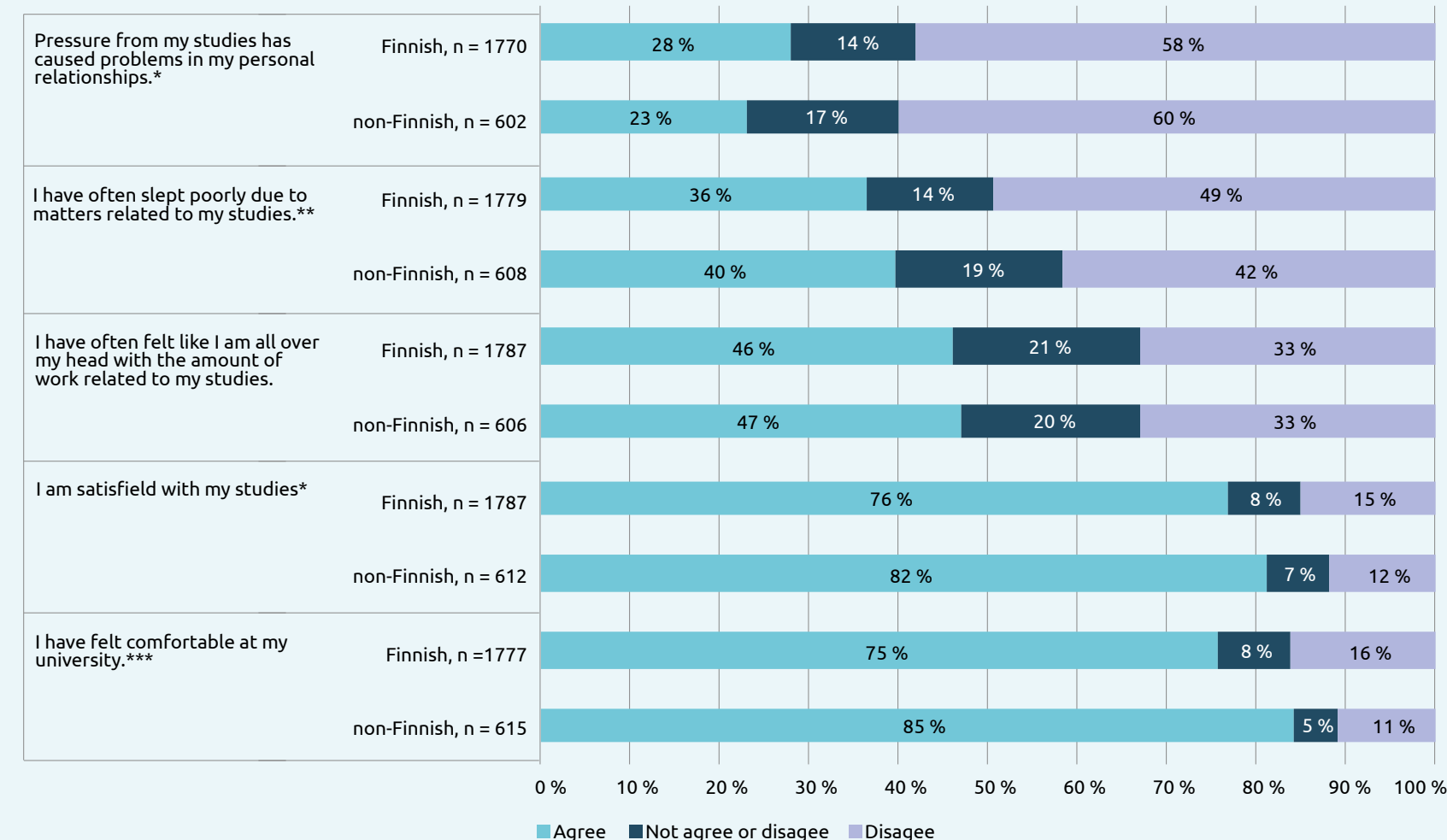


Figure 9: Statements of well-being

Coping

The well-being statements also reflected coping, and most respondents expressed concerns about managing their studies.

Only 24% of Finnish graduates reported not being worried about coping during their studies, while international graduates reported being slightly less worried (36%) ($p < 0.001$).

Interestingly, respondents from other EU countries were less worried about coping than those from outside the EU ($p < 0.05$) (see **Figure 10**).

Most respondents indicated that they were rarely worried. However, slightly over a quarter of Finnish respondents and a fifth of international respondents reported being worried several times. Fortunately, fewer than one in ten respondents reported being constantly worried.

Similarly, the good news was that compared to previous years, concerns about coping were slightly less among international graduates. For Finnish graduates, the situation had not changed significantly.

As with well-being, the results also showed that women were more often concerned about their coping compared to men. Among men, just under one-third were not worried (31%), whereas among women, one in five were not worried (19%) ($p < 0.001$).

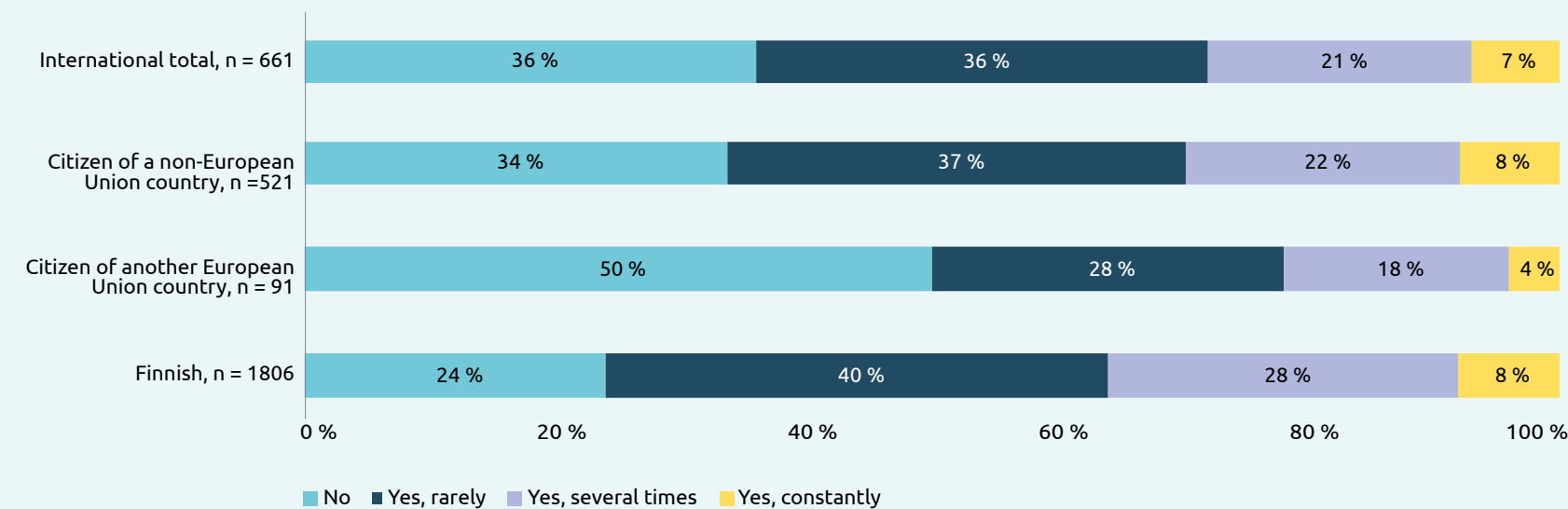


Figure 10: Worried about coping during studies by nationality

Voluntary engagement and activity

In recent years, the survey has also explored integration into the university and participation in one's own guild or student association.

The results showed that international respondents were slightly less active participants compared to Finnish graduates ($p < 0.05$). Nearly one in three Finnish graduates had either actively participated in student activities or had been a board member or an official in a guild or another student association, whereas only 16% of international graduates had done so. Participation among international graduates had been more occasional.

