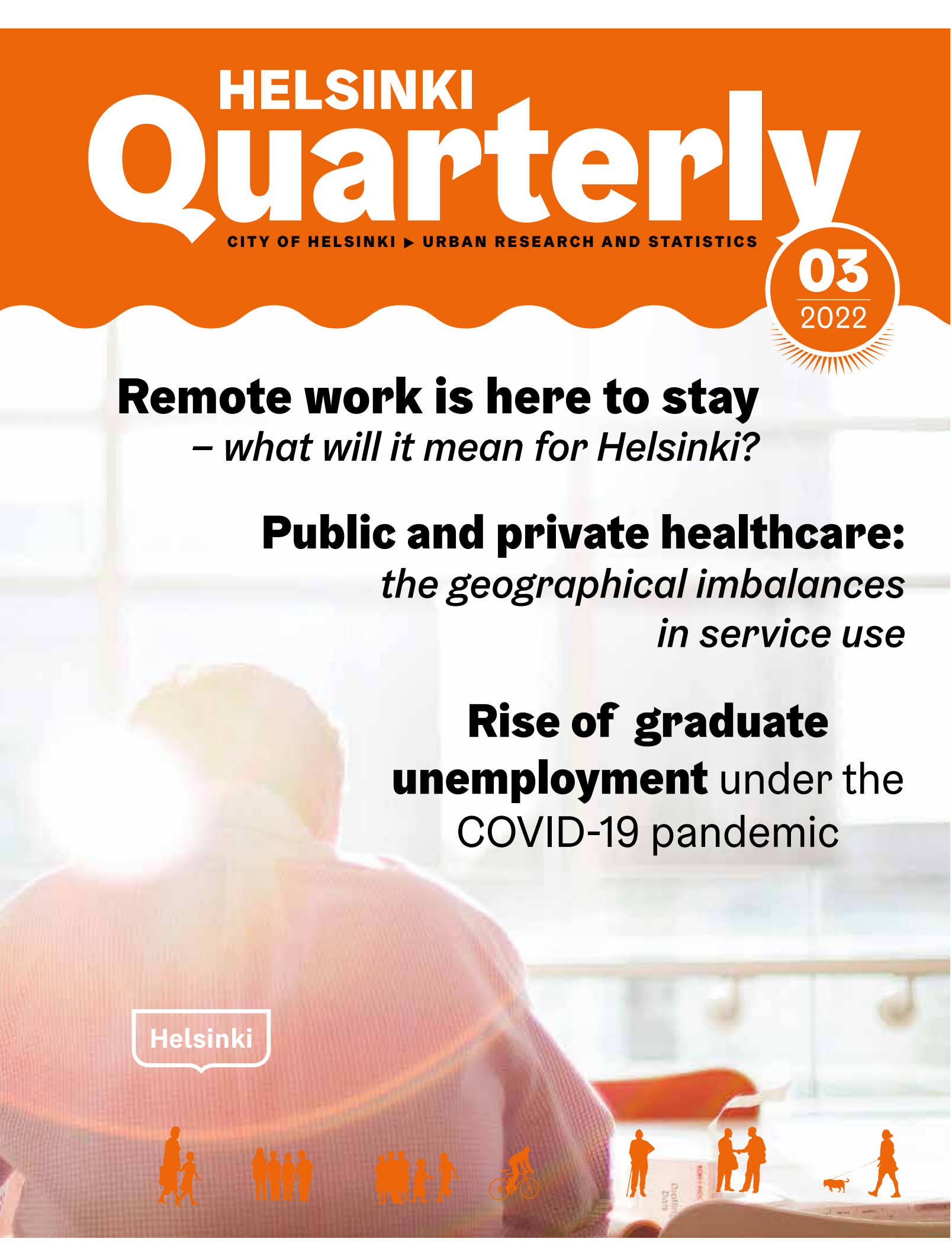
HELSINKI
Quarterly
CITY OF HELSINKI ▸ URBAN RESEARCH AND STATISTICS
03
2022

Remote work is here to stay
– what will it mean for Helsinki?

Public and private healthcare:
the geographical imbalances in service use

Rise of graduate unemployment under the COVID-19 pandemic



Helsinki

HELSINKI Quarterly

CITY OF HELSINKI ▶ URBAN RESEARCH AND STATISTICS

03 2022

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UNSPLASH / CARLOS SANTOS

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2022

has been another year dominated by events of an international magnitude. In the English issues of Helsinki Quarterly in the previous two years, these editorials have focussed on the development and impacts of the COVID-19 crisis in Helsinki and Finland. While the coronavirus is still with us, though perhaps much less deadly than before, Europe has struggled with new crises. Russia's war in Ukraine has led to momentous changes in the continent's defence and security landscape as well as an influx of Ukrainian refugees into the EU. The threat of energy shortages is among the many ways the conflict can affect people's daily lives anywhere.

POLLS CARRIED out bi-annually by our Urban Research and Statistics unit show Helsinki residents, like Finns in general, have overwhelmingly positive attitudes to assistance to Ukraine and Ukrainians. In a barometer survey earlier this year, 96 per cent were in favour of Finnish support and protection to Ukrainian refugees, while four in five said employers in Finland should strive to offer them jobs where possible. The majority of the respondents had also donated to charities supporting the Ukrainian cause.

AT THE time of writing, Finland had received over 45,000 applications from Ukrainian citizens for temporary protection. An estimated 2,500 to 3,000 Ukrainians are currently staying in Helsinki under this status. Their weekly arrivals hit a high point in the second half of March and has since continued at a slow but steady pace. The City of Helsinki provides services to Ukrainian families, including day care and education. The coming months and years will determine how the war and the situation in Ukraine will affect the city in a longer term.

THE ARTICLES in the present issue of Helsinki Quarterly depict a city that is adjusting to life after the coronavirus crisis. Henrik Lönnqvist and Minna Salorinne assess the impact of remote working on Helsinki's labour market and work culture. Jenni Erjansola compares the employment situation of recent graduates before and during the COVID crisis.

HELSINKI IS preparing for organisational changes as the national social and health care reform is implemented at the start of 2023. Monitoring the well-being of residents will remain a key duty for Finnish cities and municipalities. Tommi Sulander, Hanna Ahlgren-Leinvuo and Juha Nyman analyse the differences in the use of public and private health care services across the districts of Helsinki. Vesa Keskinen looks at perceived safety in the city's neighbourhoods, while Suvi Määttä's article focuses on the well-being of families with babies. ■

TIMO CANTELL
Director, Urban Research and Statistics
City of Helsinki

Remote work continues – but for whom and where?

HENRIK LÖNNQVIST & MINNA SALORINNE

The share of people working remotely has been growing in Finland for a long time, and the effects of the coronavirus pandemic have further accelerated the change. However, remote work is not suitable for all occupations, and more extensive remote work can be expected to remain the norm mostly with specific types of tasks, such as knowledge work requiring high-level expertise or customer service conducted over the telephone. An estimated 45 per cent of jobs in Helsinki are well-suited to remote work, and these jobs are concentrated in the city centre area and its surroundings. Helsinki has a significantly higher number of jobs suitable for remote work than Finland on average.

HELSINKI PARTNERS / MAREK SABOGAL

As a result of the coronavirus pandemic, the number of people working remotely rapidly soared in Finland in the spring of 2020. During the peak period, as many as one million Finns worked remotely (Eurofound 2021). Forced by the circumstances, remote work was also applied in occupations and tasks that are not necessarily thought to be very well suited to it. However, the instant surge of remote work due to the coronavirus pandemic can easily overshadow the fact that remote work has been strongly increasing in Finland since the 1990s – and particularly over the past decade. In 1997, four per cent of the working population occasionally engaged in remote work, but by 2013 the share had increased to 27 per cent. By 2019, the share was as high as 37 per cent. That same year, 15 per cent of the working population worked remotely on a weekly (or full-time) basis. (Sutela et al. 2019, Keyriläinen 2020).

EVEN IF the trend of record-high numbers of remote workers were not to continue as such after the coronavirus crisis, the pandemic is still likely to have accelerated the increase of remote work under normal circumstances. Whereas the attitude towards remote work used to be even partly restrictive, the situation in the post-pandemic world may be entirely different.

REMOTE WORK has its benefits, and many people are looking to work remotely more than before as society returns to normal after the pandemic. According to a survey conducted in Finland, 90 per cent of those who worked remotely during the pandemic wish to do at least a quarter of their work remotely in post-pandemic times (Sutela 2021). The opportunity to work remotely may even become a competitive advantage for employers. At the same time, it should be noted that remote work can take place anywhere, including abroad. For this reason, the debate on the increase of remote work is connected to the wider discussion on the changes in the global division of labour.

THIS ARTICLE examines the numbers and locations of jobs suitable for remote work particularly in Helsinki. In the final part of the article, the situation in Helsinki is also compared to that of the rest of the Helsinki Metropolitan area and other large urban areas in Finland. We aim to determine which are the occupations where employees can perform their work regardless of location and how large a share of the working population this actually concerns. We will also highlight perspectives presented in research literature on the impacts of the increasing popularity of remote work on urban development, among other things.

Effects of increased remote work at home and in the office

Why has the share of people working remotely been consistently on the rise for so long? One likely reason is that the ways of working have changed and the technologies enabling remote work have advanced. Alongside the increased opportunities for remote work, there must also be factors that make remote work more attractive. From the employee's perspective, remote work saves time and money as there are fewer commutes. Without the limitations set by commuting, one may also have more options as to where and how to live. Even occasional longer commutes are not necessarily an issue, particularly if the travel time can be spent working. (Kuisma & Sauri 2021, Sweco 2021)

IF THE working conditions at home are in order, remote work can provide a more peaceful environment for working and thus increase work efficiency. Remote work can also facilitate coordinating family life with working. However, remote work also includes factors that make it less appealing. In households with more than one remote worker, there may simply not be enough space. As remote work becomes increasingly common, the support from the community in the workplace may decrease and introducing new employees to their work tasks and work community may become more complicated. Similarly, the distinction between working hours and leisure time may blur. Not everyone wants to take their work home in the first place, even if the circumstances and the nature of the work would allow it. (Kuisma & Sauri 2021, Sutela & Pärnänen 2021)

FROM THE employer's perspective, the increasing popularity of remote work and the changing ways of working have been reflected for quite some time in office space planning, among other things. Cost savings can be made through the decreasing need for office space. However, the growing popularity of remote work is also challenging the methods of managing work and developing work communities. The workplace community may even be divided into two groups: an 'inner circle' working at the office and those in remote work. Group work and informal interaction – learning new things and coming up with ideas together – are important ways of developing operations, and organising these in the world of remote work can be more challenging, although probably not impossible.

There is a risk that the workplace community can be eroded and that some employees' problems go unnoticed; at worst, this can lead to seclusion and detachment from the community.

Wider effects of increased remote work

In addition to its immediate impact on individuals and the workplace, the increased popularity of remote work may have wider-reaching effects. In terms of the office space market, the change was already under way before the coronavirus pandemic. The requirements for personal workspace in offices had already decreased with the increase in remote and mobile work and the decrease of the time spent at the office. The growing popularity of remote work reduces the need for offices, in general, and creates new kinds of requirements particularly for office spaces. Modern and centrally located premises will find occupants, but a variety of other spaces – offices in particular – are left vacant. Remote work is also likely to impact the operating possibilities of trades and industries dependent on the demand created by office workers (Lukas et al. 2020). To some extent, remote work can lead to increased demand for services in areas with large numbers of remote workers.

IN THE longer term, the increase of remote work can influence where employees choose to live. Even though city centre locations are generally likely to remain appealing, the popularity of remote work may create renewed interest in suburban areas, smaller towns and, to some extent, also sparsely populated areas. Increased remote work leads to fewer commutes, but longer ones on average. This may both reduce (fewer commutes) and increase (longer commutes) traffic volume. (Metsäranta et al. 2021). In urban environments, the demand for public transport is naturally an important question as remote work becomes increasingly common. The coronavirus pandemic substantially reduced the use of public transport, leading to significant problems in its financing.

EVEN THOUGH remote work opportunities provide more leeway for employees to choose their location, jobs in cities will most likely be concentrated – more strongly than before – in the best locations that are easy to reach. As a result of the so-called agglomeration benefits that boost productivity, the largest and most productive cities will continue to hold all the trump cards when companies choose where to establish themselves, even with the increase of remote work. This is despite the fact that we now have more choice as to where we want to work. (Delventhal et al. 2020, Lennox 2020). Since many remote workers live in cities, various communal workspaces will probably continue to become more common in urban environments.

THE QUESTION has been raised at times as to how the increased popularity of remote work will impact the development of productivity. Previous research literature has suggested that face-to-face meetings are more effective in building social networks, trust and social capital, which in turn facilitate complicated processes and projects that require a high level of expertise and creativity (Florida et al. 2020). Random encounters and informal interaction are important for the development of productivity. However, benefits can also be derived from the increasing popularity of remote work. Therefore, the relevant question for the development of productivity is the optimal amount of remote work: neither too little nor too much (e.g. Behrens et al. 2021). In practice, this would mean a hybrid model combining the best aspects of remote and on-site work.

Statistical analysis of jobs suitable for remote work

Calculation model

The statistical analysis is based on the classification by Dingel and Neiman (2020) on occupations that are well-suited to remote work. Dingel and Neiman created their model based on an occupation classification used in the United States and provided the opportunity to convert it to the occupation classification utilised in Europe and Finland. (https://www2.tilastokeskus.fi/en/luokitukset/ammatti/)

OCCUPATIONS SUITABLE for remote work are not dependent on location and can be performed outside the workplace, for example, at home, usually with the help of a computer or a telephone. They usually involve knowledge work requiring high-level expertise or customer service over the telephone. In this article, the division of occupations into remote and on-site work is almost identical to Dingel and Neiman's model. With regard to some occupations, the present authors exercised their discretion as to how well the work can be completed remotely or on-site in Finnish society. These occupations are part of the welfare services sector and were classified as on-site work.

> *In practice, this would mean a **hybrid model** combining the best aspects of remote and on-site work.*

Material

The research material used in the present analysis comprised a set of data prepared specifically by Statistics Finland on job numbers by occupation group[1]. The baseline describes the numbers of jobs before the coronavirus pandemic. The statistical analysis was carried out using register-based employment statistics that assign four-digit codes to all the occupations classified. The available material covered Finland, the Helsinki Metropolitan Area (by municipality), the Helsinki Region and Greater Helsinki (sub-region) as well as the four Finnish sub-regions with the next largest numbers of jobs: the Tampere, Turku, Oulu and Lahti sub-regions.

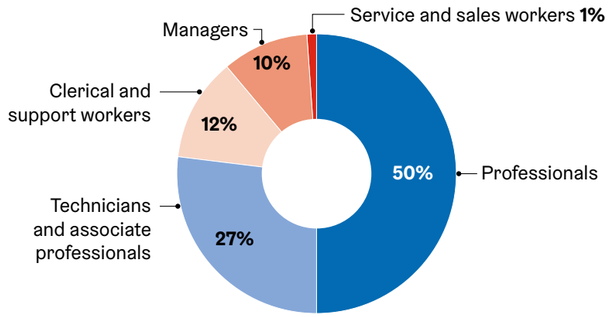
1) The article focuses on Helsinki. At the end of 2018, Helsinki had a total of 409,200 jobs. Our analysis covered 388,500 jobs, since the occupation group of soldiers (1,300 jobs) was excluded altogether, in accordance with the original model. Jobs with no specified occupation group were also excluded from the calculation model. The number of such jobs in Helsinki was close to 20,000. The same delineations were also applied to the analysis of other regions. At the end of 2018, there were a total of 2,373,700 jobs in Finland, of which 2,275,900 were selected for the model.

Occupations suitable for remote work

The majority of jobs suited to remote work consist of knowledge work requiring high-level expertise. Half of all remote jobs in Helsinki fall within the occupation group of professionals. Slightly more than a quarter are in the group 'technicians and associate professionals'. Clerical and support workers and managers attribute to roughly 10 per cent each. Only one per cent of service and sales workers' tasks are suitable for remote work.

FIGURE 1.

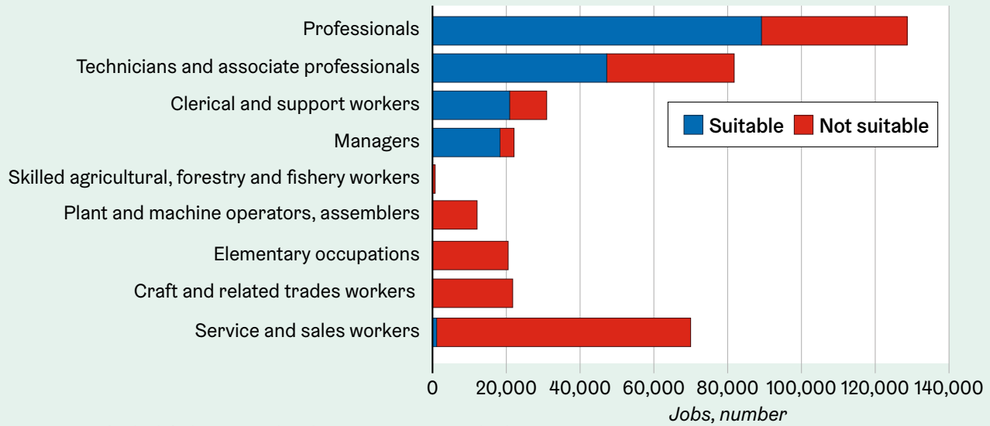
Distribution of jobs suitable for remote work in Helsinki by occupational group.



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland.

FIGURE 2.

All jobs in Helsinki and an estimate of their suitability for remote work in 2018/2019.



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland.

How well is remote work suited to different occupations?

There is considerable variation within occupational groups as to how well they are suited to remote work. Four out of five managers in Helsinki could work remotely if needed, and the same applies to more than two-thirds of professionals. Professionals make up an important occupational group in Helsinki and it covers a wide variety of occupations. In this group, the occupations where remote work is typically easy to arrange include application designers and architects, journalists, and specialist experts in administration and trade development, advertisement and marketing, accounting, management and organisation development. Experts in education, social services and health care, such as teachers, doctors and social workers, mainly engage in on-site work.