The proportions of those who very seldom or never participated in student activities were almost the same among non-Finnish and Finnish graduates (46% vs. 43%).

Graduates from other EU countries were more active in participating and being board members compared to those from outside the EU ($p < 0.001$) (see **Figure 11**).

When examining participation activity using a three-category variable (actively, occasionally, very seldom or never), it was found that the previous higher education institution had no statistically significant association with activity among international graduates.

In contrast, for Finnish graduates, the association was significant: nearly 80% of students with a background from universities of applied sciences reported participating very seldom or never. The corresponding percentages were 29% for those who graduated from the same university and 48% for those graduated from a different university ($p < 0.001$)

Among the active participants, 56% of international graduates felt that participating in the activities had been useful or very useful for their career. They found participation slightly more useful compared to Finnish graduates, of whom half thought it was useful or very useful. In contrast, there were no statistically significant differences among international respondents.

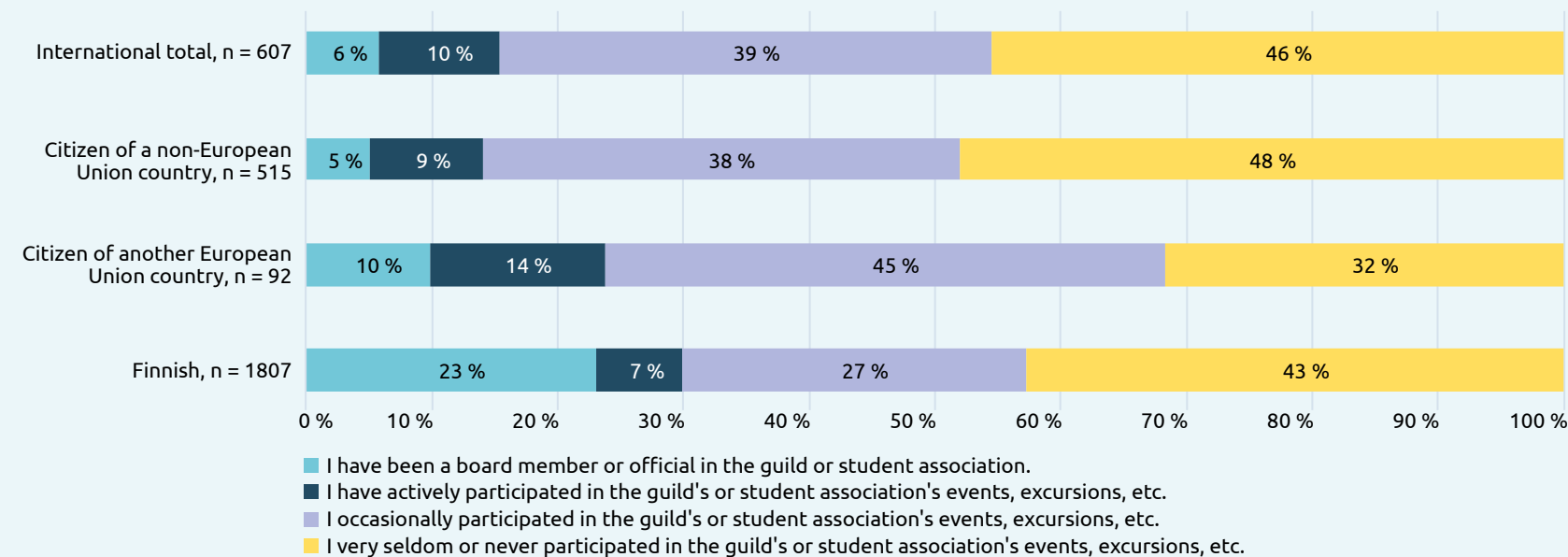


Figure 11: Participation in guilds or student associations and their activities in own field by nationality

Part of the university community

Around one quarter (23%) of international graduates either somewhat or fully disagreed with the statement “I’ve become a part of the university community the way I want to be.” This was similar to the Finnish graduate percentage (21%). However, a difference can be found among those who agreed, with Finnish graduates (28%) much more likely to fully agree than non-Finnish graduates (18%) ($p < 0.001$).

There were no statistically significant differences between respondents from other EU and non-EU countries, or between international respondents based on their previous higher education institution.

Instead, participation in student activities had a statistically significant correlation with becoming a part of the university community. Both Finnish and international graduates who had actively participated in student culture were also integrated more positively into the university community. Despite this, about 15% of active participants did not feel they belonged to the university community in the way they desired.

Compared to 2023, a slightly higher proportion of international respondents now felt that they had become part of the community in the way they wanted (47% vs. 44%). Similarly, a slightly higher proportion of Finnish respondents felt the same (55% vs. 52%).

It is noteworthy that fewer Finnish women felt they belonged to the university community in the way they wanted compared to men. Overall, 30% of Finnish women did not feel they became a part of the university community in the way they desired, whereas the corresponding proportion for Finnish men was 22% ($p < 0.01$). Among international respondents, the difference was not statistically significant.

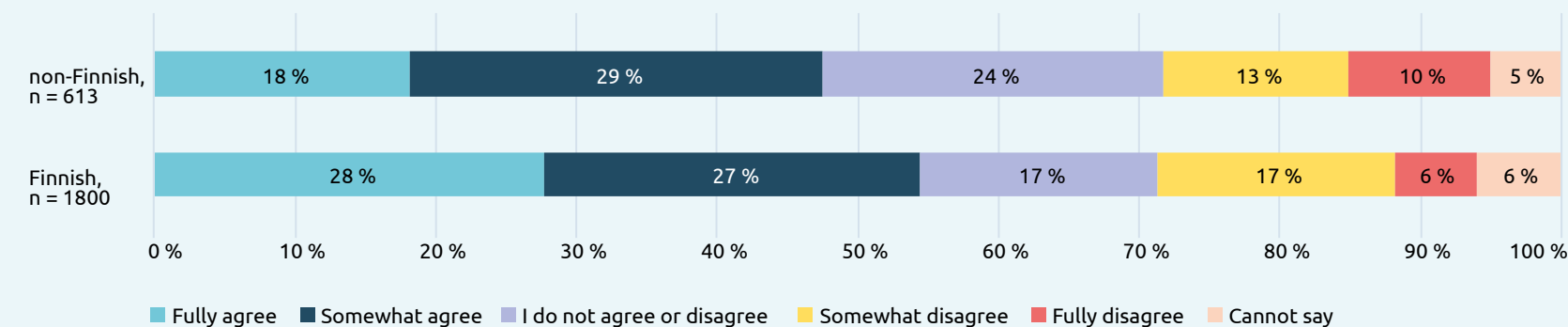


Figure 12: Become a part of university community the way wanted



Master's thesis and working life

Working during studies

Collaboration in master's thesis

Financing and duration of master's thesis

Support and supervision to master's thesis and working life

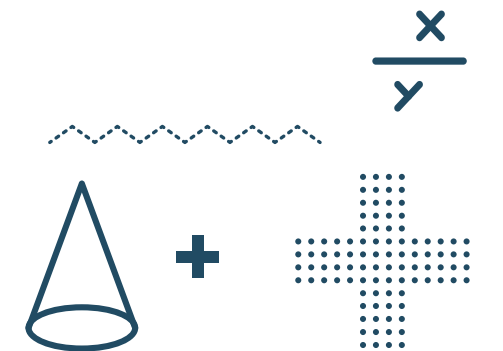
Information on job market and career planning

Employment

Employment in 2020-2024

Doctoral studies and previous relationship with the employer

Quality of employment



Master's thesis and working life

Working during studies

For international graduates, working in their field of study, as well as working in general (excluding thesis work) during their studies, was significantly less common than for Finnish graduates.

While over 80% of Finnish respondents had worked during their studies for at least a year, only one-third of international graduates had done so ($p < 0.001$). Among international graduates, one-quarter had no work experience during their studies, with 42 % having less than a year of it.

Gaining work experience in their field of study was slightly less common, and students from other EU countries gained slightly more field-specific work experience than those from non-EU countries ($p < 0.01$) (see **Figure 13.**).

There was no correlation between international graduates' previous higher education institutions and the accumulation of work experience in their own field. In contrast, Finnish graduates with a background from universities of applied sciences more often had over 2 years of work experience in their own field during their studies compared to those who graduated from the same university (27%) or other university (26%).

Work experience was considered valuable. 62% of Finnish respondents and 59% of international respondents considered gaining work experience and study-related practice in their field during studies to be very useful. Overall, almost 90% thought it was either very useful or useful.

However, working had especially affected Finnish graduates' studies, slowing them down. Almost half of Finnish graduates thought so, compared to one in four international graduates. Only 3% of non-Finnish and 2% of Finnish graduates thought that working accelerated their studies.

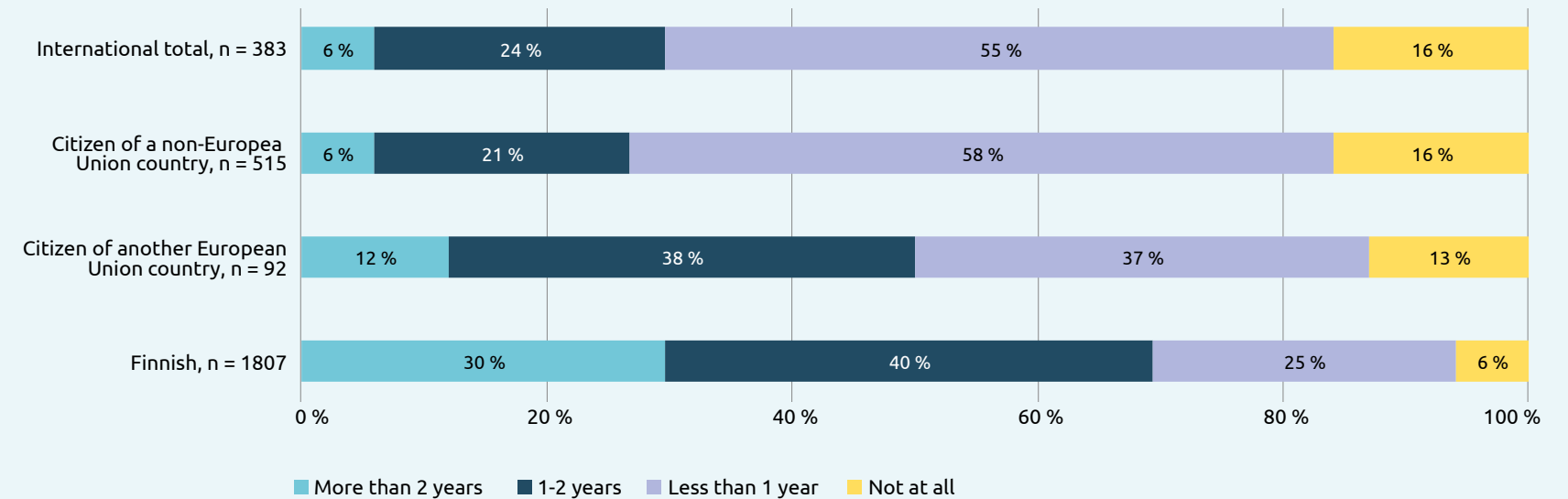


Figure 13: Work experience in own field (excl. thesis work) by nationality

Collaboration in master's thesis

As in previous years, Finnish graduates in 2024 were significantly more likely to complete their thesis outside the university compared to international graduates ($p < 0.001$).

Overall, 67% of the Finnish respondents and 35% of international respondents had completed their master's thesis in collaboration with an organisation outside their university, typically a private company.

Among international respondents, about one-third completed their thesis without collaboration, whereas only 17% of Finnish respondents did so. These proportions have remained consistent compared to previous years.

International respondents from other EU countries were in a better position, with a smaller proportion completing their thesis alone compared to those from non-EU countries ($p < 0.001$). They also more frequently completed their thesis outside the university (see **Figure 14**).

Interestingly, for international respondents, gaining work experience in their field was not statistically significant to the location of their thesis work. In contrast, for Finnish respondents, those without work experience in their field completed their thesis slightly more often without collaboration (28% vs. 16%).

Instead, gender was not associated with the location of thesis work for either international or Finnish graduates.

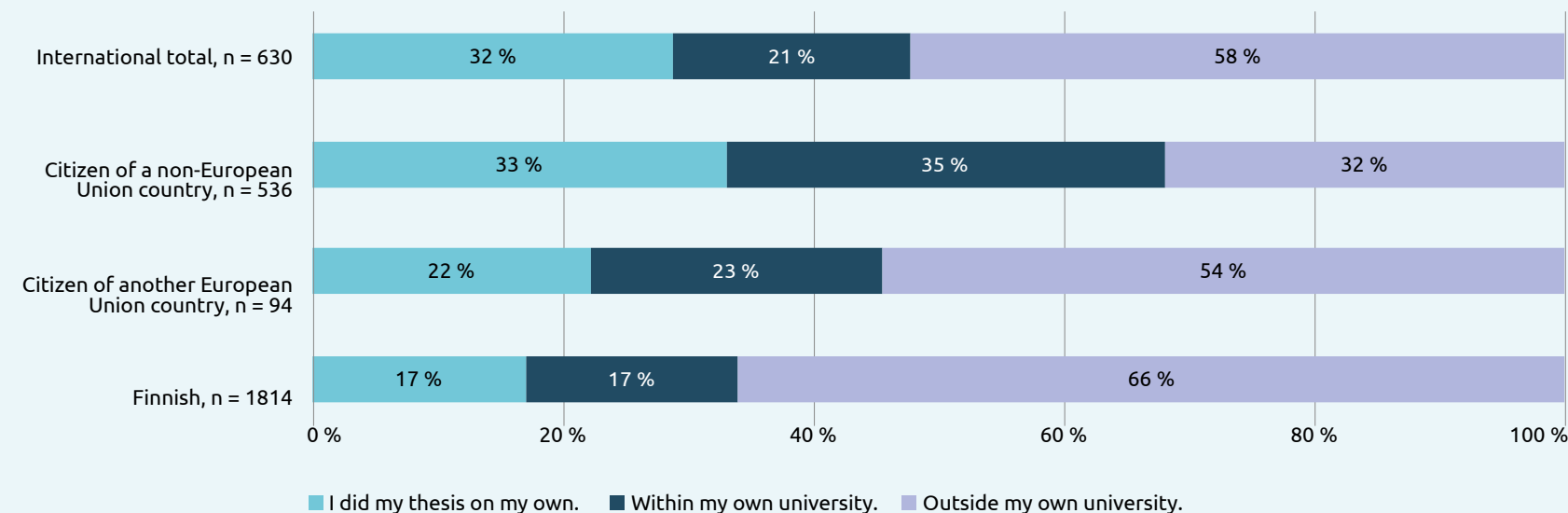


Figure 14: Collaboration in master's thesis by nationality

Financing and duration of master's thesis

International graduates received payment for their thesis work less frequently compared to Finnish graduates, partly due to the location of the thesis work (see **Figure 15**).

Notably, 18% of international respondents who completed their thesis outside the university reported not receiving financial support, compared to 6% of Finnish respondents ($p < 0.001$).

Most respondents completed their thesis within six months, with a higher proportion of international graduates achieving this compared to Finnish graduates (**Figure 16**).

A larger percentage of international graduates also completed their thesis within six months when working on collaborative projects.