TWO-THIRDS OF the jobs of clerical and support work in Helsinki can be performed regardless of location. The most common occupations in this group are general secretaries, office assistants, office workers in financing, financial administration, insurance and transport, as well as statisticians and info desk staff.

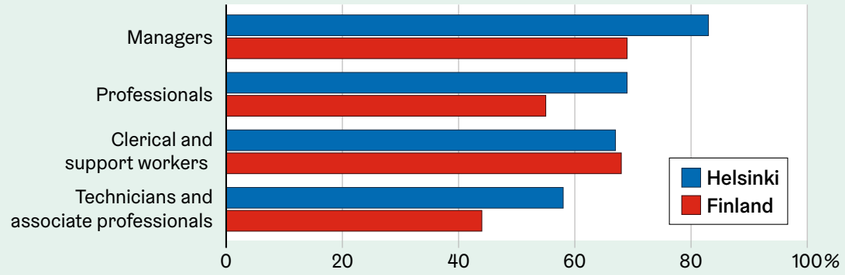
THREE OUT of five jobs of technicians and associate professionals are well-suited to remote work. The most typical of these occupations are sales representatives, bookkeeping and accounting experts, management secretaries, department secretaries, real estate agents, property managers, legal aids and experts in organisation development. The social and health care jobs in this group, such as nurses and social instructors, are primarily classified as on-site work.

AS A rule, remote work is not currently suited to other occupational groups requiring physical presence and/or on-site work performance, such as service and sales work (including hairdressers, carers and sales clerks) as well as construction, repair and production workers, and process and transport workers. In the occupational group for other workers, the job titles with the largest numbers of jobs include cleaners, cargo handlers and warehouse workers, and assisting kitchen workers. All the jobs listed above mostly require physical presence at the workplace.

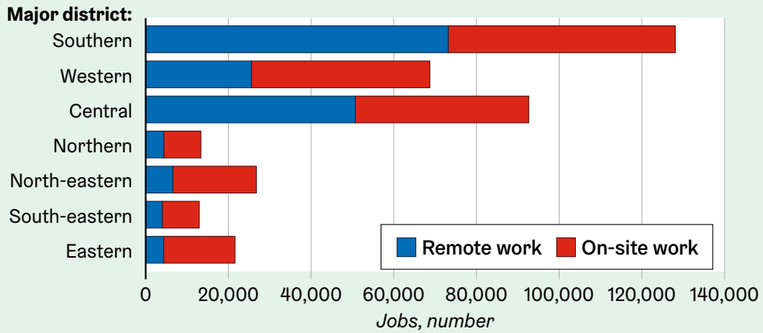
FOR FINLAND as a whole, the shares for occupational groups suitable for remote work come in a slightly different order compared to Helsinki. Moreover, the proportions are smaller across the board. At the national level, 69 per cent of managers could work remotely (compared to 83% in Helsinki). This can be explained by differences in industrial structures and job titles: for example, our model regards the tasks of production managers in industry and construction, childcare managers and restaurant managers as unsuited to remote work, and the share of these tasks is much higher at national level than in Helsinki. The same applies to professionals: at national level (55% suited to remote work, compared to 69% in Helsinki), more of them work in the manufacturing sector in tasks that require more on-site work. In the occupational group of clerical and support workers, remote work is possible for two out of three workers both on a national level and in Helsinki. The number of employees working in this occupational group has long been in decline due to increasing digitalisation and automation.

FIGURE 3.

Proportion of jobs suitable for remote work in different occupational groups in Helsinki and Finland.



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland.



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland.

FIGURE 4. **An estimate of the suitability of jobs for remote or on-site work in Helsinki by major district (2018).**

Remote work opportunities in Helsinki by area

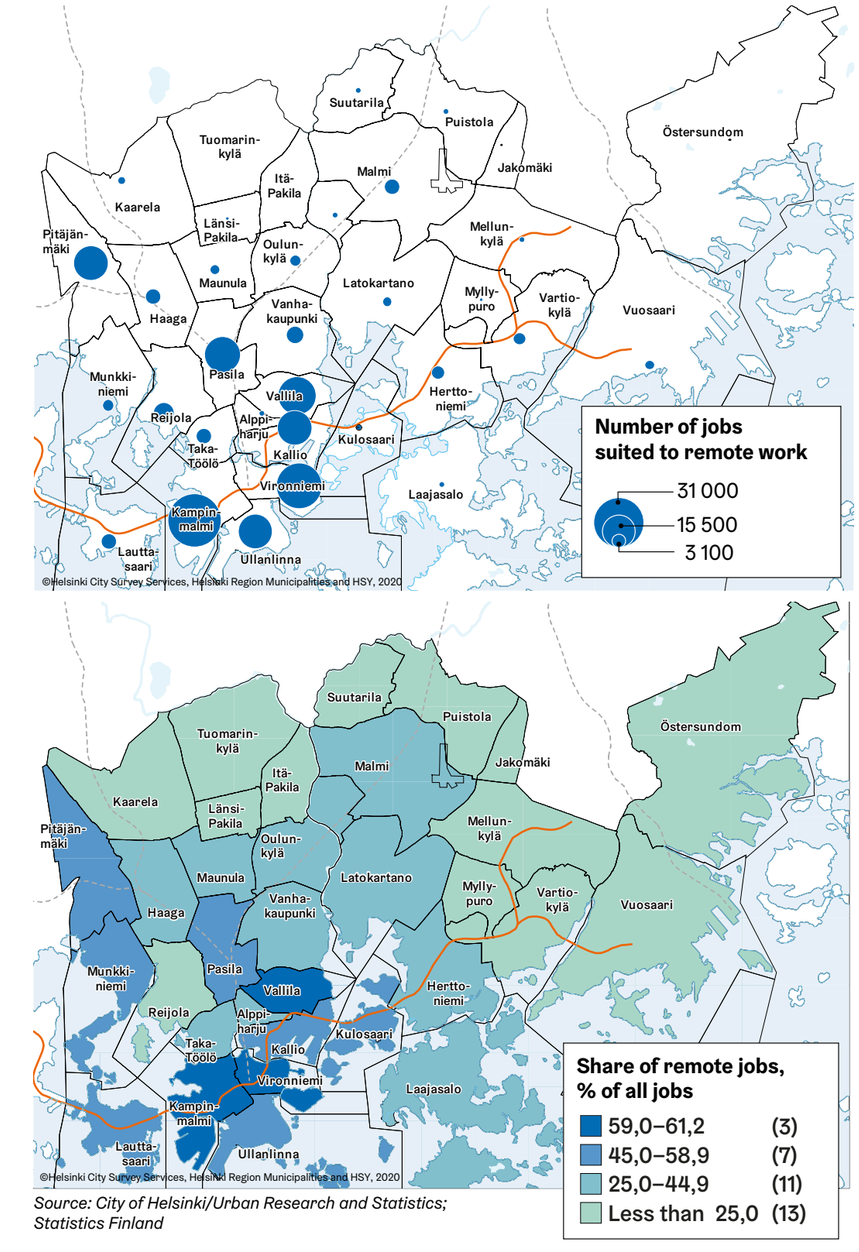
Based on Dingel and Neiman's calculation model, we estimate that 45 per cent of jobs in Helsinki are well-suited to remote work. In terms of numbers, this translates to roughly 177,000 jobs. We will next examine where the jobs suited to remote work are located within Helsinki's job concentrations. In the same context, we will present an estimate of what the situation in Helsinki would look like were there to be a transition to multi-location hybrid work instead of full-time remote work. It is likely that in future, an increasing number of people will alternate between on-site and remote work, spending, for example, 2–3 days a week at the office. We will provide a calculation of how many employees would be physically absent from workplaces if 70 or 50 per cent of employees were to work remotely.

IN HELSINKI, jobs suitable for remote work are clearly concentrated in the city centre and a few other office work areas. In principle, the Southern, Central and Western Major Districts – three of Helsinki's eight major districts – hold 75 per cent of all jobs in Helsinki. The share of jobs suited to remote work is even higher in these areas than their share of all jobs in Helsinki; in total, these three major districts cover 85 per cent of all jobs suitable for remote work in the city.

ONE-THIRD OF all jobs in Helsinki are located in the Southern Major District (including the districts of Kampinmalmi, Vironniemi and Ullanlinna). The share of jobs suitable for remote work is even higher at 41 per cent of all such jobs in the city. More than 73,000 of those employed in workplaces in the Southern Major District could do "location-neutral" work – this corresponds to 57 per cent of all jobs in the major district.

THE NUMBER of jobs suitable for remote work in the Central Major District (including Vallila, Pasila and Kallio) is more than 50,000, making for 55 per cent of all jobs in this major district and nearly one-third of all jobs suitable for remote work in Helsinki. The Western Major District (including Pitäjänmäki and Reijola) has 25,000 jobs suited to remote work, which is 37 per cent of all jobs in this major district and 14 per cent of all jobs suited to remote work in Helsinki.

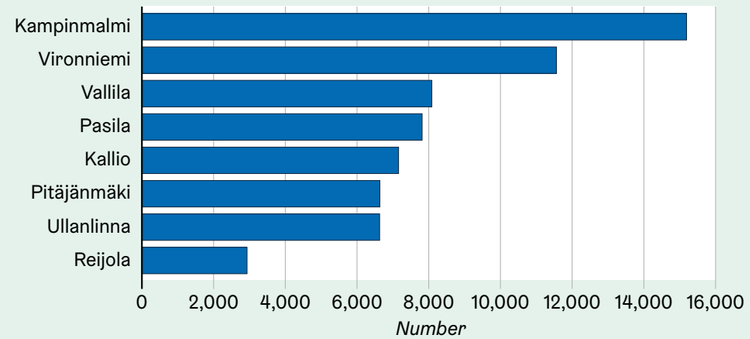
SLIGHTLY LESS than one-third of all jobs in the Northern Major District (including Oulunkylä and Maunula) and South-eastern Major District (including Herttoniemi) are well suited to remote work. However, the total numbers of jobs in these areas are so low that their shares of the jobs suited to remote work in all of Helsinki remain at just a couple of percentages. The share of jobs suitable for remote work is one-quarter of all jobs in the North-eastern Major District (including Malmi and Latokartano) and one-fifth in the Eastern Major District (including Itäkeskus and Vuosaari).



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland

FIGURE 5.

The location of jobs suitable for remote work in Helsinki by district (numbers and proportion, %, of all jobs in the area).



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland.

FIGURE 6. **Numbers of remote workers by district when 50 per cent of the jobs suited to remote work are performed remotely (districts with largest numbers).**

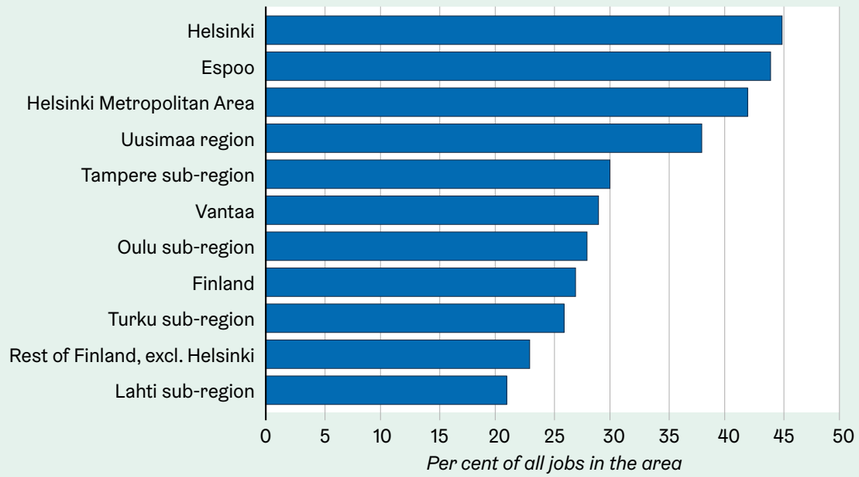
Post-pandemic scenarios for the frequency of remote work – 70 or 50 per cent

As a result of the coronavirus pandemic, the opportunities and capabilities of organisations and individuals to engage in remote work have substantially increased. In practice, many will perform part of their work tasks remotely and part in the office. Multi-location or hybrid work can mean, for example, that an employee spends two days a week in the workplace and three days working at home (or elsewhere, such as their second home). As was mentioned above, our calculation model shows that there are in total 177,000 jobs suitable for remote work in Helsinki. If 70 per cent of these were done as remote work, this would amount to a total of 124,000 jobs. If half of the jobs were done as remote work, that would equal roughly 88,000 Helsinki jobs. At district level, this means that the number of employees commuting to Kamppi, for example, would decrease by 15,000 compared to a situation where all employees would always be physically present in the workplace. In another city-centre district, Vironniemi, the number of employees would decrease by 11,500 persons, and in Vallila and Pasila by roughly 8,000 persons. The districts of Kallio, Pitäjänmäki and Ullanlinna would lose 7,000 employees, while the number of employees in Reijola would fall by 3,000 from the current level. In other districts, the decreases would remain below 2,000 persons.

ASSUMING THAT the working hours of all the employees transitioning to remote work take place within traditional office hours (such as between 7 am and 6 pm), the abovementioned districts would have significantly fewer lunch-time diners and customers for brick-and-mortar shops and other local services. If the employees' physical presence in the office is spread evenly over all weekdays, the need for physical office space will also decrease. That said, many organisations had already started to modify their workspaces into more flexible multipurpose spaces before the coronavirus pandemic. Correspondingly, the size of the daytime population and partly also the demand for services would increase in areas where remote workers live.

Remote work opportunities in the employment areas of major Finnish cities

In the early part of the coronavirus pandemic, Finland, together with the Netherlands, Belgium and Ireland, was among the top European countries in terms of the share of remote work. The proportion of those working at home was as high as 59 per cent in Finland. In total, roughly one million Finns worked remotely (Eurofound 2021).



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland.

FIGURE 7. **Jobs suited to remote work, as shares of all jobs in the area (Helsinki Metropolitan Area, Uusimaa, the sub-regions of Lahti, Tampere, Turku and Oulu, and all Finland).**

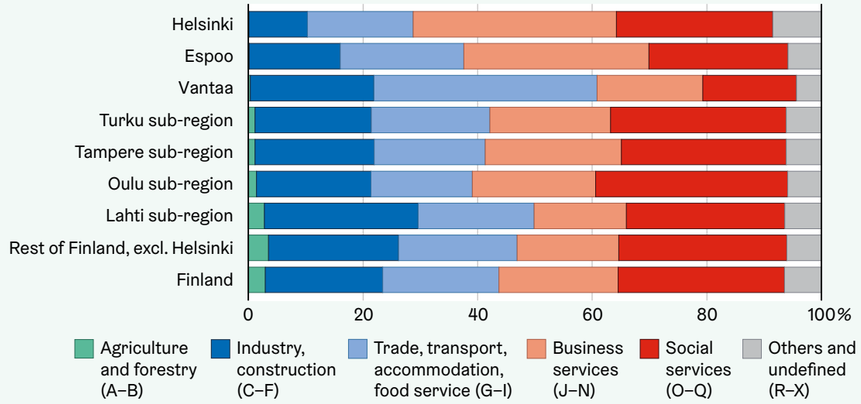
THE RESULTS of the calculation model based on occupational classification used in this article showed that Finland has a total of 618,000 jobs suitable for remote work, accounting for 27 per cent of all jobs in the country.[2]

THE SHARE was considerably higher in the Helsinki Metropolitan Area: the calculation model indicated the number of jobs suited to remote work to be 263,000. As stated above, 177,000 jobs in Helsinki are suited to remote work, accounting for 45 per cent of all jobs in the city. The number of jobs suited to remote work in Espoo was 52,000 and in Vantaa, 34,000.

THE INDUSTRIAL structure of the jobs in each geographical area and the occupational structure within each sector determine the proportion of jobs in that area suited to remote work. The share of the manufacturing sector is lower in Helsinki than in the rest of the country, and business services are heavily concentrated in Helsinki and Espoo. In Espoo, which is similar to Helsinki in terms of its economic structure, the share of remote jobs is 44 per cent. However, in Vantaa, the share is clearly lower at 29 per cent. Trade and transport, requiring physical on-site work, are prominent in the Vantaa industrial structure. For all the jobs in the Helsinki Metropolitan Area, 42 per cent and 38 per cent of the jobs in Uusimaa lend themselves to remote work. In other parts of the country, the share was 23 per cent.

IN THE Tampere sub-region, jobs suited to remote work accounted for 30 per cent of all jobs in the area, while the share of the Oulu sub-region stood at 28 per cent and that of the Turku sub-region at 26 per cent. In these sub-regions, the shares of manufacturing and social services jobs requiring on-site work are higher than in Helsinki. In the Lahti sub-region, the proportion of jobs suitable for remote work was as low as 21 per cent, which is largely attributable to the large share of manufacturing and the small share of business services in the local industrial structure. However, it is likely that in the city centres of these sub-regions, the occurrence of jobs suited to remote work is somewhat higher than that of the entire sub-region.

2) According to an estimate presented in the Dingel and Neiman (2020) study, 39 per cent of jobs in Finland are well-suited to remote work. This is a considerably higher share than the estimate presented in this article (27%). The difference is most likely due to the fact that the Dingel and Neiman calculation is based on a different statistical source. They used the labour force survey data harmonised by ILO at a two-digit level occupational classification (https://ilostat.ilo.org/topics/employment/ -> Employment by age and occupation – ISCO level 2). The results of the labour force survey are suited to international comparison, but the sample does not lend itself to separating city-specific statistics. For this reason, we used Statistic Finland's register-based employment statistics (https://www.stat.fi/til/tyokay/index.html) at a four-digit level occupational classification – see also the description of our research material above.



Source: City of Helsinki/Urban Research and Statistics; Statistics Finland, TOL 2008 (https://www2.stat.fi/en/luokitukset/toimiala/).