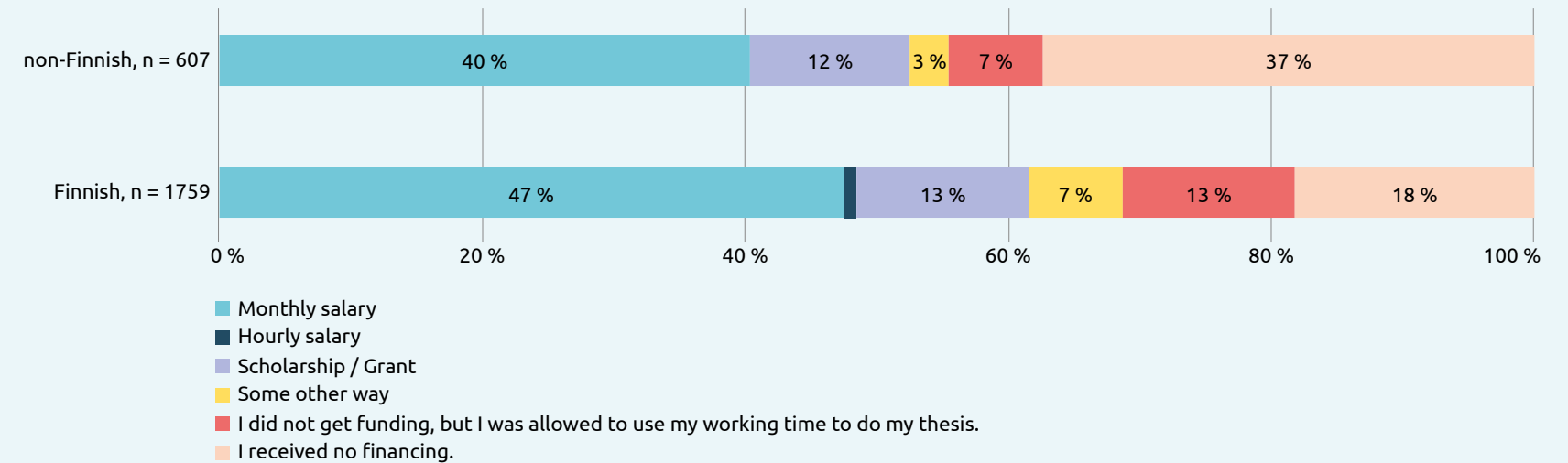


Figure 15: Financing of master's thesis

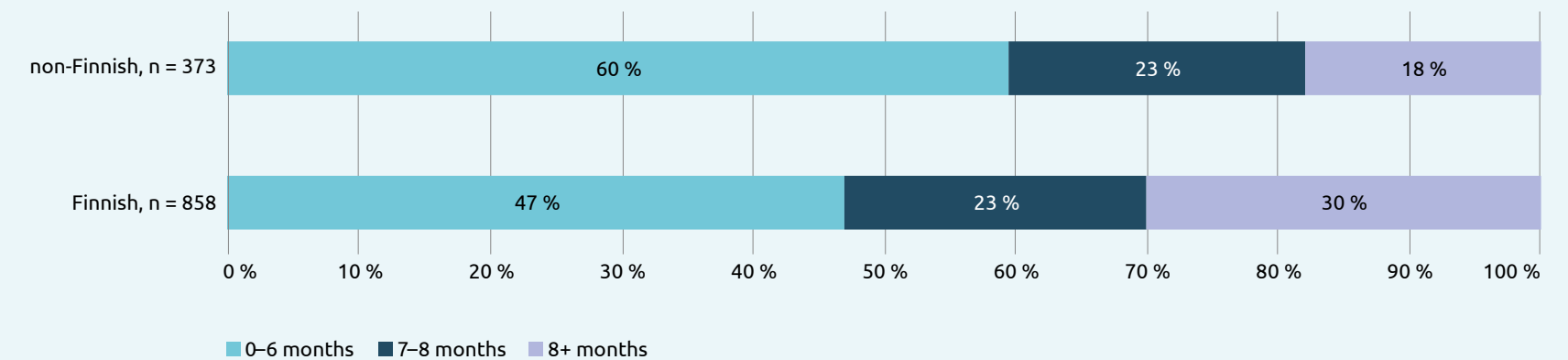


Figure 16: Duration of master's thesis

Support and supervision to master's thesis and working life

A clear majority of both international graduates and Finnish respondents were satisfied with the guidance they received from the university and their partnering organization when writing their master's thesis (see Figure 17).

The only significant difference was that a slightly larger proportion of Finnish respondents felt that the guidance received from the university was well-organized and informative.

However, there were notable differences in opinions among international respondents.

Specifically, graduates from other EU countries were less satisfied with the guidance provided by partnering organizations compared to their non-EU counterparts. A significant 25% of EU graduates reported dissatisfaction, in contrast to only 6% of non-EU students ($p < 0.001$).

Furthermore, the collaboration between the university and partnering organizations was perceived to be less well carried by those from other EU countries. One in five of them disagreed with the effectiveness of this collaboration, compared to one in ten non-EU respondents ($p < 0.05$).

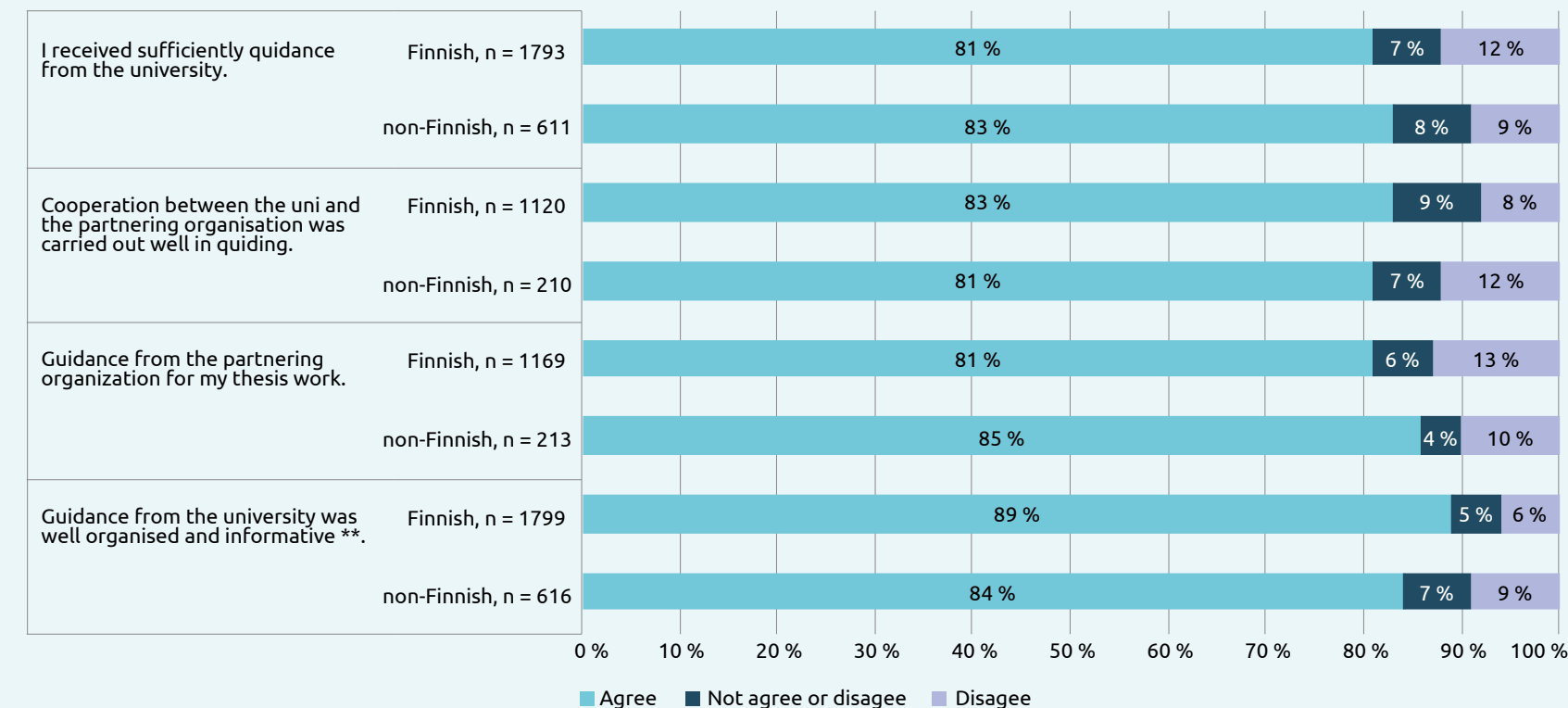


Figure 17: Statements of support and supervision during master's thesis

Information on job market and career planning

The results reveal notable differences in the satisfaction levels regarding the information received about the job market and career planning during the studies.

Nearly half of international graduates (48%) and Finnish respondents (43%) were satisfied with the information they received on the job market and career planning during the studies. However, a quarter of international respondents felt they had not received sufficient information or support, compared to only 15% of Finnish respondents ($p < 0.001$).

Among international respondents, opinions on sufficient support for career planning and information about the job market in their own field were related to their country of origin. While just over a quarter of graduates from non-EU countries felt they did not receive enough support and information, the corresponding proportion for recent graduates from other EU countries was 13%.

Conversely, nearly one in four of graduates with non-Finnish EU nationalities did not feel they needed information about the job market.

Overall, nearly one in six respondents were unsure of their opinion (see **Figure 18**).

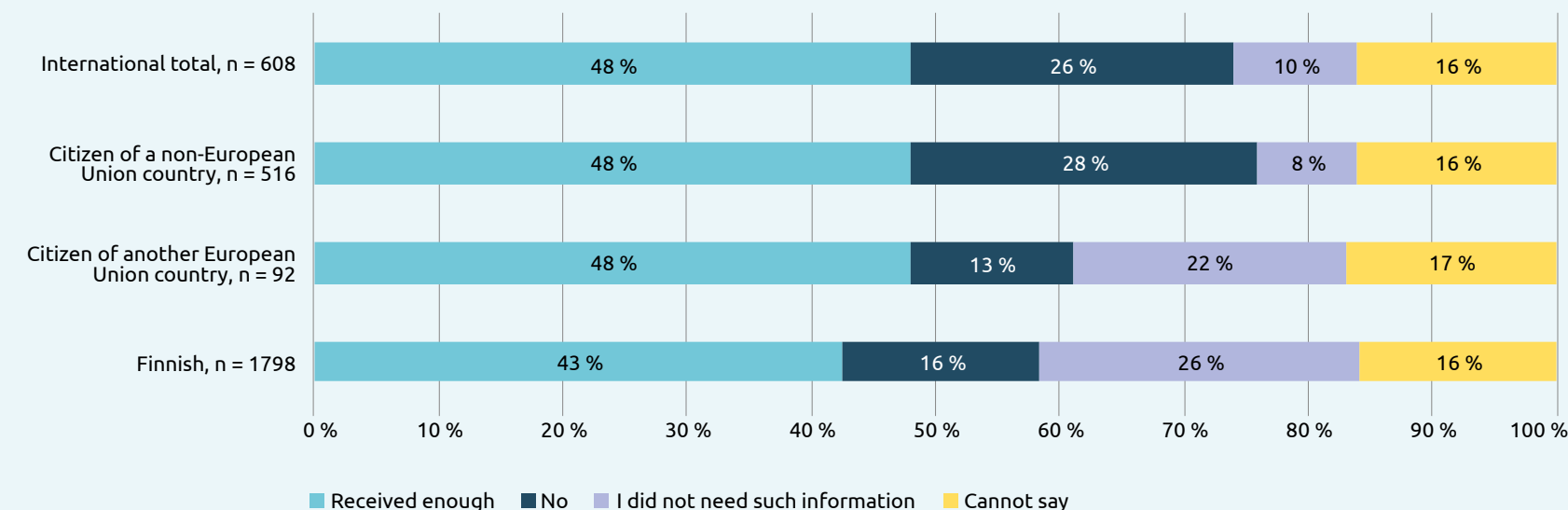


Figure 18: Support for career planning and information on job market in own field

Employment

Among Finnish respondents, nearly 80% stated that they already had a job or knew where they would be employed after graduation, compared to just over half of international graduates. Finnish graduates also more frequently had prior connections with their employers, either through working there during their studies or writing their master's thesis for the organization.

A closer examination of the employment situation revealed that the type of higher education institution prior to master's studies was significant for Finnish graduates. 90% of those from universities of applied sciences were employed, and the highest proportion of job seekers were those who graduated from the same university (21%). In contrast, the distributions were more even among international students.

The highest proportion of job seekers were graduates from Process & Materials Engineering (37%). Conversely, graduates from Industrial Management had a higher likelihood of having a job or a job offer (83%) compared to other fields.

However, there were no statistically significant differences between higher education institutions, even though the proportion of job seekers varied between 21% and 30%.

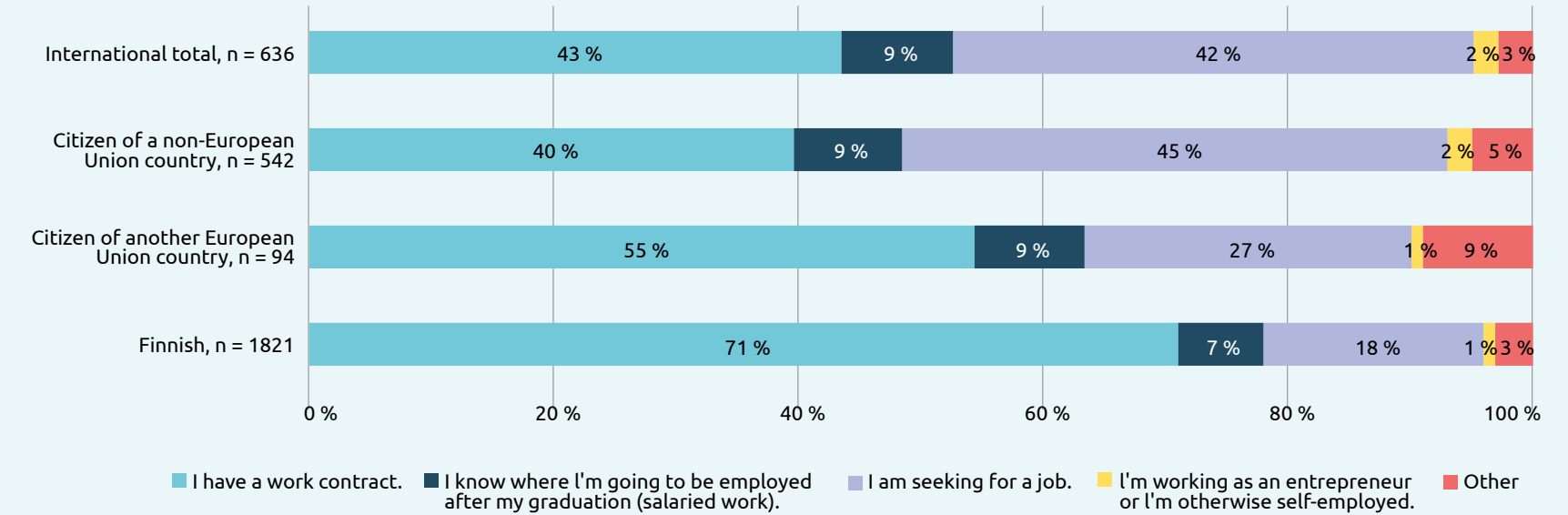


Figure 19: Situation at the time of graduation

Employment in 2020-2024

The five-year time series shows that the employment situation for both international and Finnish graduates in 2024 is slightly weaker compared to previous years (see Figure 21).