FIGURE 8. **Sector structure of jobs in Helsinki, Espoo, Vantaa, the sub-regions of Lahti, Tampere, Turku and Oulu, and all Finland in 2019.**

Conclusions

There is a wide consensus that remote work is gaining popularity. The locations and environments of work are becoming more diverse. More and more people are working from home, giving them more options where to live. This has a wide array of effects on urban development, among other things. It is unlikely that housing demand in city centre areas will change significantly, but with more options to choose from, the quality differences within the housing stock and between different neighbourhoods will be emphasised. Accessibility will remain important, but its content will take on new meanings. Smooth travel connections – sometimes longer in distance but enabling working during the commute – will gain added value as remote workers chooes where they want to live. However, many occupations and jobs remain unsuited to remote work.

UNDER NORMAL circumstances, the share of employees working remotely is lower than during the extraordinary circumstances imposed by the coronavirus pandemic. During the coronavirus pandemic, remote work was also extended to tasks that are not ideally suited to remote work. Also, not everyone wants to work remotely and not all employers allow full-time remote work. Most people working remotely only do so part-time.

THE MAJORITY of jobs suitable for remote work entail some kind of knowledge work requiring high-level expertise or traditional office work that can be done digitally. The opportunities for "location-neutral" work vary between different regions according to their economic structure, occupational structure and the more specific structure within the different occupational groups. Occupational groups suited to remote work include managers, professionals, technicians and associate professionals, and clerical and support workers. Half of all remote jobs in Helsinki fall within the occupational group of professionals, while slightly more than one-quarter comprise other expert tasks.

DUE TO the occupational structure, there are more remote work opportunities in Helsinki and Espoo than elsewhere in Finland and in the other large cities. Jobs suitable for remote work in Helsinki are concentrated in the city centre and in certain office districts. If half of the employed in the area worked remotely, the number of people present at the city-centre offices (districts of Kampinmalmi, Vironniemi, Ullanlinna and Taka-Töölö) on a daily basis would fall by approximately 35,000 persons.

IN THE future, digitalisation will replace some of the jobs suitable for remote work, but the change will mostly focus on the automation of clerical and support tasks. On the other hand, the professional occupation groups will continue to grow in large cities, and thus the number of jobs suited to remote work is likely to increase rather than decrease. ■

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UNSPLASH / NICK MORRISON

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Recent graduates face higher unemployment rates at all levels of education

– better situation in fields struck by labour shortage

UNSPLASH / ETHAN HU

JENNI ERJANSOLA

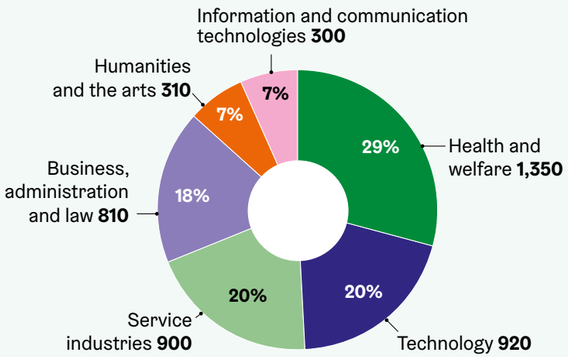
The COVID-19 pandemic increased unemployment among recent graduates at all levels of education in 2020. Graduates from vocational colleges were particularly affected by the pandemic. Unemployment among graduates from universities and universities of applied sciences did not increase quite as strongly. This article examines the employment situation among graduates from educational institutions in the Helsinki region at these three levels of education. The article also looks at the situation with certain occupations suffering from labour shortage: nurses, practical nurses and early childhood education teachers. The labour market situation in these fields was better than average in 2020.

The ups and downs of the economy have usually been quickly reflected in the general employment and unemployment situation (Mikkola et al. 2022). Economic cycles affect different occupational groups in different ways and thus also graduates from different levels of education. Higher education can protect against the effects of economic change, for example, because people with a university level degree often have skills that can be adapted.

The COVID-19 pandemic, which started in 2020, had strong economic impacts, which led to a rise of unemployment particularly in the fields of transport, tourism, hospitality, restaurant services, special commodity trade and culture. In Helsinki, the majority of those who became unemployed in 2020 were young people working in the service industry. Even though the employment situation generally deteriorated, the number of employed people still increased in specialist occupations and in the health sector, for example. (Mikkola et al., 26–28.) In 2020, it became particularly difficult for fresh graduates with a vocational upper secondary qualification to find employment. Especially those with a recent service industry qualification found it more difficult to become employed than before (Statistics Finland 2022a). The trend was similar in Helsinki.

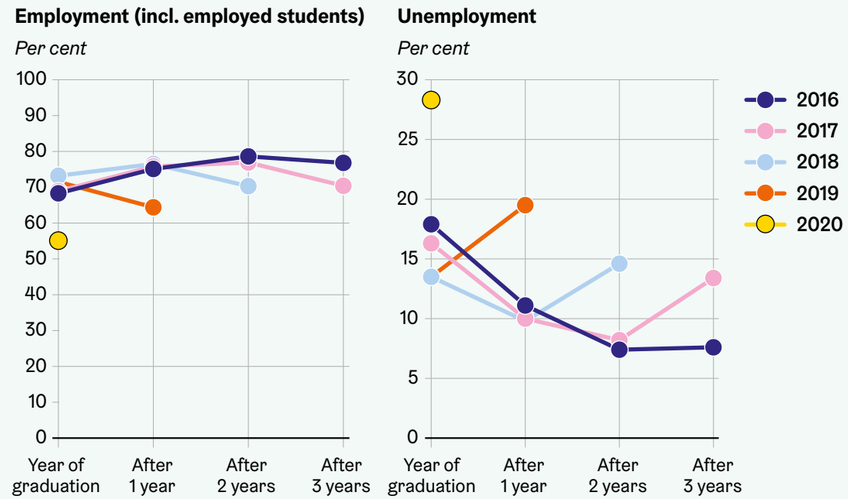
GRADUATING DURING a recession may potentially weaken future career paths, and some unemployed recent graduates may be permanently excluded from the labour market. In addition to the changes in the general economic situation, the job mismatch between vacancies and the qualifications of jobseekers may also weaken the development of future employment among graduates also in Helsinki (Mikkola et al. 2022, 31). Certain occupational groups are suffering from an oversupply, whereas other occupational groups, such as nurses, practical nurses and day-care teachers, are suffering from a labour shortage (Occupational Barometer 2022).

THIS ARTICLE examines the labour market outcomes of graduates from educational institutions in the Helsinki region in 2010–2020. The trends are monitored by examining the types of main activity (for example, employment or unemployment) of the graduates in the last week of the year. The main activity of the graduates at the end of the 2020 is broken down by level of education so that separate analyses are presented for graduates with a vocational upper secondary qualification, those with a degree from a university of applied sciences and those with a university degree. The main activity is also examined by graduation cohort; in other words, groups of graduates from different years are compared according to how their employment situation develops in subsequent years. In addition, three occupations suffering from labour shortage – nurses, practical nurses and early childhood education teachers – are subjected to closer scrutiny. The present article examines the labour market entry of those who have completed a degree qualifying for work in one of these occupations, as well as their other options such as further education. In addition to these analyses, this article also describes the development of the number of degrees and qualifications by field of education: which fields and levels of education do graduates in the Helsinki region generally represent?



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 1. **Graduates from vocational institutions in Helsinki by field of education in 2020.**



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 2. **Proportions of employed and unemployed among those with a vocational upper secondary qualification completed in Helsinki in 2016–2020; by cohort, in the year of graduation and next three years.**

Vocational education: dip in number of degrees – strong increase in unemployment for recent graduates

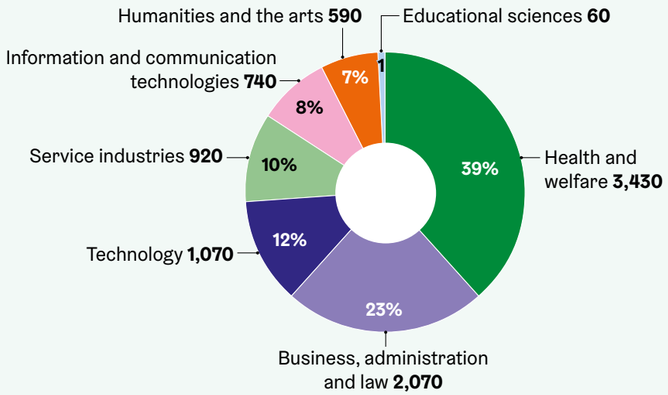
During 2020, approximately 8,110 vocational qualifications were completed in Helsinki. 4,590 of these were vocational upper secondary qualifications. Most of the vocational upper secondary qualifications completed were in the fields of healthcare, technology, services, and business and administration (Figure 1). In the rest of Finland, the technology industry featured more prominently than in Helsinki. A total of 3,520 people completed their further vocational or specialist vocational qualification in Helsinki, almost half of whom graduated in business and administration. Preparatory education for further vocational and specialist vocational qualifications is supplementary vocational education in the form of a competence-based qualification that is often completed alongside work.

In 2020, fewer people than before graduated from vocational institutions in Helsinki with a vocational upper secondary qualification or other qualifications. The development was similar throughout the country, but not quite as strong. Already in 2019, the number of vocational upper secondary qualifications completed had decreased from the previous year both in Helsinki and in all of Finland.

A SLIGHTLY higher proportion of those who had completed a vocational upper secondary qualification in Helsinki between 2017 and 2020 were employed in 2020 compared to the average for the corresponding group nationwide. In Helsinki, 66 per cent of those who had graduated in these years were employed in 2020, while the corresponding number for all Finland was 65 per cent.

WHEN LOOKING at Helsinki's vocational upper secondary graduates by field of education, it can be observed that those graduating from the field of healthcare have had the best labour market outcomes. In previous years, graduates from the service sector have also found employment easily. However, in 2020, the unemployment rate among graduates from the service sector was higher than the average for all those with a vocational upper secondary qualification. The employment rate was the lowest for graduates from the fields of information and communication technologies and the arts.

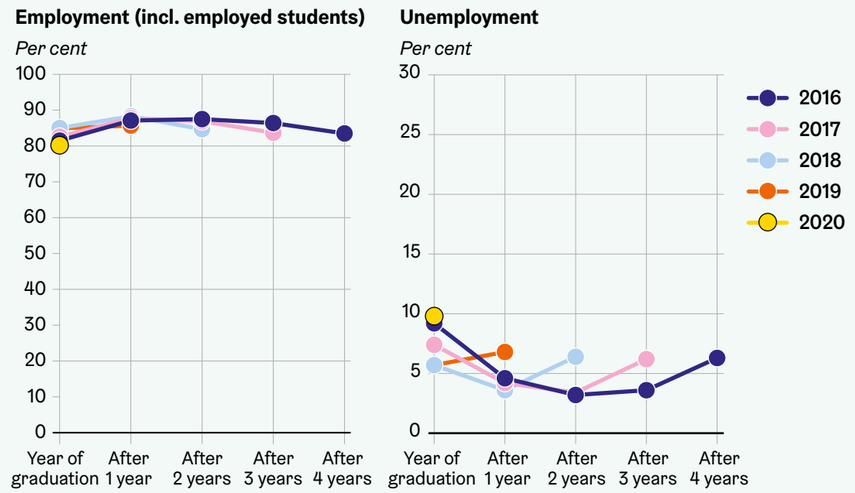
THOSE WITH a further vocational or specialist vocational qualification have a better employment situation after graduation than vocational upper secondary graduates. Nearly nine out of ten people who had graduated in 2017–2020 with a further vocational or specialist



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 3.

Graduates from universities of applied sciences in the Helsinki region by field of education in 2020.



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 4.

Proportion of employed and unemployed among those who have graduated from universities of applied sciences in 2016–2020 in Helsinki, by cohort in the year of graduation and three years ahead.

vocational degree in Helsinki were employed in 2020. Among the holders of these degrees, graduates from the fields of business, administration and technology found jobs most easily.

EMPLOYMENT RATE among those with a vocational upper secondary qualification completed in Helsinki has normally been at its lowest immediately after graduation (regardless of the year of graduation). Thereafter, their employment situation has notably improved in the next two years after graduation. By contrast, graduate unemployment has been more dependent on the graduation cohort (Figure 2). Unemployment among recent graduates was considerably less common in the early 2010s than in the years immediately preceding the COVID-19 pandemic, and the changes in the proportion of unemployed people in the years following graduation were small.

IN 2020, nonetheless, the employment rate decreased while the unemployment rate increased in all graduation cohorts (2017 to 2020). Unemployment among recent graduates increased strongly, especially in Helsinki. Of those who completed a vocational upper secondary qualification in Helsinki in 2020, 28 per cent were unemployed at the end of their graduation year, while the corresponding proportion for the previous year's graduates was 14 per cent. At the same time, the proportion of employed among recent graduates was only 55 per cent in the 2020 cohort.

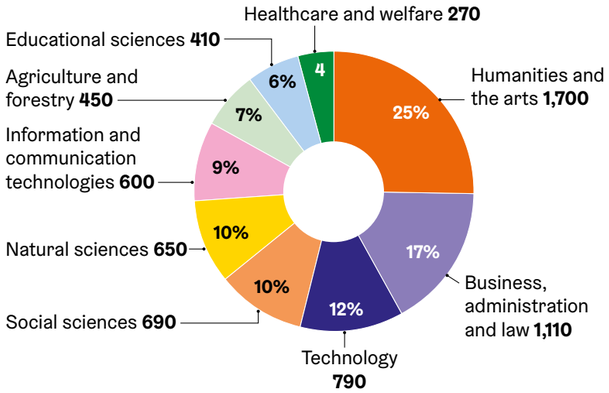
Universities of applied sciences: most degrees completed in health and welfare – unemployment highest in education and services

In 2020, approximately 8,890 degrees were completed in universities of applied sciences in the Helsinki region. 1,280, or 14 per cent, of these were master's degrees. Most graduates from universities of applied sciences completed degrees in the fields of healthcare and welfare, business and administration (Figure 3).

GRADUATES FROM universities of applied sciences in the Helsinki region have typically found employment slightly more easily than those from other universities of applied sciences in Finland. In 2020, however, the difference between Helsinki and the rest of Finland diminished. Of those who had graduated between 2016 and 2020 from universities of applied sciences in the Helsinki region, 84 per cent were employed and seven per cent unemployed in 2020. Graduates from the fields of health and welfare and technology found employment most easily. Up till 2019, the proportion of unemployed had been highest among graduates from humanities and the arts. In 2020, by contrast, unemployment among graduates from universities of applied sciences was highest in the fields of education and services.

LOOKING BACK longer, the employment rate among graduates from universities of applied sciences has mostly been at its highest in the year following graduation. In subsequent years, the proportion of the employed has not changed significantly. This pattern is noticeable regardless of the graduation cohort throughout the 21st century. The unemployment rate is also typically at its highest in the year of graduation and decreases in the following years. The differences between the cohorts seem to even out over the years. Up till 2019, the proportion of those who were unemployed at the end of their graduation year was roughly at the same level as in the early 2010s.

HOWEVER, DURING the COVID-19 pandemic in 2020, the unemployment rate among graduates from universities of applied sciences increased while their employment rate decreased significantly in all cohorts (Figure 4). The unemployment rate remained the highest among recent graduates. In the Helsinki region, the number of unemployed recent graduates was almost twice as high as in the year before. In 2020, the unemployment rate increased for all cohorts who had graduated between 2016 and 2020. The labour market situation one year after graduation among those with a master's degree from a university of applied sciences was still better than that among other graduates from universities of applied sciences or those with a university master's degree.



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 5. **Master's-level graduates from universities in the Helsinki region in 2020, by field of education.**

University graduates: most degrees completed in humanities and the arts – rising unemployment especially among recent graduates

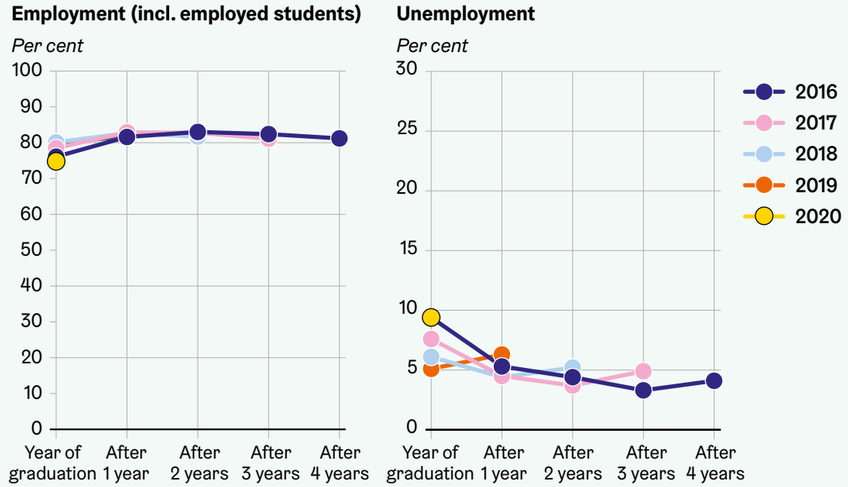
In 2020, 6,660 people graduated from universities in the Helsinki region with a master's degree and 840 with a doctoral degree. The data includes degrees completed at the University of Helsinki, Aalto University, University of the Arts Helsinki and Hanken School of Economics (but not the National Defence University).

MOST OF those who acquired a master's degree from these universities graduated from humanities and the arts (Figure 5). These fields accounted for one quarter of all master-level graduates. The number of graduates with a doctoral degree was the highest in the fields of natural sciences, health and welfare, and technology. In the rest of Finland, the most common master's degree was in economics and business administration, while most doctoral degrees were in health and welfare, mainly in medicine.

80 PER cent of graduates with a master's degree completed between 2016 and 2020 in universities in the Helsinki region were employed in 2020. The unemployment rate for those who had graduated in this period was six per cent. The proportion of unemployed graduates was roughly the same in the rest of Finland. By contrast, the proportion of the employed was slightly lower in the Helsinki region than in the rest of Finland. This is explained by the fact that the proportion of full-time students and those having moved from other parts of the country was higher among graduates in the Helsinki region. The group of university graduates with the most success in the labour market were those with a degree in health and welfare fields. The proportion of unemployed people was the highest among those who had graduated in the fields of humanities, the arts and natural sciences, while it was very low for graduates from health and welfare.