Examining the entire cohort of graduates in 2024, it can be observed that their employment situation is weaker than in previous years.

Currently, 74% of respondents are already employed or aware of forthcoming employment. The last time a lower figure was recorded was in 2017 (71%).

The proportion of job seekers is now 24%, with the last higher proportion recorded in 2016 (25%).

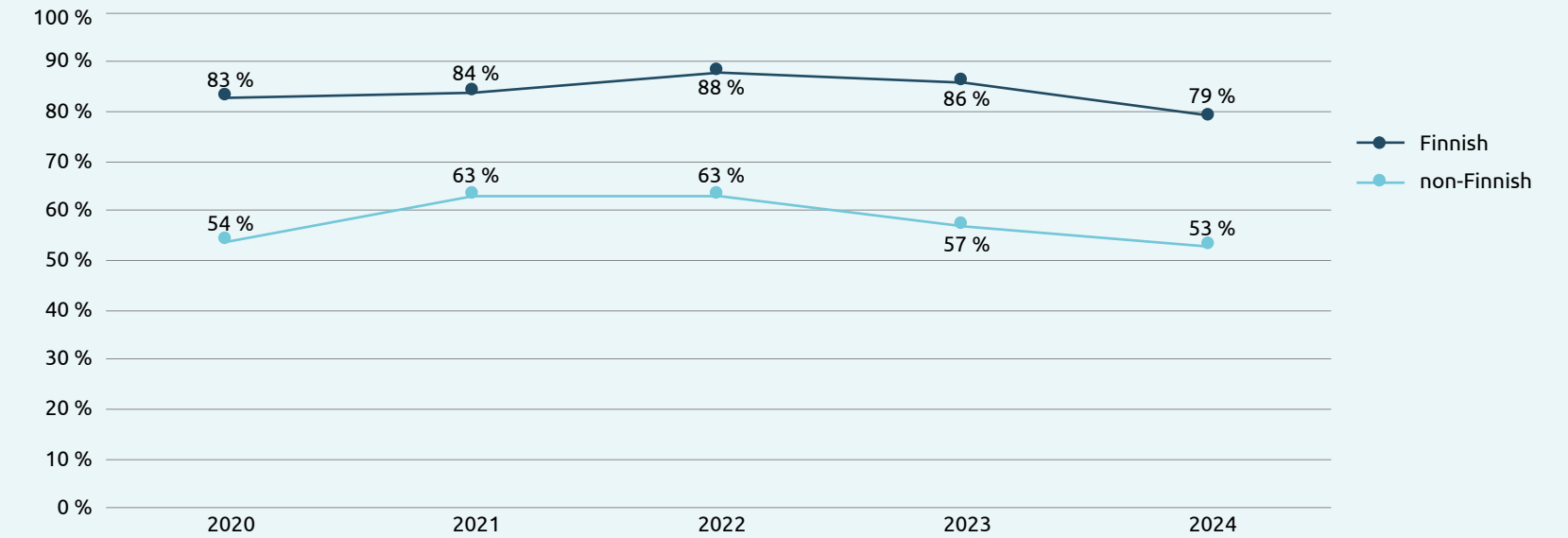


Figure 20: Proportion of respondents employed or aware of forthcoming employment, 2020-2024

Doctoral studies and previous relationship with the employer

Overall, 9% of employed respondents worked as a full-time doctoral candidate, and this was more common among international graduates than Finnish graduates ($p < 0,001$) (Figure 21.). There were no significant differences between graduates from EU and non-EU countries.

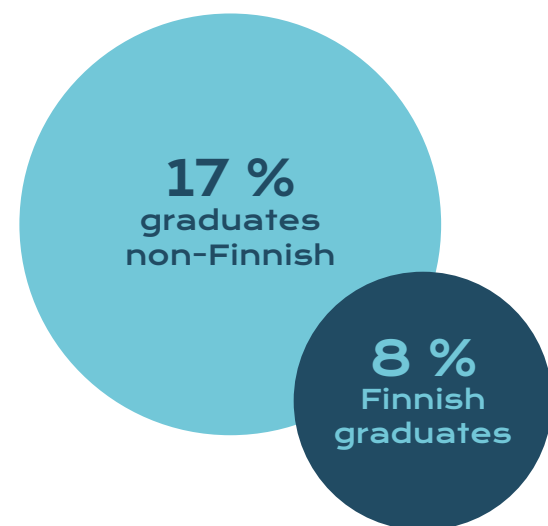


Figure 21: Doctoral studies

Quality of employment

One in three international graduates who worked as full-time doctoral candidates had no previous relationship with their current employer. In contrast, only one in ten Finnish graduates were in the same situation. Additionally, Finnish graduates more often had a previous relationship with their current employer, either through working there during their studies or writing a master's thesis for the organization. Only 13% of Finnish employed respondents had no prior relationship with their current employer, compared to 45% of international graduates.

The overall quality of employment was high. Among international respondents, 76% reported that their job corresponded very well or well to their field of education, compared to 74% of Finnish respondents. Among employed respondents from other EU countries, 86% felt that their job matched very well or well with their field of education, while 74% of those from non-EU countries shared this sentiment. Notably, 7% of respondents from non-EU countries felt that their job did not correspond at all to their field of education, whereas none from other EU countries and only a few Finnish felt the same.

Overall, 77% of all employed respondents indicated that their job demands corresponded well to their level of education. Both international graduates and Finnish respondents largely agreed on this point. The highest proportion of respondents in jobs that did not match their level of education were from non-EU countries, with 5% expressing this view.

For more information on employment status, see TEK web page.

www.tek.fi/graduate-survey

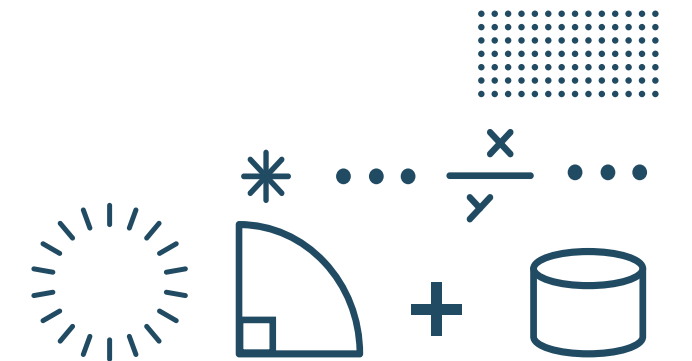


Satisfaction and future

Satisfaction with the studies

Reselection of the education

Future abroad or Finland?



Satisfaction and future

Satisfaction with the studies

Graduating academic engineers and architects were generally highly satisfied with their studies.

Around 80% of international graduates agreed with all the statements. The highest satisfaction was with the education received (84%) and the up-to-date content of the studies (84%). The highest dissatisfaction was with the statement “The competences I have developed in my education meet my expectations” (11%). (Figure 22.)

There were no significant differences between other EU and non-EU respondents or between Finnish and non-Finnish respondents when using three-category variables. Additionally, neither the previous higher education institution nor gender had a statistically significant association with satisfaction statements.

Overall, the results in 2024 are very similar to previous years.

I am satisfied with the education that I have received.

Research results from the field were applied to teaching.

Contents of the studies were up-to-date.

I have been satisfied with the teaching methods used.

The teaching has been, to a large extent, of good quality.

My education meets the set goals.

The competences I have developed in my education meet my expectations

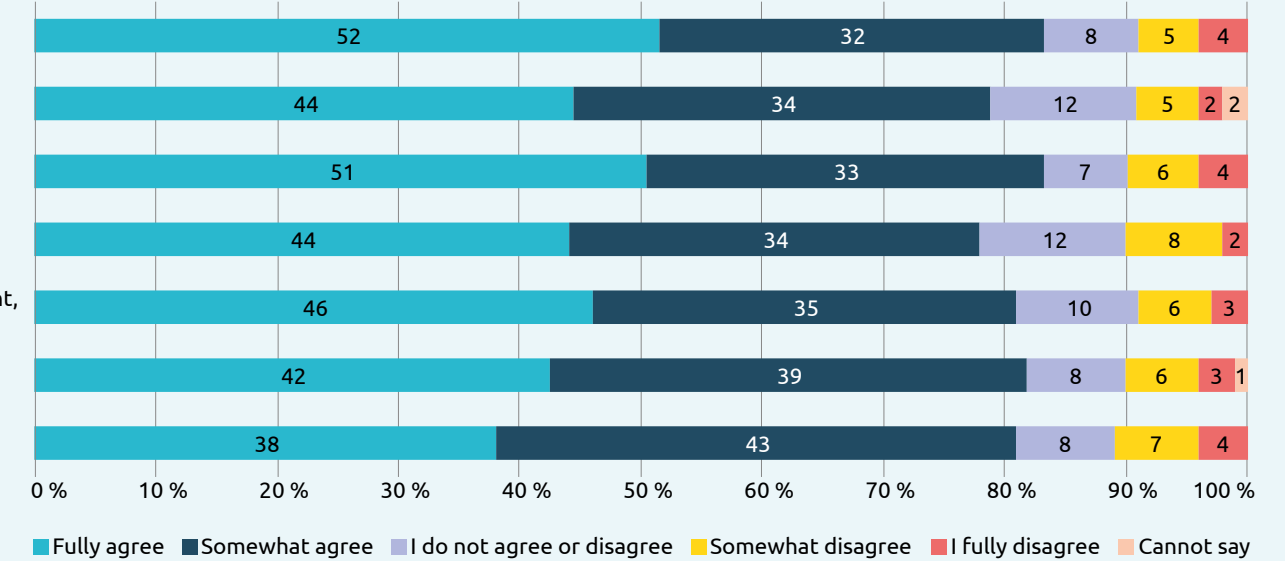


Figure 22: International graduates' satisfaction with the studies

Reselection of the education

Most international respondents, as well as Finnish respondents, would choose the same degree or programme / major again at the time of graduation. Around 12% would choose a different university degree program in the field of technology (see **Figure 23**).

International graduates would slightly more likely to choose another university education compared to Finnish graduates (12% vs. 6%, $p < 0.01$).

However, there are notable differences within the group of international respondents. Graduates from other EU countries were more likely to choose the same basic degree and degree program compared to graduates from outside the EU (83% vs. 72%). A higher proportion of graduates from non-EU countries would prefer to choose a different university education in a different field (12% vs. 1%, $p < 0.05$).

As seen in previous sections, the results in 2024 are very similar for both international and Finnish graduates compared to previous years.

An examination of all respondents together revealed that those most likely to make the same choice again were graduates from Industrial Management (85%) and Architecture (83%). In contrast, there were no statistically significant differences between universities. Similarly, the location of the previous degree was not associated with the likelihood of reselection of education.

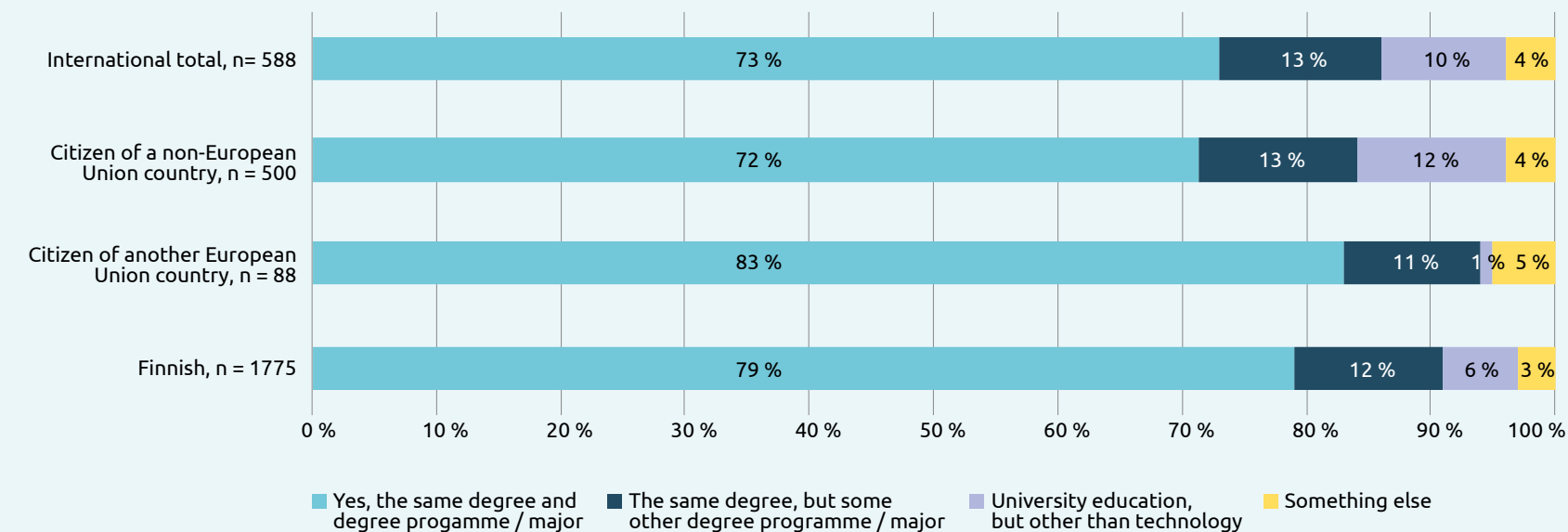


Figure 23: Reselection of education by nationality

Future abroad or Finland?

Despite the high level of satisfaction with their studies in Finland, two-thirds of respondents from other EU countries considered it likely that they would work outside Finland within five years of graduating.

Similarly, 40% of respondents from non-EU countries considered leaving Finland likely. However, a larger proportion of non-EU respondents were uncertain about this statement compared to their EU counterparts ($p < 0.001$).

Overall, the likelihood of international graduates remaining in Finland was significantly lower than that of Finnish graduates, which is understandable for various reasons ($p < 0.001$). Notably, 16% of Finnish respondents also considered working abroad likely.

When examining the likelihood of working abroad as a three-category variable (likely, possibly, unlikely), it was observed that the employment situation did not produce differences among Finnish respondents. In contrast, among international respondents, those already employed were more likely to consider working elsewhere as unlikely compared to those still seeking employment (22% vs. 13%). For job seekers, working elsewhere was more possible than for those already employed (38% vs. 29%, $p < 0.05$).