AS WITH the other levels of education, the employment rate among graduates with a university master's degree is also at its lowest (and the unemployment rate at its highest) at the end of the graduation year. It improves significantly during the following year. Correspondingly, the proportion of the unemployed among graduates decreases notably in the year following graduation – usually also after that. During the COVID-19 pandemic in 2020, the unemployment rate of university graduates, however, increased in all the graduation cohorts of 2016–2020 (Figure 6). Almost one tenth of the recent graduates were unemployed. Earlier in the 2010s, there was some variation in the unemployment rate among master's-level graduates by cohort; in other words, the year of graduation influenced graduates' future career paths.

THE UNEMPLOYMENT rate has generally been roughly the same among graduates from universities and those from universities of applied sciences. What is notable is that the COVID-19 pandemic did not increase unemployment among graduates with a university master's degree quite as strongly as for graduates from universities of applied sciences – with the exception of recent graduates. One year from graduation, graduates from universities of applied sciences have had significantly better employment outcomes than university graduates. This is because it is more common for university graduates to continue their studies or move abroad, among other things.



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

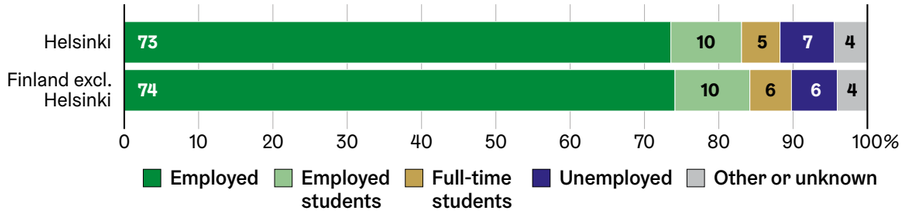
FIGURE 6. **Proportion of employed and unemployed people among graduates who completed their master's degree in 2016–2020 in Helsinki by cohort in the year of graduation and three years ahead.**

74 PER cent of those who had completed a doctoral degree from universities in the Helsinki region in 2016–2020 were employed at the end of 2020. Five per cent were unemployed. The unemployment rate among those with a doctoral degree is lower than among those with a master's degree, but so is the employment rate. This is explained by the fact that graduates with a doctoral degree leave Finland more commonly in the years after graduation. Of those who had completed a doctoral degree in universities in the Helsinki region during 2016–2020, 14 per cent had left Finland by 2020, while only six per cent of the master's degree graduates had done so. Doctoral graduates from health and welfare and education disciplines had the best employment situation in the years following graduation. Graduates from humanities and the arts had the highest unemployment rate.

Three fields faced with labour shortage: practical nurses, nurses and early childhood education teachers

We previously examined the labour market outcomes of graduates from educational institutions in the Helsinki region. The statistics show how graduates from different levels of education have found employment on average. This section discusses in more detail the career paths of three qualification titles: nurses, practical nurses and early childhood education teachers. These are the most common occupational groups among City of Helsinki employees (City of Helsinki 2021). Yet Helsinki suffers from labour shortage in these groups. The situation is generally similar in the entire Helsinki Metropolitan Area (Occupational Barometer 2022). The public-sector pensions administrator Keva has estimated that the Uusimaa region has a shortage of approximately 3,500 nurses and early childhood education teachers (Keva & Aula Research Oy 2021).

THE CITY of Helsinki is a large employer that needs staff with various levels of education. Not all occupations require employees with a particular degree; in these cases, the City can hire from different educational



**Vocational upper secondary qualification in social and health care.*
Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 7. **Main activity of those who graduated as practical nurses in 2017–2020 in Helsinki and the rest of Finland, data for 2020.**

backgrounds. Nonetheless, we can generally consider that a nurse's education, for example, qualifies graduates especially for the duties of a nurse, and an early childhood education teacher's education qualifies graduates for that occupation. A practical nurse's qualification prepares graduates for a few different areas of specialisation, enabling them to work in different tasks in the health and welfare and education sectors.

Decrease in the number of new practical nurses

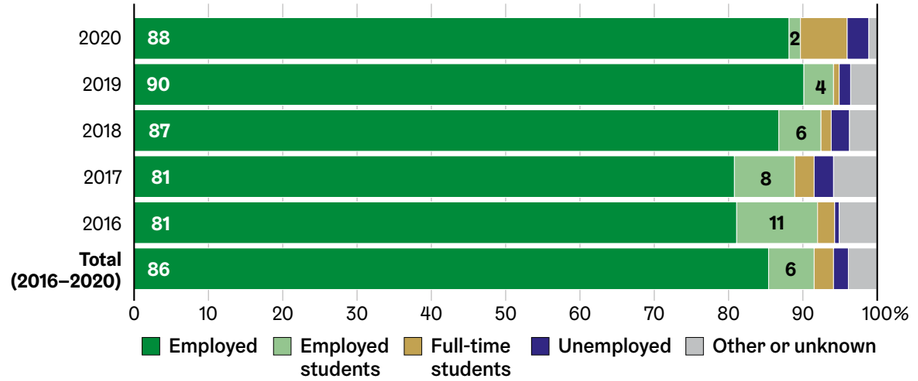
In 2020, 960 people in Helsinki graduated with a practical nurse's vocational upper secondary qualification in the fields of health and social welfare. Approximately 8,170 people completed the practical nurse's qualification in all of Finland. Since 2019, the number of people who have completed the practical nurse's qualification has decreased in both Helsinki and in all of Finland. In 2020, the number of new practical nurses decreased by over 200 in Helsinki, which is more than in the rest of the country.

COMPARED TO graduates with another vocational upper secondary qualification, the employment rate among practical nurses who had graduated in Helsinki was significantly higher. In 2020, 83 per cent of the practical nurses who had graduated between 2017 and 31 July 2020 were employed (Figure 7). Only a small proportion of those who have completed the practical nurse's qualification continue their studies alongside work. The unemployment rate among those who had recently graduated as practical nurses was also lower than for those with another vocational upper secondary qualification. However, the employment situation among practical nurses in 2020 (seven per cent were unemployed) was not as good as in the previous year. It is likely that the unemployment rate for some areas of specialisation available for practical nurses was higher than for others. The practical nurse's qualification is a vocational upper secondary qualification in health and social welfare, where students specialise in different areas such as elderly care or education. In all of Finland, the employment situation among practical nurses was slightly better than in Helsinki.

Employment rate among nurses up from previous year

In recent years, approximately one thousand nurse's degrees have been completed annually in universities of applied sciences in the Helsinki region. These schools are Laurea University of Applied Sciences, Metropolia University of Applied Sciences, Diakonia University of Applied Sciences and Yrkeshögskolan Arcada. In the rest of Finland, approximately 3,000 people have completed this degree every year. In 2020, the number of people who graduated as nurses decreased slightly from the previous year both in the Helsinki region and all Finland.

THE EMPLOYMENT rate among people who have graduated as nurses is higher and the unemployment rate lower than that among graduates from universities of applied sciences on average. 92 per cent of those who completed a nurse's degree in the Helsinki region between 2016 and 2020 were employed at the end of 2020, and two per cent were unemployed. Unlike other graduates from universities of applied sciences, the employment rate among recently graduated nurses improved from the previous year in 2020. Of the nurses who graduated in 2020, 90 per cent were employed or working students in the Helsinki region and 88 per cent in all of Finland at the end of the year.



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 8. **Main activity of those who graduated in 2016–2020 with a nurse's degree from educational institutions in the Helsinki region, data for 2020, by year of graduation.**

SOME OF the graduated nurses will return later to complete a second degree. As more and more years pass since their graduation, the proportion of working students increases (Figure 8). Of those who had graduated in 2019, the proportion of working students in the Helsinki region was four per cent at the end of the following year. This proportion was considerably higher for those who had completed their degree in 2016 – among them, one in ten were working students four years later. In addition, two per cent of them were full-time students. The proportions are similar in Finland as a whole.

MORE THAN one quarter of those who graduated with a nurse's degree in 2016–2020 had also completed a second degree in a university of applied sciences by 2020, which was usually a public health nurse's degree. In the Helsinki region, this amounts to approximately 1,600 nurses. Some of them completed a master's degree in nursing: in the Helsinki region, a total of 470 persons had done so between their graduation in 2016 – 2020 and the end of 2020.

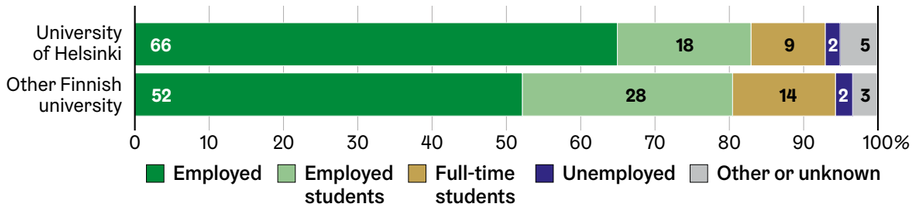
NINE PER cent of the nurses who had graduated in 2016–2020 were attending further education at the end of 2020 in both the Helsinki region and all of Finland. As a whole, these further studies took place on several levels of education. Those who continued their studies after a nurse's degree usually did so in a university of applied sciences, but it was also common to start a master's degree or choose vocational upper secondary education. In Helsinki, it was slightly more common to continue studies at university level than in the rest of the country.

MOST OF the nurses who continued their studies chose health and welfare as their field. This was the case particularly among those who entered university-level education. At the same time, a significant number of graduated nurses studied business, administration and law.

Early childhood education teachers often continue their studies

Approximately 630 persons completed Bachelor of Education degrees in the University of Helsinki in 2016–2020 to become early childhood education teachers. Nationwide, their number amounted to 2,140 persons. In 2020, the number of early childhood education teacher's degrees completed both at the University of Helsinki and other Finnish universities altogether was one-quarter higher than in the previous two years. While a positive development, this alone is not sufficient to offset the labour shortage plaguing this field in Helsinki.

THE EMPLOYMENT rate among early childhood education teachers who completed their studies in 2016–2020 remained high in 2020 during the COVID-19 pandemic, and their unemployment rate was low, although their situation deteriorated slightly on both indicators. 84 per cent of them were employed at the end of 2020 and two per cent were unemployed. The unemployment rate was low among recent graduates, as well. The employment rate among early childhood education teachers having graduated from the University of Helsinki was higher for graduates from other universities or universities of applied sciences in Finland (Figure 9). It should be



Source: City of Helsinki, Urban Research and Statistics. Data source: Statistics Finland.

FIGURE 9. **Main activity of early childhood education teachers who graduated in 2016–2020 from the University of Helsinki and other universities, data for 2020.**

noted that a significant proportion of early childhood education teachers studied alongside their work. At the end of 2020, 18 per cent of early childhood education teachers who had graduated from the University of Helsinki in 2016–2020 had the status of a working student. For graduates from other universities, this proportion was as high as 28 per cent. Approximately one tenth of graduated early childhood education teachers were full-time students. Nonetheless, the number of working students, in particular, was lower in 2020 compared to previous years, and along with this development, the employment rate among early childhood education teachers also decreased, especially in Helsinki.

Rise in graduate unemployment in the Helsinki region – those with vocational degrees fare worse than others

The employment situation among graduates from educational institutions in Helsinki or elsewhere in the region has followed a fairly similar trend at all levels of education since the 2000s. Following economic trends, the proportion of unemployed recent graduates kept increasing throughout the 2010s up to 2016 at all levels of education, until it started to decline in 2017. The proportion of the employed among those who had graduated one year previously kept decreasing steadily throughout the 2010s, until the decline stopped in 2017.

IN 2020, however, the COVID-19 pandemic increased unemployment at all levels of education, and the proportion of unemployed people returned approximately to the level of 2015 among those with a degree from a university of applied sciences or a university. Unemployment among recent graduates was more common at all levels of education in 2020 compared to the early part of this century. However, unemployment among graduates from universities and universities of applied sciences did not increase quite as strongly as among those who had graduated from vocational institutions. The situation was exceptionally difficult for those with a vocational upper secondary qualification, among whom the proportion of employed persons was lower and the proportion of unemployed was higher than ever in the 21st century.

THE EMPLOYMENT rate of those who had completed a vocational upper secondary qualification in Helsinki also deteriorated more in the 2010s than for graduates from other levels of education. Moreover, the proportion of unemployed people at this level of education has been the largest throughout the 21st century compared to other levels. One reason behind this development is the structural change of the labour market: higher education and more flexible skill sets now open up larger employment opportunities. During the COVID-19 pandemic, unemployment increased particularly in the service industry, which employs a large number of people with a vocational qualification.

OVER THE past ten years, the unemployment rate among graduates from universities of applied sciences has been roughly as high as that among university graduates. The COVID-19 pandemic clearly increased unemployment for all graduates from universities of applied sciences in general – not only for recent graduates. Meanwhile, among those who had completed a master's degree, recent graduates were particularly affected by unemployment. The impact of the pandemic – including severe restrictions – was felt especially strongly in the hotel and restaurant industry, where part-time employment is common (Mikkola et al. 2002, 27).

THE UNEMPLOYMENT rate among recent graduates is significantly higher than among other graduates on all levels of education. Looking at graduation cohorts, we can see that the time of graduation also has a small impact on employment in the coming years. Some of the sectors that include expert tasks requiring a high level of education are susceptible to economic fluctuations, and the unemployment situation among those with a university-level degree by has shown some variation by graduation cohort, also in the Helsinki region. According to the material of the present study, however, the differences between the cohorts even out a few years after graduation. The COVID-19 pandemic has particularly impacted certain sectors, such as services. In the future, it will be necessary to monitor how the graduation cohort of 2020 integrates into the labour market.

IN THIS article, we analysed three fields faced with acute labour shortage, and these are distinguished from other fields by their positive labour market situation. For example, practical nurses experienced some unemployment in 2020, but less than those with a vocational upper secondary qualification on average. The employment situation among nurses even improved from the previous year in contrast to other graduates from universities of applied sciences. The employment rate among early childhood education teachers who had completed their studies in 2016–2020 remained high in 2020 during the COVID-19 pandemic, and the unemployment rate was low. However, their employment situation also deteriorated slightly, as the number of working students and available part-time work decreased. As in previous years, a significant proportion of early childhood education teachers studied alongside their work.

IT IS common among early childhood education teachers to continue their studies immediately and complete a second degree. The most common trend was for early childhood education teachers to continue their studies to obtain a Master of Education degree, as they already receive the right to do so when they begin their studies. Approximately half of all Bachelors of Education continue their studies in education. Part of those with a nurse's degree also continue their studies, mostly in the same area of health and social welfare. However, from a perspective of labour shortage, a key question is whether early childhood education teachers and nurses will return to these professions once they complete their studies, possibly at a higher educational level. In either case, highly educated staff are needed in various occupations such as the management of day-care centres.

A SLIGHTLY higher number of early childhood education teachers graduated in 2020 than in previous years, whereas the numbers of both nurse's and practical nurse's degrees decreased in Helsinki and all Finland. However, according to an employment projection for the Uusimaa region, the public administration and welfare services sector will grow with as many as 28,000 jobs by 2030 (Laakso 2019), which means that the need for employees in both education and health and social welfare services will be great.

THE COVID-19 pandemic may have had an effect on the numbers of graduates. Students in some fields may have had difficulties in obtaining internships, or the pandemic may have affected people's well-being and motivation to study. The corona year 2020 seems to have had a nationwide impact especially on students at upper secondary level, among whom school dropouts increased, working decreased and graduation times lengthened (Statistics Finland 2022b). The proportion of dropouts also increased in Helsinki, especially in vocational upper secondary education. Education and degrees have intrinsic value in themselves, but it is nevertheless important for graduates to find jobs in their fields as quickly as possible. ■

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Differences in the use of private and public health services reflect inequality in Helsinki

TOMMI SULANDER, HANNA AHLGREN-LEINVUO & JUHA NYMAN

Helsinki is simultaneously home to the most affluent and the least well-off people in Finland, and there are considerable differences in terms of morbidity and the use of health services in different residential areas. This article examines the frequency with which private and public health services were used in different Helsinki districts in 2019. Private services are used more, and public services are used less, in southern districts where income levels are higher than the city average and morbidity is lower. Correspondingly, in districts with higher rates of illness and lower income levels, residents tend to use more public services and fewer private services.

The Finnish health care system is based on the principle of universality. This means that everyone residing in Finland is entitled to equal services, regardless of their socioeconomic status or place of residence. Our health care system is divided into three levels. The first level is open public health care, which includes primary health care and specialised medical care provided or organised by municipalities. The second is occupational health care, covering approximately 86 per cent of the working population (Tarvainen and Turunen 2012). The third level includes private health care services partly subsidised by Kela, the Social Insurance Institution of Finland.

THE COVERAGE of health services is at a good level in Finland. According to Jormanainen and Keskimäki (2019), specialised medical care is particularly successful and provides good availability of care. They list inequality in access to primary health care services and regional variation in the costs of social and health care services as some of the key challenges of our health care system. In itself, the three-level model employed by Finland is one of a kind in the EU (Kivimäki 2017). But while some of the population get to choose their health care services from among these three systems, many only have one option: public health care.

A STRATEGIC aim of the City of Helsinki is to combat any further segregation of its neighbourhoods. This is an important goal as several studies have shown that disadvantage is more than ever tending to concentrate in the same urban areas (Vilkama and Hirvonen 2018). There are socioeconomic differences between Helsinki neighbourhoods, and these are also reflected in the morbidity and mortality rates of the local population. Residents of areas with higher income levels are healthier on average than those with lower income levels (Mäki 2021). A similar phenomenon has been reported in the United States, among other places (e.g. Acevedo-Garcia 2000, Gibbons et al. 2020).

THIS ARTICLE examines the extent to which people in various residential areas of Helsinki use private and public health services. The article also discusses the correlation between the morbidity index and income level and the use of services.

Materials

The data used in this study is based on information from 2019, which was yet unaffected by the coronavirus pandemic. The material concerning private health care is based on statistics from Kela's benefit system on medical care reimbursements. We examined the reimbursements received by Helsinki residents for the fees of private sector doctors, dentists or dental hygienists and the costs of examinations and care prescribed by doctors. Reviewing medical care reimbursements provides a good overview of the proportion of Helsinki residents using private health care services. The data on medical care reimbursements does not include occupational or student health care appointments or those prescribed by public health care providers (e.g. private service purchased with a service voucher). Furthermore, the data cannot be used to determine how many of the residents have a private medical insurance.

PUBLIC HEALTH care services in this study refer to services produced and organised by the City of Helsinki Social Services and Health Care Division, including the health services provided by the Hospital District of Helsinki and Uusimaa. Helsinki residents who have used primary health care outpatient services have either had an outpatient appointment at a health station or a telephone appointment replacing the on-site appointment. Specialised medical care comprises outpatient appointments at somatic and psychiatric specialised medical care.

THE GEOGRAPHICAL areas examined in the article are based on the City of Helsinki's district division system. The district-level data concerning public services was derived directly from the City of Helsinki information systems, but the districts for the data concerning private health care were formed by grouping together postal code areas. The boundaries of the ad-hoc districts formed from postal code areas differ slightly from the official district boundaries. For this reason, the number of service users was not proportioned to the size of the population of the official district but to the size of the population in the postal code areas that were used to form each ad-hoc district.

THE MORBIDITY rates and income levels of the district populations were also highlighted in the study. Morbidity was studied using an age-standardised morbidity index, which is based on information on the frequency of incapacity for work, mortality and Kela medicine reimbursement rights in the area. The index depicts morbidity in relation to the national average expressed as 100 (Mäki 2021). Thus, if the morbidity index in an area exceeds 100, this means that the morbidity (rate of illness) in the area is higher than the national average. Income levels, on the other hand, were measured in terms of the average taxable income of the population aged 15 or over (Statistics Finland). The correlation between the morbidity index and income levels with the use of services in each district was examined using the Pearson correlation coefficient.

People with higher income use private health services most often

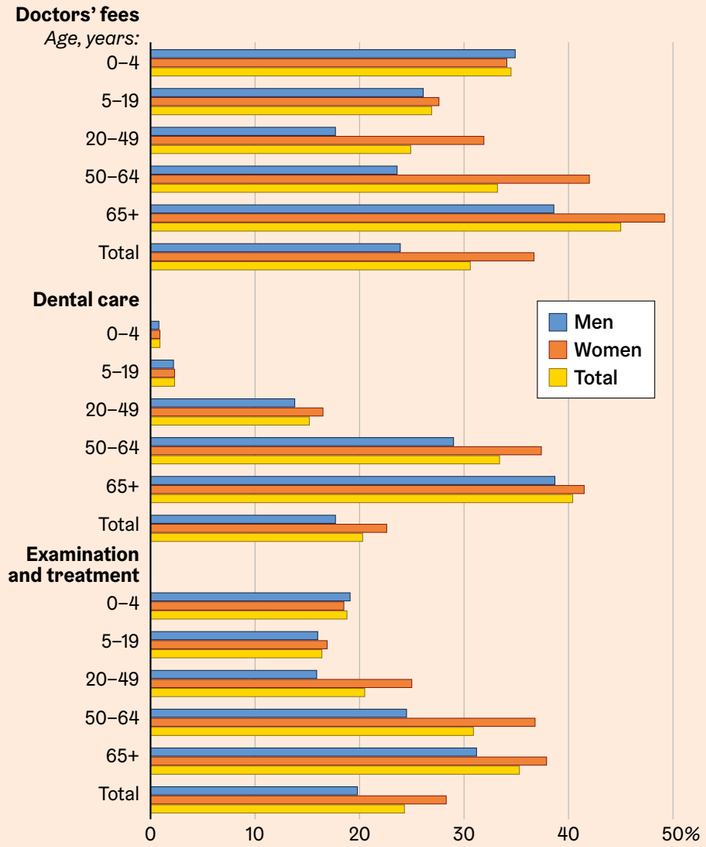
Previous research data supports the observation that income level correlates with the use of private health services. For example, according to the study by Jenni Blomgren et al. (2015), the amount of private medical care reimbursements paid was directly proportional to the patient's income level. The average amount of private medical care reimbursements (doctors' fees, dental care and examinations and treatment) was €63 for everyone aged 25 or above. Those with the lowest income level received on average €33 of reimbursements per year, while those with the highest income level received close to €100. Most reimbursements were paid to high-income pensioners: in this group, women with the highest income received close to €200 of reimbursements per person per year. The smallest reimbursements were found in the group of low-income men of working age: only €21 of reimbursements per person (Sosiaalivakuutus 2015).

AN INCREASING number of people have purchased private medical insurance policies offered by insurance companies. At the end of 2019, as many as 1,239,000 Finns – more than 22 per cent of the population – had such an insurance policy. The number of people with an insurance policy increased by approximately 50 per cent from 2009 to 2019 (Sairauskuluvakuutustilastot 2021). A private medical insurance policy allows quick access to private health services. Depending on the extent of the policy, it will cover examination, treatment and medicine costs beyond the annual deductible.

SOME SPECIALIST services, such as ophthalmology, are not available in primary health care. Instead, access to the service requires a referral to specialised medical care, which can mean months of waiting at worst. In the private sector, accessing a specialist is much faster. This, for its part, also increases the use of private services among those who do not have a high income level.

Nearly one in three have received Kela reimbursements for private doctors' fees

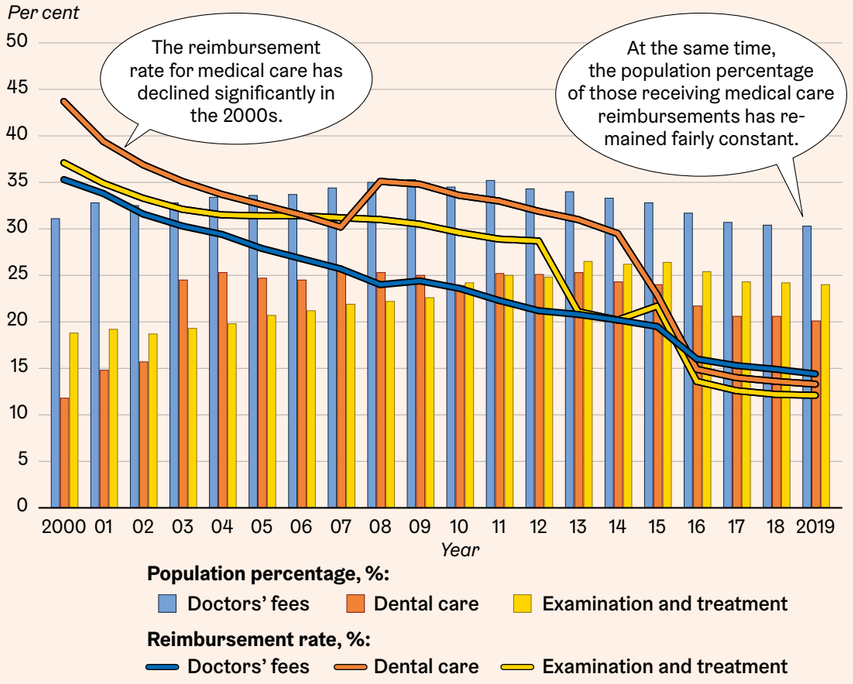
In 2019, 31 per cent of Helsinki residents received medical care reimbursements for private doctors' fees, 20 per cent for dental care costs and 24 per cent for costs related to examination and treatment. Overall, medical care reimbursements for doctors' fees, dental care, and examination and treatment were most common among people over the age of 50, and particularly with those aged 65 and over. Of people aged 65 and over, 45 per cent received reimbursements for doctors' fees, 40 per cent for dental care and 35 per cent for examination and treatment (Figure 1).



City of Helsinki/Urban Research and Statistics. Data source: Kela, Kelasto database.

FIGURE 1. **Population percentages of recipients of medical care reimbursements by age group and gender in Helsinki in 2019.**

WOMEN RECEIVED more reimbursements than men for all three types of services. Women also use the services of public health care more commonly and often than men. In terms of doctors' fees, the share of women is already clearly higher than that of men among 15–19-year-olds, and it is at its highest among 50–59-year-olds. For dental care, the differences between men and women are more moderate, but the share of women is higher in this context, too.



City of Helsinki/Urban Research and Statistics. Data source: Kela, Kelasto database.

FIGURE 2. **Population percentage of medical care reimbursement recipients (%) and the reimbursement rate of medical costs (%) by service in Helsinki in 2000–2019.**

DOCTOR'S AND dentist's appointments as well as examination and treatment have become significantly more expensive in the 2000s. According to a study conducted by Statistics Finland, in 2020 specialist appointments, for example, cost more than twice the price in 2000 (Lehtinen 2020). However, the health insurance reimbursements for doctors' fees have not been raised in this time period, meaning that patients now foot a larger share of the costs (Mikkola and Räsänen 2021). Figure 2 shows that the actual average reimbursement rate in Helsinki declined substantially between 2000 and 2019: from 35 to 14 per cent for doctors' fees, from 44 to 13 per cent for dental care, and from 37 to 12 per cent for examination and treatment. Instead, the proportion of the population who have received reimbursements has remained largely constant during this period, except for dental care. The entire population has only been covered by dental care health insurance since December 2002, which is why the population share of private dental care users soared after 2002 (Blomgren et al. 2015).

Major variation between districts in the use of private and public health services

Figures 3 to 5 present the population shares of private and public health service use as well as the morbidity index and the average taxable income by district. The morbidity (illness rate) index and income are presented in separate figures because their different scales do not allow them to the be presented in the same graph together with the use of services.

AS STATED above, 31 per cent of Helsinki residents have used private medical services and approximately 50 per cent primary health care outpatient services produced or organised by the City of Helsinki. There are substantial differences between Helsinki's districts in the use of private medical services and primary health care outpatient services.

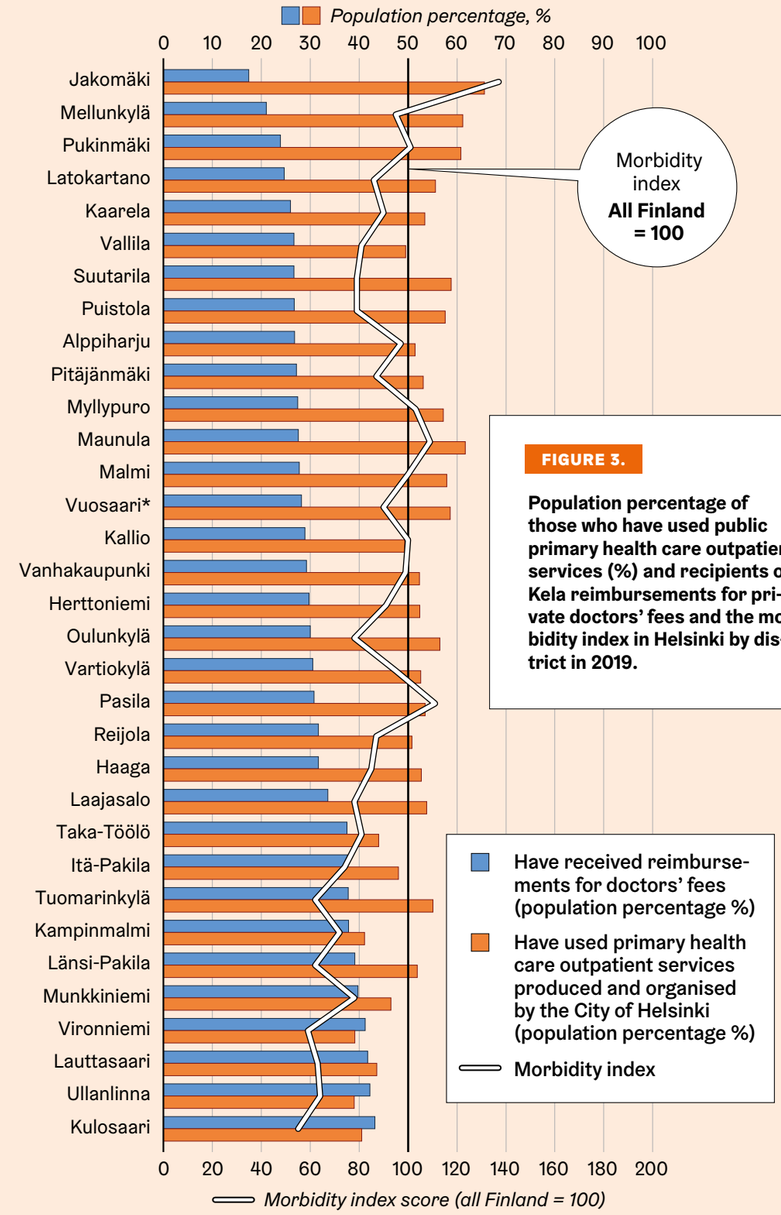


FIGURE 3. **Population percentage of those who have used public primary health care outpatient services (%) and recipients of Kela reimbursements for private doctors' fees and the morbidity index in Helsinki by district in 2019.**

*In the reimbursement data, the population of Vuosaari also includes the Östersundom district.

City of Helsinki/Urban Research. Data sources: Kela, Section for Analytics and Statistics; City of Helsinki Social Services and Health Care Division; Mäki 2021.

THE USE of private medical services is proportionately most common in the districts of southern Helsinki and least common in the eastern and north-eastern districts. The population shares using private medical services vary between 17 and 43 per cent by district.

Jakomäki and Kulosaari are at the extremes. In three districts, the share of people using private medical services was higher than the share of people using public health services. (Figure 3).

THE USE of public primary health care outpatient services is quite opposite in comparison to the use of private services. The use of public health services is relatively low in the districts of southern Helsinki and most common in the eastern, north-eastern and northern districts. The proportions of those who had used public health services varied between 41 per cent in Kulosaari and 66 per cent in Jakomäki.

PRIVATE MEDICAL services are used the most in districts where the average income levels of residents are also the highest. Furthermore, there can be significant variation in income levels within districts. One such district is Herttoniemi, which also includes the sub-district of Tammisalo, an area with a high average income level. Close to 46 per cent of Tammisalo's population received reimbursements for private doctors' appointments, whereas the share was 30 per cent for the entire Herttoniemi district. Similarly, Laajasalo district includes the high-income area Jollas, where the share of the population who received reimbursements is significantly higher than that of the entire district. These areas raise the average of their respective districts.

THERE IS major district-to-district variation in the morbidity index as well. It can be observed in Figure 3 that the morbidity index is on average higher in areas where the use of private medical services is lower and the use of public health services is more common. The morbidity index varies between 55 in Kulosaari and 137 in Jakomäki.

A HIGHER morbidity index, which indicates incapacity to work, mortality and the amount of medication reimbursements, correlates with an increase in the share of the population using primary health care services (Pearson correlation = 0.69, p = <0.01). On the other hand, as the morbidity index increases, the share of the population receiving Kela reimbursements for private doctors' fees decreases (Pearson correlation = -0.48, p = <0.05). When examined based on income levels, the use of primary health care services was more common in lower income level districts (Pearson correlation = -0.84, p = <0.01) and the use of private medical services was more common in higher income level districts (Pearson correlation = 0.81, p = <0.01).

ROUGHLY 39 per cent of Helsinki residents used the specialised medical care outpatient services organised by the City of Helsinki in 2019. The proportions of people using specialised medical care outpatient services varied between 35 and 45 per cent by district. The use of outpatient health services produced and organised by the city was most common in some northern and eastern districts (Figure 4). No statistically significant correlation was found between a district's morbidity index and the share of the population using specialised medical services organised by the city (Pearson correlation = 0.16 p = 0.378). On the other hand, a lower income level of a district was found to have a statistically significant correlation with the more common use of specialised medical services (Pearson correlation = -0.38, p = <0.05).

IN TOTAL, 21 per cent of Helsinki residents had received reimbursements for private dental care and 28 per cent had used oral health care services organised by the city. In seven districts, the share of the population using private dental care services was higher than the share of the population using public services. The differences between districts were very similar to the differences in the use of private medical care services and primary health care outpatient services (Figure 5).

AS WAS the case with the reimbursements for private doctors' fees, the differences between districts in terms of private dental care reimbursements were substantial. Ullanlinna and Jakomäki were at the opposite extremes. In these districts, the shares of population receiving reimbursements were 30 per cent in Ullanlinna and roughly ten per cent in Jakomäki. Figure 5 shows that the order of the districts is quite similar to the one depicting the use of private medical services. In other words, people in areas with a higher average income level also use private dental services more often.

AS THE morbidity index rises, the share of the population using public oral health care services increases (Pearson correlation = 0.42 p = <0.05). On the other hand, as the district's morbidity index rises, the share of the population who have received Kela reimbursements for private dental care service decreases (Pearson correlation = -0.49, p = <0.01). Examined according to income levels, the use of public oral health care services was more common in districts with lower income levels (Pearson correlation = -0.59, p = <0.01), and the use of private dental care services was more common in districts with higher income levels (Pearson correlation = 0.81, p = <0.01).