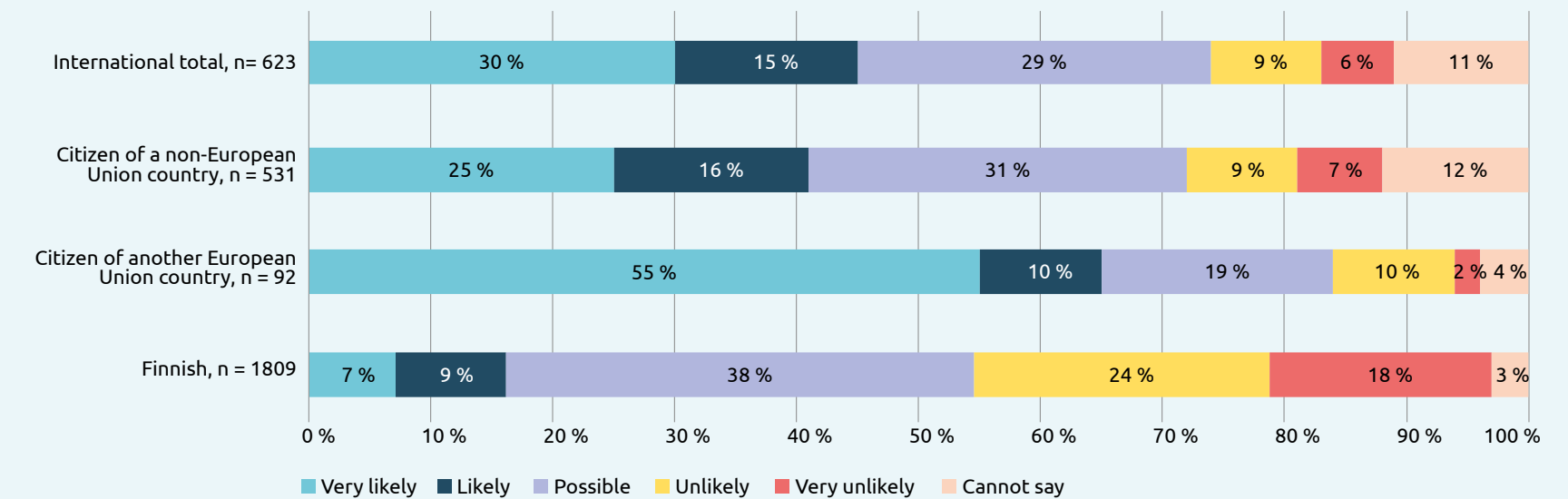
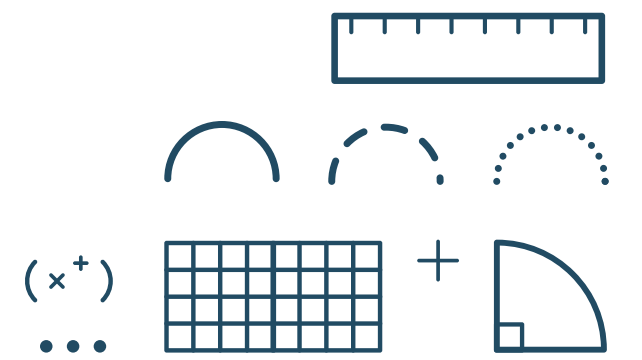


Figure 24: Likelihood to working abroad within 5 years graduation by nationality



Conclusion



Conclusion

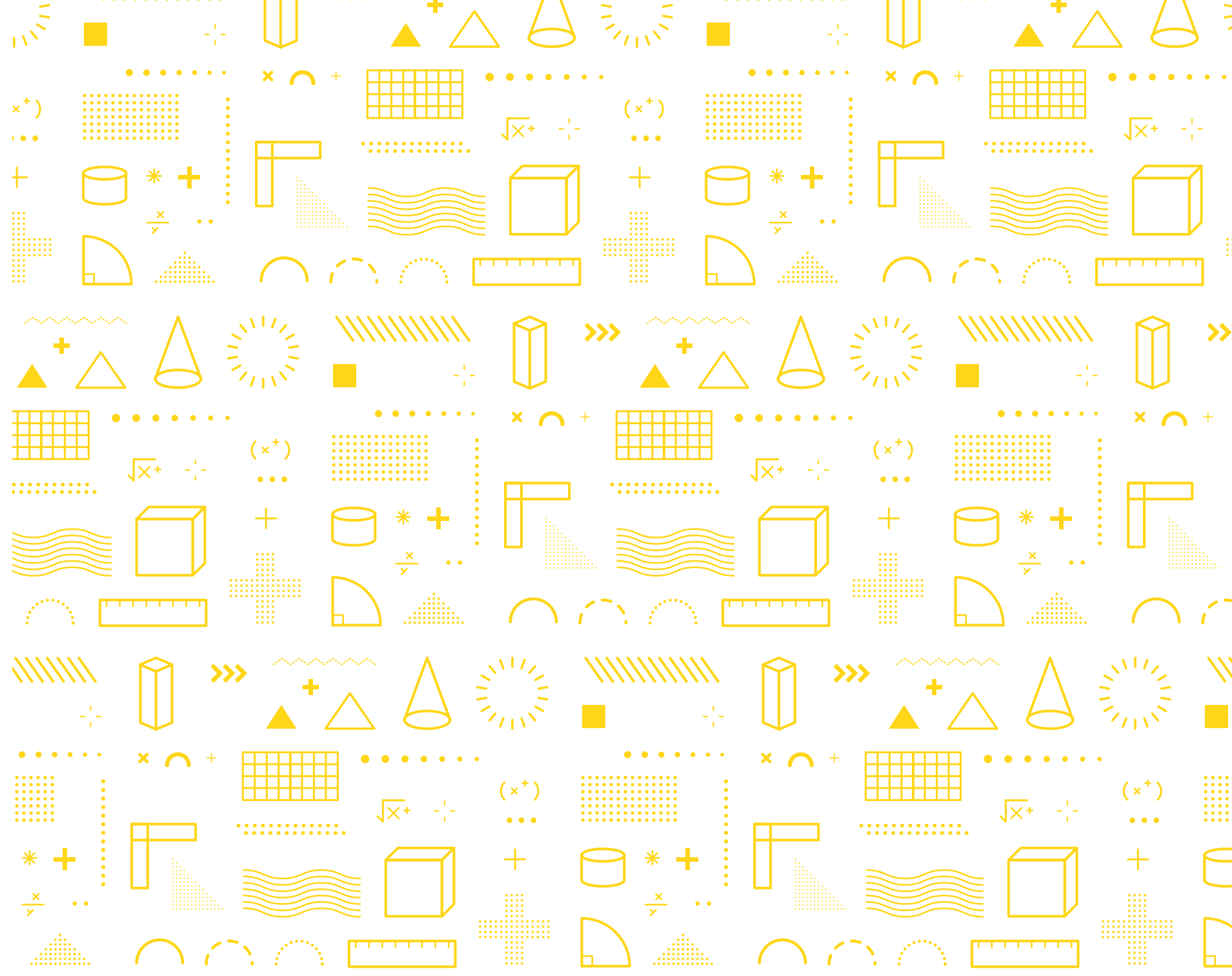
The TEK Graduate Survey 2024 provides valuable insights into the experiences of international and Finnish graduates. While international graduates generally reported positive experiences with university support and integration, they faced significant challenges in employment and thesis-related financial support. The survey highlights the need for improved support systems to enhance the well-being of graduates, as many experienced high levels of stress and poor sleep due to study-related reasons.

Employment rates for international graduates were lower compared to Finnish graduates, with other EU graduates having better employment prospects than non-EU graduates. The overall employment rate was also lower than in previous years, indicating a need for targeted interventions to improve job opportunities for recent graduates. Enhancing career counselling, networking events, and partnerships with local businesses could help address this issue.

The survey underscores the necessity for enhanced support mechanisms for international graduates, particularly in facilitating their transition to the Finnish labour market and ensuring equitable financial support for thesis work.

Addressing the retention issue is vital, as a significant proportion of international graduates, especially from EU countries, do not see Finland as their long-term workplace within five years of graduation. Strengthening initiatives to integrate international students into the university community and broader society, along with providing post-graduation support and mentorship programs, can improve retention rates.

Supporting international graduates is crucial for cultivating a more inclusive and dynamic workforce in Finland, which can drive competitiveness and cultural enrichment. Continued efforts to integrate international students into both the university community and the broader society are essential to ensure they feel welcomed and valued, ultimately contributing to the overall prosperity and cohesion of Finnish society.





TEK Graduate Survey 2024

Academic Engineers and Architects in Finland TEK and Finnish universities in technology together carry out a yearly feedback survey for graduated academic engineers and architects.

The feedback and results are utilized in developing university education and influencing the educational policy making. In 2024, the focus was particularly on examining the experiences and perspectives of international graduates regarding their time studying in Finland.

More information:

Virve Murto

virve.murto@tek.fi

www.tek.fi/graduate-survey