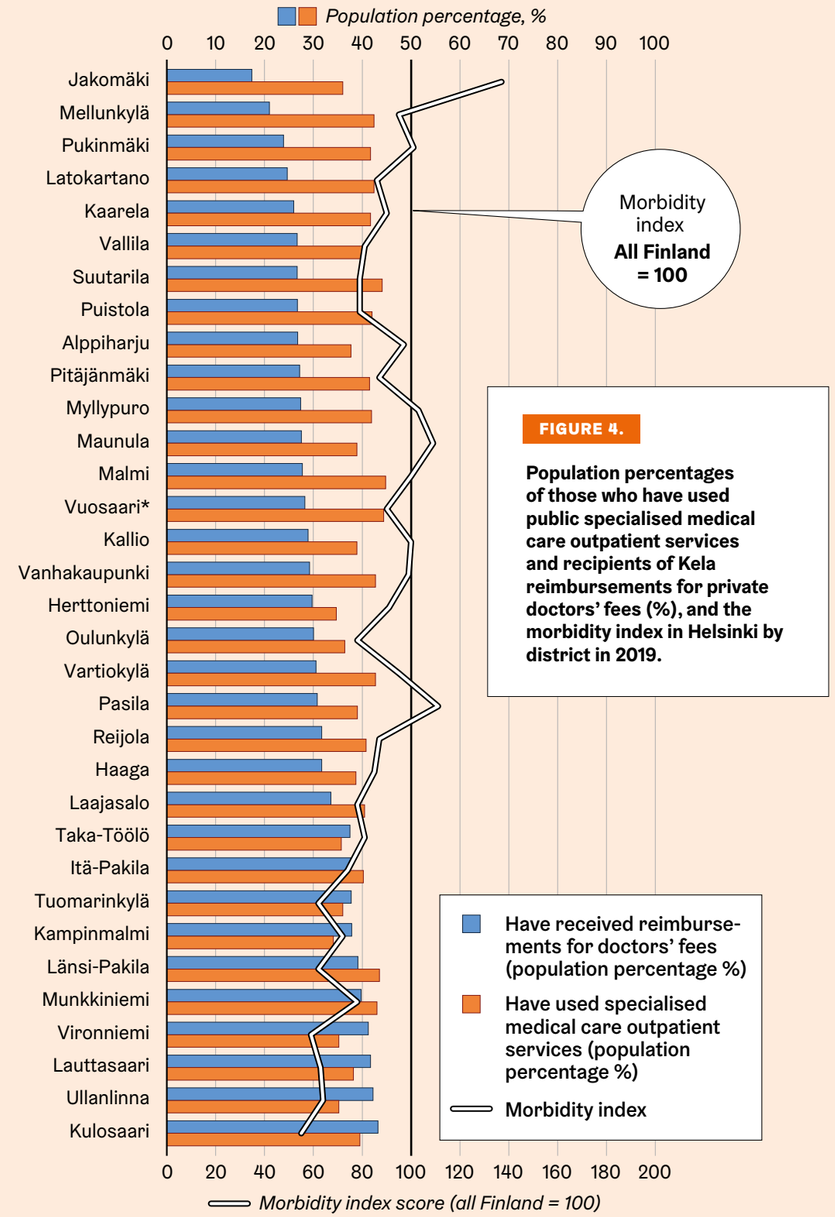


FIGURE 4.

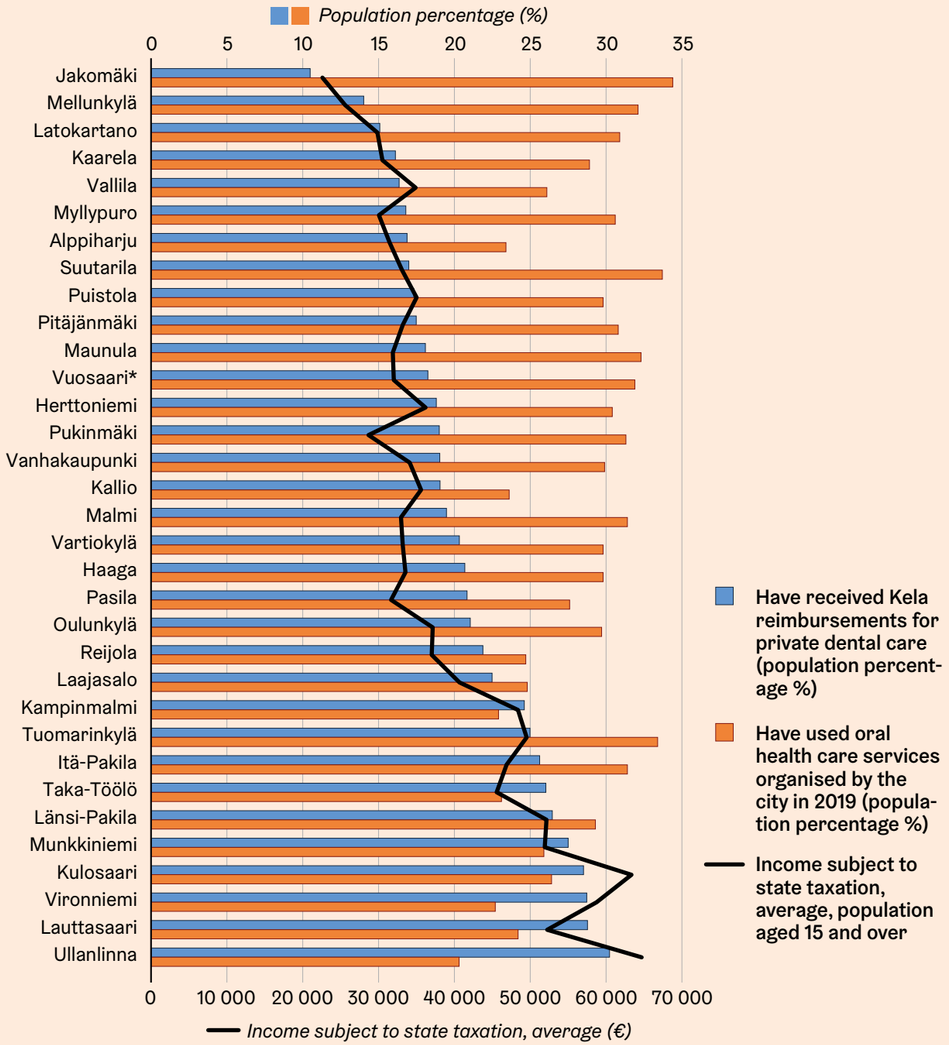
Population percentages of those who have used public specialised medical care outpatient services and recipients of Kela reimbursements for private doctors' fees (%), and the morbidity index in Helsinki by district in 2019.

*In the reimbursement data, the population of Vuosaari also includes the Östersundom district.

City of Helsinki/Urban Research. Data sources: Kela, Section for Analytics and Statistics; City of Helsinki Social Services and Health Care Division; Mäki 2021.

HELSINKI PARTNERS / MATTI SNELLMAN

The use of public health services *is relatively low in the districts of southern Helsinki and most common in the eastern, north-eastern and northern districts.*



*In the reimbursement data, the population of Vuosaari also includes the Östersundom district.

City of Helsinki/Urban Research. Data sources: Kela, Section for Analytics and Statistics; City of Helsinki Social Services and Health Care Division; Mäki 2021.

FIGURE 5. **Population percentages of those who have used public oral health care services (%) and recipients of Kela reimbursements for private dental care services, and average taxable income by district in 2019.**

Who gets to see a doctor quickly – who must wait until next month

This study provides rather a clear picture of the differences in the use of services between different Helsinki districts. Private services are used more and public services less in high-income areas, where the morbidity rate is also lower. A similar difference was not observed in specialised medical care. This result is supported by the findings of Jormanainen and Keskimäki on the good functionality and availability of specialised health care services (Jormanainen and Keskimäki 2019).

THE DISTRICT-TO-DISTRICT differences in the use of private and public health care services found in this study were quite predictable, especially when compared with the existing information on the socioeconomic differences related to the use of health care services (Manderbacka et al. 2019, Blomgren and Virta 2020). A larger proportion of the population with lower socioeconomic status use only public health care services compared to those with higher socioeconomic status. The geographical inequality in Helsinki largely stems from the varied sociodemographic and socioeconomic profiles of the residents of different areas. For example, the unemployment rate in Helsinki varies greatly between districts. According to Nyman et al. (2017), the use of public health care services is common in the Helsinki districts with a high level of unemployment and a large number of income support customers. Blomgren and Virta (2022) made a similar observation in their recent study on the working-age population of Oulu in Northern Finland, which indicated that public outpatient health care was most commonly used by the unemployed and those outside working life. According to their observations, the labour market status of an individual had a strong correlation with his or her use of the various service systems. When all appointments at various outpatient health care sectors were added together, the shares of those who had used the different services were highly consistent in the groups divided according to labour market status.

IT REMAINS to be seen whether the number of people taking out private medical insurance policies continues to grow in the future. Insurance companies have no statutory obligation to provide medical insurance to all who apply for it. An insurance seeker's state of health may prevent the granting of a policy or at least significantly limit its coverage. As there are major differences in the morbidity rates of different Helsinki districts, some areas include more people who have no access to medical insurance. Thus, people taking out medical insurance policies are also, on average, healthier. If the number of new insurance policies continues to grow as it has in the past years, the inequality related to the availability of health services will increase.

PRIVATE MEDICAL insurance policies may also increase the use of health services, as they reduce the amount of the appointment fee footed by the customer. The share of residents receiving Kela reimbursements for private doctors' fees as well as examination and treatment has remained largely unchanged for years, even though the medical insurance reimbursements for private health services have not increased in tandem with the fees. It is, therefore, possible that smooth access to private health care services is the reason why an increasing number of people are using private health services.

IN SOME eastern, north-eastern and central districts, morbidity is higher than in other areas, and residents use public health care services more than the residents of southern and western Helsinki. Primary health care outpatient appointments are free of charge, but access to them is hampered by the long waiting times. In 2019, the median waiting time for Helsinki health stations was on average 26.5 days. Paloheinä Health Station had the shortest waiting time, 13.8 days, and Myllypuro Health Station had the longest, on average 41.4 days. The waiting time for a non-urgent dentist's appointment in Helsinki was more than 21 days for roughly half of the customers. (City of Helsinki Social Services and Health Care Division 2022).

PUBLIC HEALTH care services aim to improve public health and the population's involvement in working life and social activity. Public health care also strives for a more equal distribution health across the populations of different areas, since the poor health of the residents of a certain area will have an adverse effect on the local population's involvement in working life and social activity, thereby eroding the overall productivity of Helsinki.

Social welfare and health care reform accentuates the need for evidence-based management

This study is based on comprehensive register data by Kela and the City of Helsinki Social Services and Health Care Division. The data covers all public primary and specialised health care outpatient appointments as well as private medical care appointments. Hence, the results of the study can be considered reliable. Furthermore, the area-specific examination of income levels and the morbidity index broadens the perspective when comparing different Helsinki districts. Although these factors allow us to observe some variation when examining the datasets simultaneously, the baseline is very clear. In other words, the residents of affluent areas are, on average, healthier and use more private health care services.

Now, more than ever, we need to ramp up evidence-based management, especially from the perspective of prevention and anticipation.

HOWEVER, THE present data does not allow to see the degree of overlap between the use of public and private services. Studying the overlapping use of private and public health care services is difficult because of the poor availability of data on the use of private services. Research is also hampered by the diverging information systems used by private and public health care providers and the resulting difficulty of coordinating the data. For public social and health care services, the use of different services – and the extent of overlapping use of these services – can be studied. These kinds of studies have already been conducted on a general level. For example, approximately 17 per cent of the Helsinki residents who used public health care services also used social services in 2019. It would be interesting to delve deeper into the overlapping use of various services in all of Helsinki and also at area level.

OCCUPATIONAL AND student health care data were not available for the purposes of this study. The use of these services can be expected to reduce the use of public health care services – especially in areas where there are more residents engaged in studying or working. For example, in districts like Vallila, Kallio and Alppiharju, where the use of private medical services is relatively low, the share of the working population is higher than the city average. It can be assumed that the use of occupational health care services is also higher than average in these areas.

THAT THE data could not be analysed by age and gender in this study leaves some questions relating to the partially inconsistent results in the districts. Presumably, these results are at least partially attributable to the varying age distributions, employment rates and, possibly, family structures in the areas. The use of private and public health care outpatient services is connected not only to the disposable income of the customer but also the age structure and share of women in each area. In 2019, the proportion of residents aged 65 and over was highest in the Maunula district (22.5% of residents) and lowest in the Vallila district (11.7% of residents) (Vuori et al. 2020). The proportion of women was highest in Reijola (56.2% of the residents) and lowest in Itä-Pakila (49.6% of the residents) (Helsinki City Executive Office 2021). A follow-up for this article is currently being planned, with the aim of exploring, among other things, the connections between these factors and the use of health care services.

THIS STUDY has shown fairly substantial differences between districts in the use of public and private health care services. The upcoming social services and health care reform is hoped and expected to improve the availability of public services and expedite access to non-urgent care. If the waiting times for non-urgent care cannot be significantly shortened, the great inequality between districts in terms of service access will persist, as some city residents have better chances of gaining access to a doctor quickly in the private sector.

PUBLIC SOCIAL and health care services are facing challenging times. Even though the financing of the social services and health care sector is predicted to increase overall, both nationally and in Helsinki, financing in relation to the costs is at risk of deterioration in Helsinki (Aalto 2022). Now, more than ever, we need to ramp up evidence-based management, especially from the perspective of prevention and anticipation. At the beginning of 2023, Helsinki's social, health care and emergency care services will be transferred to the Helsinki wellbeing services county. After this change, national government – and not the City of Helsinki – will be responsible for the financing of social and health care services also in the capital. The government-driven financing model and related calculations are currently being specified, so it is presently uncertain whether or not it will be sufficient to cover the future service needs of the City of Helsinki social services and health care. ■

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Perceived safety in Helsinki

– major area differences persist but gaps have not grown

VESA KESKINEN

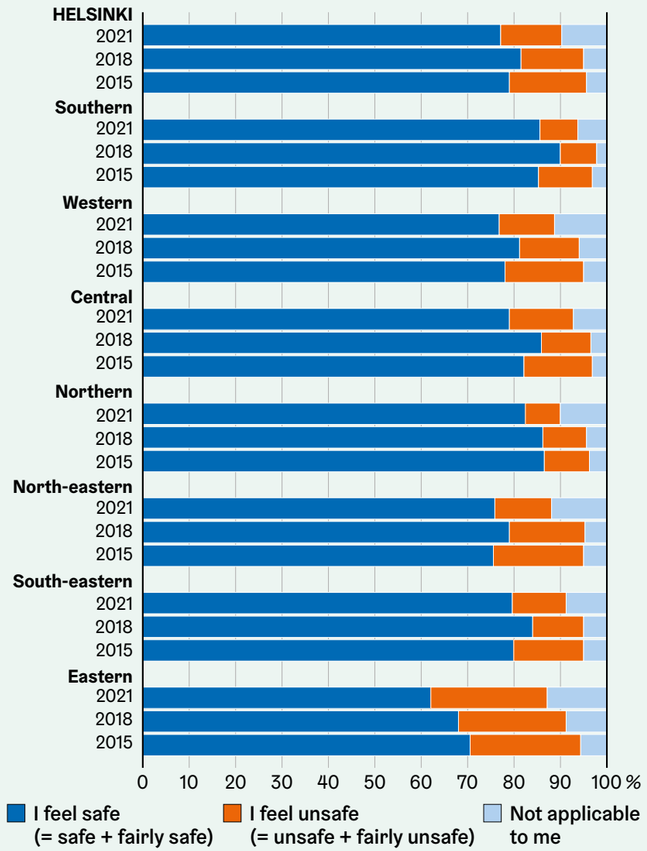
Significant differences remain between Helsinki districts as to how safe and secure residents perceive their own neighbourhoods to be. In some areas, around one in three people feel unsafe in their neighbourhood on weekend evenings, compared to a mere 3 per cent in those areas perceived as the safest. Despite the persistent area-to-area differences, the gap between the safest and the most unsafe neighbourhoods does not seem to have widened. In most areas, the situation has stayed largely the same, while only a few areas have seen remarkable positive or negative trends in perceived safety.

The Helsinki Safety Survey, conducted every three years, examines residents' views and experiences of safety and insecurity in their own neighbourhood and the city as a whole. The relatively large number of respondents (around 4,000 residents of Helsinki on the latest survey round) allows us to study the results on a district level, in addition to the city-wide results. This gives us a picture of area differences in perceived safety. The Safety Survey is designed by the City of Helsinki in cooperation with Helsinki Police, and the latest survey material was collected in late 2021.

UNSPLASH / TAPIO HAAJA

ONE OF the most central questions in the survey deals with how safe the respondents feel when walking alone in their own neighbourhood late on Friday and Saturday evenings. The present article aims to examine the area-to-area differences in the responses to this question in three comparable survey years. In 2021 and 2018, the survey targeted all Helsinki residents aged under 79 regardless of mother tongue. In 2015, the upper age limit was 74 years. The results of the previous survey rounds are available in a series of research reports (see e.g. Keskinen 2019 in English).

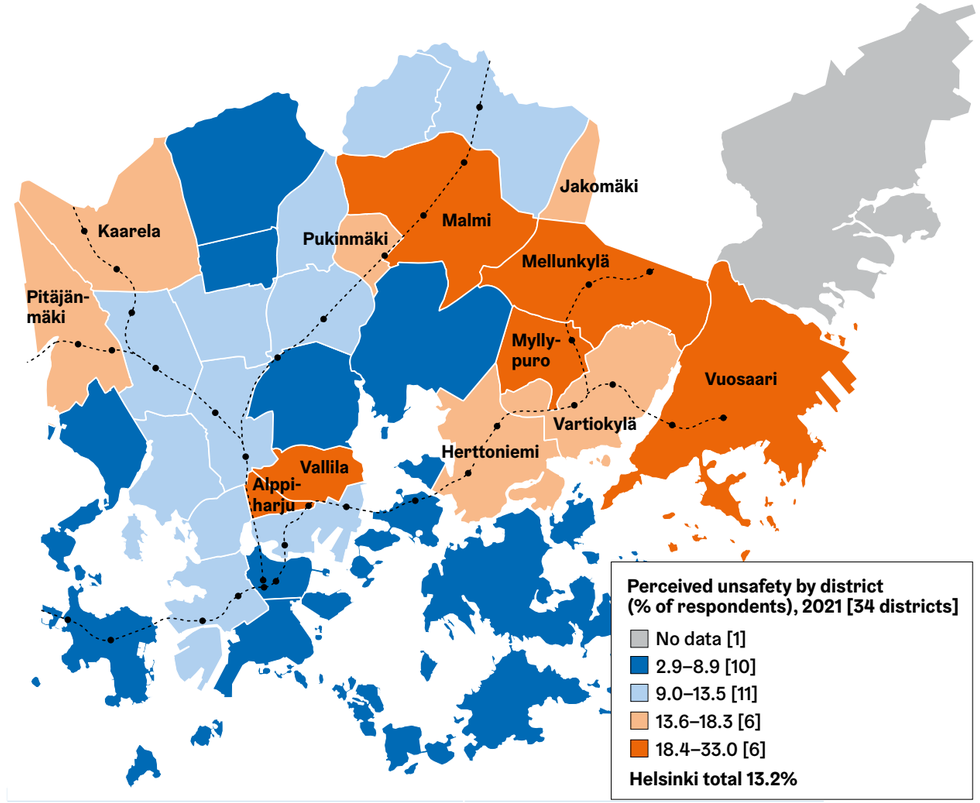
FIGURE 1 (see below) shows the rough outline of area differences in perceived safety in Helsinki. The majority of all respondents – around three in four – regard their own neighbourhood as safe also on weekend evenings. A similar result has been obtained in each survey year. The safety situation of the Eastern Major District has also been perceived as weaker than city average each time. In 2021, the share of 'not applicable' response options has been larger in all major districts than in 2018 and 2015, which may be related to the respondents limiting movements outside of the home due to COVID restrictions. The number of respondents per major district ranges from 250 to 750 (Northern and Southern Major Districts, respectively).



Urban Research and Statistics / City of Helsinki. Source: Helsinki Safety Survey 2021.

FIGURE 1.

Perceived safety in the respondents' own neighbourhood late on Friday/Saturday night, by major district, 2021, 2018 and 2015 (all respondents aged 15–79).



Urban Research and Statistics / City of Helsinki. Source: Helsinki Safety Survey 2021.

FIGURE 2.

Perceived unsafety in the respondents' own neighbourhood late on Friday/Saturday evening, by district, 2021 (respondents who stated they felt unsafe or fairly unsafe).

IF WE examine the change over time (2018 to 2021) only for those respondents who felt safe in their neighbourhood on weekend evenings, their proportions decreased most notably in the Eastern and Central Major Districts (6–7 percentage points). Compared to 2015, there has been a significant decrease mainly in the eastern neighbourhoods.

FOCUSSING THE lens on the proportion of those feeling unsafe (see Figure 1), it can be noted that the 2015 results in all of Helsinki's major districts differed from the subsequent two survey years, 2018 and 2021. It is possible that the 2015 European refugee crisis, which coincided with the data collection period, had an impact even on the perceived safety of Helsinki residents in the urban environment. Judging by the survey results, 2018 seems to have been a more peaceful and serene period. Comparing the 2018 and 2021 results, the negative trend in the Central Major District stands out, and this will be examined more closely later in the present article. The same trend can be detected to some extent in the Eastern Major District.

THE CORONAVIRUS (COVID-19) pandemic, which broke out in early 2020, has been with us ever since – in successive waves, some milder and some more severe. It is very likely that the effects of the pandemic are visible in the responses to the latest Helsinki Safety Survey, carried out in late 2021. Figure 1 shows, for example, that respondents' movements outside of the home in night-time have decreased in all major districts as various COVID-related restrictions have been in force. This reluctance to move around in the neighbourhood may thus be related partly to a general cautiousness due to the COVID situation. The proportion of those respondents who do not move around at all in the night-time has doubled since 2018.

Area differences in perceived safety remain fairly stable

We examined above how perceived safety in Helsinki has changed over time (2015, 2018 and 2021 surveys) focussing on the Major District level. However, this is a fairly rough geographical classification and does not

TABLE 1.

Perceived unsafety in the respondents' own neighbourhood (33 districts*) late on weekend evenings, 2021, 2018 and 2015, all respondents.

	Have felt unsafe in my neighbourhood, %		
	2015	2018	2021
District with highest proportion	34	25	33
District with lowest proportion	3	2	3
Range between lowest and highest	31	23	30

The district of Östersundom is not included in the analysis due to a low number of respondents.

allow a detailed analysis of area-to-area differences and their development.

MOVING DOWN the area hierarchy to the District level, the differences between areas would appear to grow – as typically happens when a phenomenon is examined on a more detailed geographical level. The adjacent map (Figure 2) classifies the districts of Helsinki according to the proportion of those respondents of the 2021 Safety Survey who say they feel unsafe in their neighbourhood on weekend nights. The map does not present data for individual districts since the small respondent numbers in some districts do not allow us to demonstrate the change statistically reliably. At city level, 13 per cent of all respondents felt unsafe in their neighbourhood late on weekend evenings.

THE TOTAL proportion of all respondents who felt unsafe was roughly the same from 2018 to 2021, staying at around one in eight (or 13 per cent). In 2015 their proportion had been 16 per cent. However, the 2015 survey had been targeted at residents aged 15 to 74, while the two later surveys polled those aged 15 to 79.

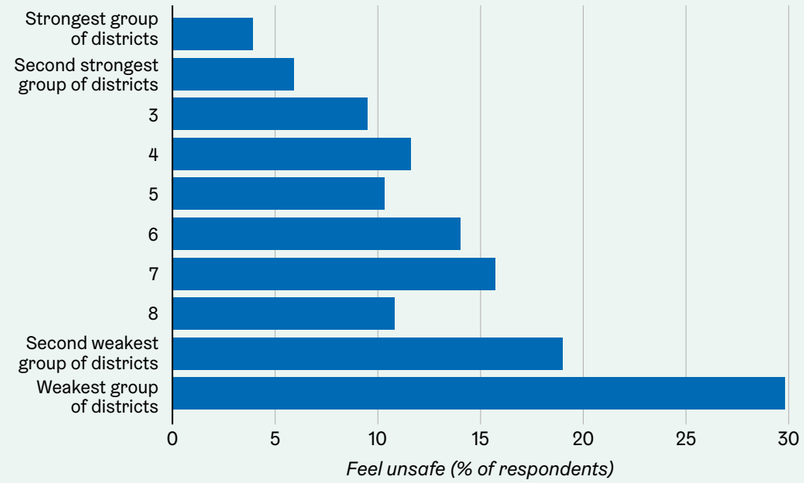
TABLE 1 shows the change that has taken place at district level. In fact the situation regarding area-to-area differences looks rather similar in 2021 compared to the 2015 survey. The highest district-level proportion of respondents feeling unsafe was 33 per cent in 2021 and the lowest only three per cent. The range between the two districts deviating the most from the city average was narrower in 2018, compared to the 2015 and 2021 surveys (see Table 1).

EXAMINING DATA from these three comparable survey years, we can thus state that there are marked differences in perceived unsafety between Helsinki areas, on one hand, and from one survey year to the next, on the other hand. These differences appear rather persistent. Amongst the ten districts perceived as the safest in 2018 and 2021, eight were the same. Similarly, the list of the ten unsafest districts contained seven names that were the same in both years.

BETWEEN 2018 and 2021, there were 24 districts (out of 33) where the proportions of respondents who reported feeling unsafe had remain almost unchanged. These districts saw a decrease or increase of less than 5 percentage points. Meanwhile, five districts in Helsinki saw a clearly positive safety trend (of more than +5 percentage points). Four districts saw a marked increase in perceived unsafety. Both groups included one district with a particularly low number of respondents.

Perceived unsafety concentrates in areas doing poorly on socioeconomic indicators

The next section uses district-level survey data to examine what types of neighbourhoods display the most or the least perceived unsafety. A socioeconomic index calculated for all Helsinki districts is used here as an analysis tool. This index is based on three key socioeconomic indicators: the proportion of low-income households (i.e. the lowest income quintile); unemployment rate; and the proportion of low-educated persons in the district's total workforce. Based on these variables, the 34 districts of Helsinki have been classified into ten groups, with the 'strongest' group displaying the least socioeconomic challenges and the 'weakest' group displaying the most.



*The total number of districts in Helsinki is 34.
Urban Research and Statistics / City of Helsinki. Source: Helsinki Safety Survey 2021.

FIGURE 3. **Perceived unsafety in the respondent's own neighbourhood late on Friday/Saturday night, 2021, ten groups of districts* formed based on a socioeconomic index (2–4 districts per group).**

FIGURE 3 shows the proportions of Safety Survey respondents who said they felt unsafe on weekend nights according to the socioeconomic status[1] of the district they live in. In Figure 3, the districts have been grouped into deciles as described above, and these groups include two to four districts each (with a total of 230–500 respondents per district group).

WE CAN observe that perceived unsafety is connected to the socioeconomic structure of an area. However, perceptions of unsafety do not correlate directly with the poor socioeconomic standing of an area. In other words, Helsinki has a number of districts that do relatively well on the socioeconomic index but show a poorer-than-average situation in perceived safety (such as the Alppiharju-Vallila area in the Central Major District), or vice versa (e.g. Latokartano in the North-eastern Major District).

1) The Socioeconomic Index utilised here comprises three key socioeconomic variables: the proportion of households in the lowest income quintile; unemployment rate; and the proportion of low-educated persons in the local workforce. The data used for calculating the index are from 2019 and 2020. The base value for the three variables mentioned above, as well as for the index itself, is the city-wide average, set at 100. If the index value of an individual district exceeds 100, the district performs weaker than city average, and conversely, districts with values under 100 have a better socioeconomic structure than in Helsinki on average. At district level, the index value ranges from 41 (Länsi-Pakila) to 185 (Jakomäki).

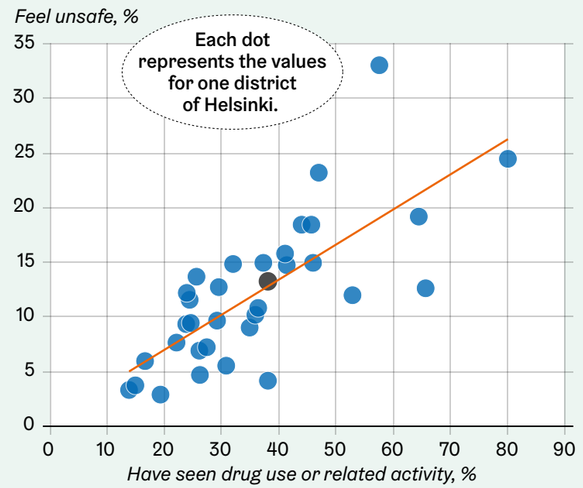
Connection between experiences of unsafety and the perception of neighbourhood hazards

Seeing violence in one's own neighbourhood shows a clear connection with perceived unsafety on weekend nights (correlation 0.259, <.0001). Signs of drug use in the daily environment are less strongly linked to perceived unsafety than seeing violence (0.197, <.0001). The intercorrelation between seeing violence and seeing drug use is rather high (0.342, <.0001), indicating that these two neighbourhood hazards are often witnessed in the same areas.

A HANDFUL of Helsinki neighbourhoods (here districts) behave differently from others in terms of these correlations. In the Kallio district, for example, seeing violence is relatively common, but perceived unsafety on weekend nights is near the average level for Helsinki. The neighbouring district of Alppiharju differs from Kallio in that it has high values for both perceived unsafety and perceptions of violence.

FIGURE 4.

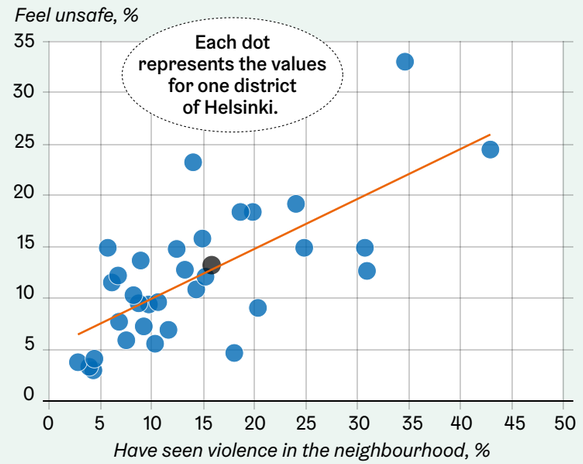
Perceived neighbourhood unsafety and respondents witnessing drug-related problems in their neighbourhood.



Urban Research and Statistics / City of Helsinki. Source: Helsinki Safety Survey 2021.

FIGURE 5.

Perceived neighbourhood unsafety and respondents witnessing violence in their neighbourhood.



Urban Research and Statistics / City of Helsinki. Source: Helsinki Safety Survey 2021.

PERCEPTIONS OF drug-related problems are also common in Kallio, yet this district scores average at most on perceived unsafety. Alppiharju is again an example of a district where both experiences – unsafety and seeing drug use – are more common than in Helsinki at large. Vallila, directly to the north of Alppiharju, is another area approaching a similar situation as its neighbouring district.

EARLIER THIS year, national media have reported on growing drug problems in or near the aforementioned neighbourhoods of Helsinki's Central Major District (e.g. the 20 May editorial of the daily Helsingin Sanomat). The results of the Helsinki Safety Survey – including Figures 4 and 5 above – should perhaps not be interpreted directly in the light of this public debate. We do not know exactly how the survey respondents have defined the limits of their own neighbourhoods when answering the questionnaire. For instance, the area around the Sörnäinen metro station – a well-known hot spot for drug-related activity – is situated on the border of the Kallio and Alppiharju districts and close enough to Vallila. Nonetheless, the open-ended responses to the Safety Survey contain a number of mentions about the Kurvi (Sörnäinen Metro) quarter as well as public disorder and drugs on the Helsinginkatu street and the Vaasanpuistikko square.

Although drug-related problems are commonly witnessed in Kallio, the district does not score high on perceived unsafety.

BOTH TYPES of neighbourhood hazards discussed above have a generally negative impact on the residents' appreciation of their own area. A strong negative correlation exists between the proportions of those respondents expressing a high level of satisfaction with their neighbourhood and those who have seen drug abuse near where they live.

Concluding remarks

The area-to-area differences in perceived safety and unsafety have remained relatively unchanged from the previous rounds of the Helsinki Safety Survey in 2015 and 2018 until the latest survey conducted in 2021. The new material was collected in late 2021; therefore the recent changes in the geopolitical situation are not reflected in the data. It is debatable whether these events, notably Russia's war in Ukraine, would directly affect the daily perceptions of safety in Helsinki neighbourhoods in any case.

ANOTHER ANALYSIS of the results of the Helsinki Safety Survey, published simultaneously with the present article (Hirvonen 2022), focusses more closely on the theme of social disorder and other neighbourhood issues causing concern among the respondents. Some of these issues – such as seeing drugs or violence – have also been examined in the present article. In the analysis and interpretation of the results of this safety study and other surveys, caution is advised when examining the data on the smallest available area levels as there may be potential issues related to reliability. As regards the present study, the district-level results and their development should be used only indicatively, or the districts should be combined into larger groups with a sufficiently high number of respondents in each group. ■

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UNSPLASH / KATIE EMSLIE

Families with babies in Helsinki

– signs of exhaustion and COVID stress, but also good life

SUVI MÄÄTTÄ

Parents of babies in Helsinki are generally doing well and are satisfied with their lives, while sleeping problems and exhaustion interfere with their daily routines. Families with babies have also been affected more than average by the COVID-19 pandemic. Families with babies need support for parenthood and problems related to the baby's sleep routine.

There were 6,499 children under the age of one living in Helsinki at the end of 2020. The birth of a child usually brings about many changes in the parents' daily routines, life conditions and well-being. Families with babies also need various services, such as maternity clinics, throughout pregnancy and infancy. So far, data on the well-being, living conditions and need for services of families with babies in Helsinki has been scarce.

THIS ARTICLE describes the well-being of Helsinki families with babies. The data consists of the Helsinki sample of the nationwide FinChildren 2020 survey conducted by the Finnish Institute for Health and Welfare (THL). The survey provides information on the health and well-being of children under school age and their families, as well as their experiences of various services. The 2020 survey targeted parents with babies aged between 3 and 6 months. A total of 8,977 birth-giving parents (response rate 50%) and 5,843 other parents (response rate 36%) responded to the national survey (Klemetti et al., 2021). For Helsinki, the responses came from 1,232 birth-giving parents (response rate 50%) and 791 other parents (response rate 38%).

OF THE Helsinki respondents, 17% of the birth-giving parents and 10% of the other parents (who did not give birth) were under the age of 30 (34% and 22% nationwide). Approximately one-half (51%) of the Helsinki parents who gave birth (27% nationwide) and 47% of the other parents (25% nationwide) had a higher education degree.

THIS ARTICLE examines Helsinki parents' satisfaction with life, mental health, social relationships, life conditions, access to support and services and the effect of the COVID-19 pandemic. All results of the FinChildren survey are available for all on THL's result portal[1]. The present article does not aim to examine any connections between different factors or describe in more detail the background of the respondents (such as origin, educational background or family size). However, since the data material does not represent a random sampling of Helsinki families with babies, the views of parents presented here may be somewhat biased by age, education, origin or other factors.

1) https://sampo.thl.fi/pivot/prod/fi/lth/fl1bp/summary_vanhem-mat3

High satisfaction with life, parenthood and intimate relationship

Almost all Helsinki parents were satisfied with their lives and with themselves as parents. Parents felt that their families' everyday life had run smoothly after the baby's birth. The parents also felt a strong sense of inclusion; in other words, they found their daily activities meaningful; they believed that other people needed them; they could influence the course of their lives; and felt that they were trusted. They were also satisfied with the intimate relationship they were in. Most parents were happy with the mutual respect they shared, as well as their ability to talk openly, to feel togetherness and be understood in the relationship. A good two out of three parents were satisfied with the amount of time spent and things done together.

Symptoms of exhaustion – spouse a key part of social network

The FinChildren survey included several questions on the respondents' mental health during pregnancy and at the time of the survey (Figure 1). More than one in three parents in Helsinki had symptoms of exhaustion. Every tenth birth-giving parent had severe fatigue symptoms. The proportions for exhaustion symptoms among Helsinki parents were higher than the national average.

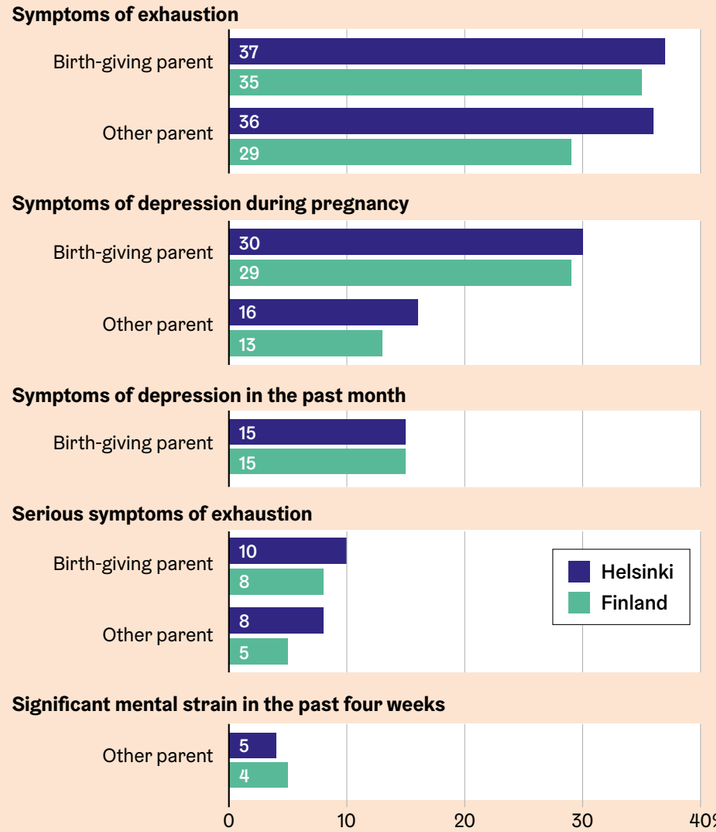


FIGURE 1.

Symptoms of depression, mental strain and exhaustion among parents, Helsinki and nationwide.

Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

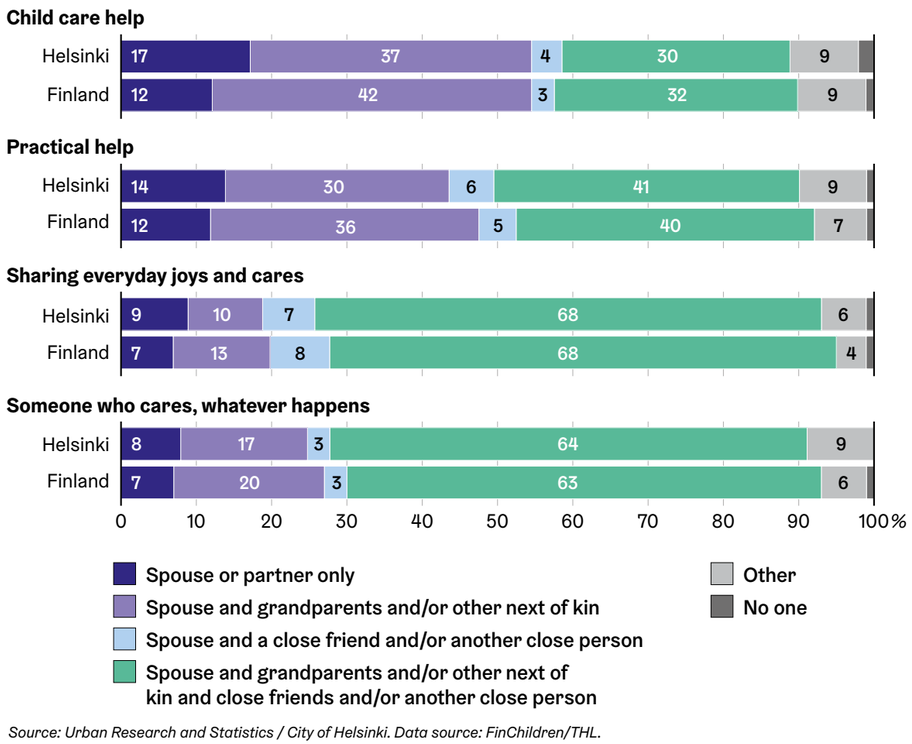
Symptoms of depression at the time of delivery were determined by the following question: "During the pregnancy, did you have at least one consecutive period of two weeks when you felt particularly worried, unhappy or depressed?"

Symptoms of depression in the past month were measured on the CES-D-10 scale. If the score is 10 or more, the parent has symptoms of depression (10 questions with a total score between 0–30).

Mental strain in the past four weeks were measured on the MHI-5 scale. Clinically significant mental strain is determined when the total score of the responses is 52 or less (five questions with a total score between 0–100).

Serious symptoms of exhaustion or symptoms of exhaustion were based on the so-called VAU screening (VAU-seula). Parents are considered to have symptoms of exhaustion when they select the alternative 'daily' or 'once or twice a week' to at least one of the items. Serious symptoms of exhaustion have occurred when a parent selects the alternative 'daily' to at least one item and/or 'once or twice a week' to at least three items. The scale includes five statements.

FIGURE 2. **Extent of the social support network of birth-giving parents in Helsinki and Finland.**



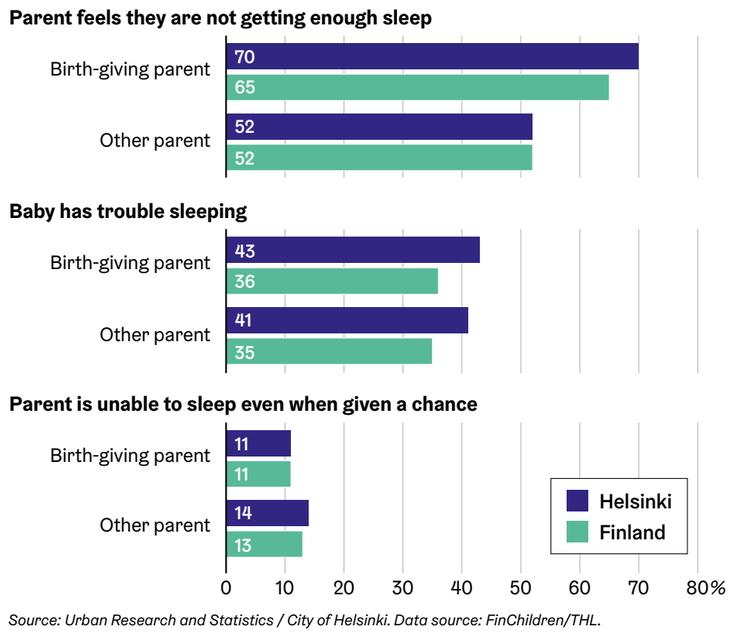
Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

ELEVEN PER cent of the birth-giving parents had reported symptoms of depression to a professional during the pregnancy and felt they needed help with the situation. Nationwide, the percentage was 10 per cent. As for the other parents, nearly four per cent of the Helsinki residents and two per cent of respondents nationwide had reported symptoms of depression. Eleven per cent of the birth-giving parents reported feeling lonely, both in Helsinki and nationwide. Only a couple of per cent of the other parents in Helsinki and nationwide had experienced loneliness.

SOCIAL RELATIONSHIPS were surveyed, for example, by examining parents' experiences in interacting with the baby and receiving support for daily routines. Few Helsinki parents stated they had considerable problems in interacting with the baby, amounting to eight per cent of parents who gave birth and about 12 per cent of the other parents. Similarly, few parents in Helsinki felt that their baby was more difficult than average (7% of birth-giving parents, 5% of other parents). A little less than half of the parents felt the baby was easier than average (43% of birth-giving parents, 46% of other parents).

PARENTS WERE also surveyed on the kinds of help and assistance they had received from those near them. Of the birth-giving parents in Helsinki, 17 per cent stated that they only received help with childcare from their spouse. In addition, 14% felt that the spouse was the only source of practical help (Figure 2). Both percentages are somewhat higher than the national average. In all the statements in Figure 2, it was more typical for Helsinki parents to only select their spouse, whereas nationwide, parents often selected more than one source of support in their social network. However, very few parents in Helsinki reported that they do not get help from anyone for daily routines. Regarding the extent of the social support network, the same patterns also mainly applied to the other parents as for the birth-giving parents.

FIGURE 3. **Views of parents about problems related to their or the baby's sleeping, Helsinki and nationwide.**



Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

Challenges with sleeping, one-third describe their financial situation as moderate at best

As many as 70 per cent of birth-giving parents in Helsinki felt that they did not get enough sleep, and 43 per cent cited problems related to the baby's sleep (Figure 3). These percentages are higher than the national average.

FOUR PER cent of the birth-giving parents in Helsinki had consumed alcohol during pregnancy (2% nationwide), and three per cent had consumed alcohol excessively at least once a month after the birth of the baby (2% nationwide). As for the other parents, the percentage of Helsinki residents (17%) who consumed alcohol excessively was the same as nationwide. One per cent of the birth-giving parents in Helsinki used tobacco products or e-cigarettes daily (4% nationwide). Smoking was less frequent also among the other Helsinki parents (4%) than the national average (8%).

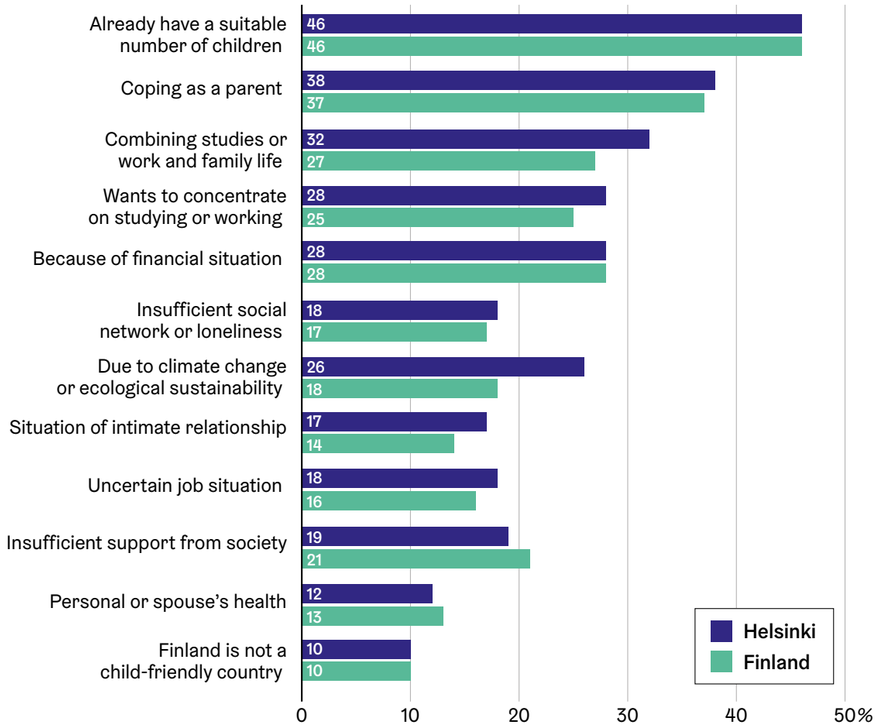
IN HELSINKI, 11 per cent of the birth-giving parents and 12 per cent of the other parents had experienced intimate partner violence in the previous year. For all of Finland, the corresponding figures were 11 and 14 per cent. Mental violence was the most common form of violence among families with babies in Helsinki. A little over eight per cent of the birth-giving parents and just under 10 per cent of the other parents had experienced it. However, it should be noted here that only 18 per cent of the birth-giving parents in Helsinki had been asked about violence in close relationships when visiting a maternity clinic, compared to 27% nationwide.

HELSINKI PARENTS rated their family's financial situation better than the national average. Around 30 per cent of birth-giving parents in Helsinki considered their financial situation as moderate or worse, compared to 35 per cent nationwide. For the other parents, the corresponding figures were 28 per cent in Helsinki and 32 per cent nationwide.

One in four have decided against having more children due to climate anxiety

Nearly one-half or 48 per cent of the birth-giving parents in Helsinki parents hoped to have more children in the future. The percentage was slightly lower than nationwide (50%). Forty-two per cent of the other Helsinki parents (46% nationwide) hoped to have more children in the future.

FIGURE 4. **Reasons mentioned by birth-giving parents for not wanting more children or being undecided (Helsinki and nationwide).**

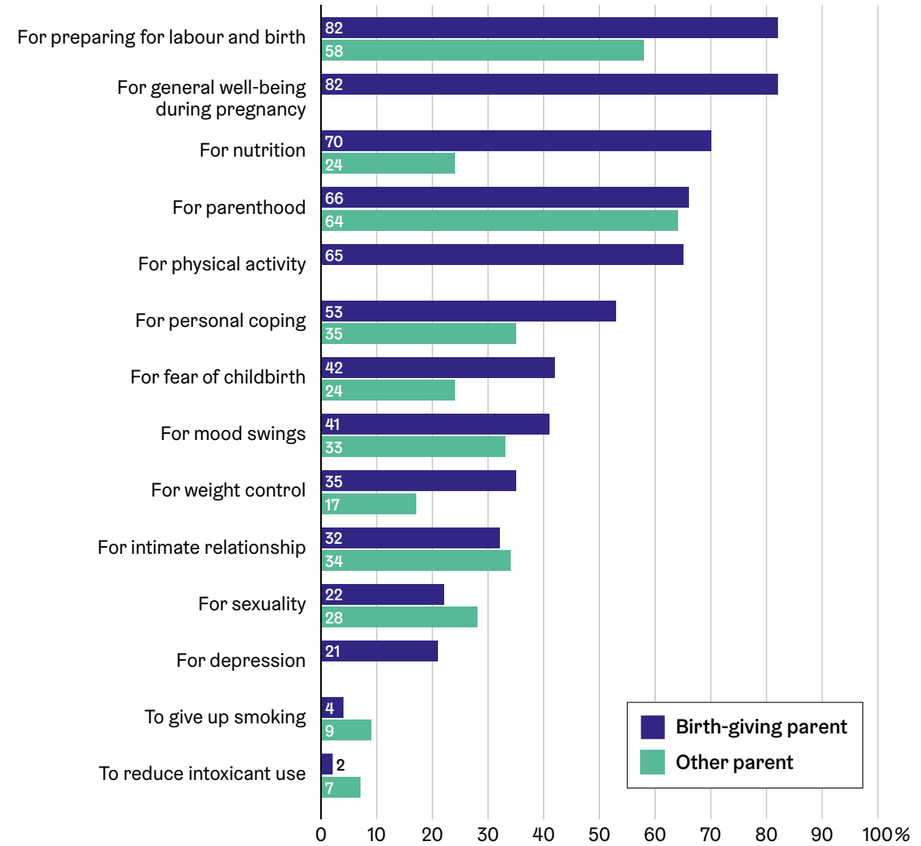


Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

The indicator is based on two questions. Question 1: "Would you like to have more children in the future?" and Question 2: "Estimate the extent to which the following factors affect your inability to say if you would like to have more children or not, or the fact that you do not want any more children". Question 2 has been answered by the parents who replied to Question 1 that they would not like to have more children or 'Cannot say'. The statements are set in proportion to the total number of participants in the survey. In this case, a statement 100% is structured as follows: (a) those who answered positively to Question 1; (b) those who answered that they did not want more children or cannot say to Question 1 but answered 'Not at all' to Question 2; and (c) those who answered that they did not want more children or cannot say to Question 1 and answered 'Slightly', 'To some extent' or 'Significantly' to Question 2. The graph shows the distribution for those who chose option (c).

PARENTS WHO did not want to have more children, or were undecided, were asked a follow-up question on the reasons why they felt this way. They were asked to consider twelve factors (see Figure 4) that potentially contributed to their undecidedness or reluctance to have more children. The responses of Helsinki parents stood out from nationwide responses, particularly regarding climate change and the planet's ecological carrying capacity. Around 26 per cent of the birth-giving parents in Helsinki (or 18% nationwide) gave this reason for not wanting more children or being undecided. The corresponding shares for the other parents were 23 per cent in Helsinki and 15 per cent nationwide.

FIGURE 5. **Helsinki parents who had needed the support of professionals during the pregnancy.**



Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

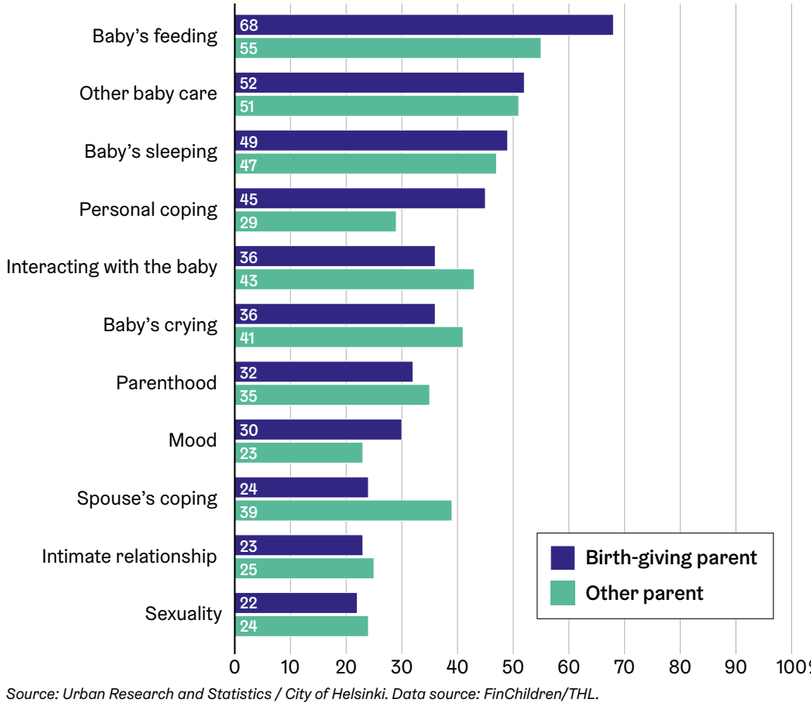
The indicator is based on the following question: "Did you receive adequate support from various professionals (including the maternity clinic) during the pregnancy for the following issues?".

Support needed for parenthood and lifestyle choices

More than half of parents in Helsinki had participated in family training or antenatal classes during pregnancy. The share is somewhat higher than for all Finnish parents (around 40 per cent). Almost all Helsinki parents had attended child health clinic appointments with the baby or had used child health clinic services in the previous year. One-third had used early childhood education services. 44 per cent had used medical services when the child became ill, and more than one-third had used specialised health care services. Other services were used less frequently.

DURING THE pregnancy, Helsinki parents who gave birth needed the most support for preparing for childbirth and general well-being during pregnancy. Over two thirds of birth-giving parents needed support for physical activity, nutrition and parenthood during the pregnancy (Figure 5). Compared to them, the other parents needed support considerably less often during the pregnancy period. Support was most often needed for parenthood and preparing for childbirth.

FIGURE 6. **Helsinki parents who had needed the support of professionals after the baby's birth.**



Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

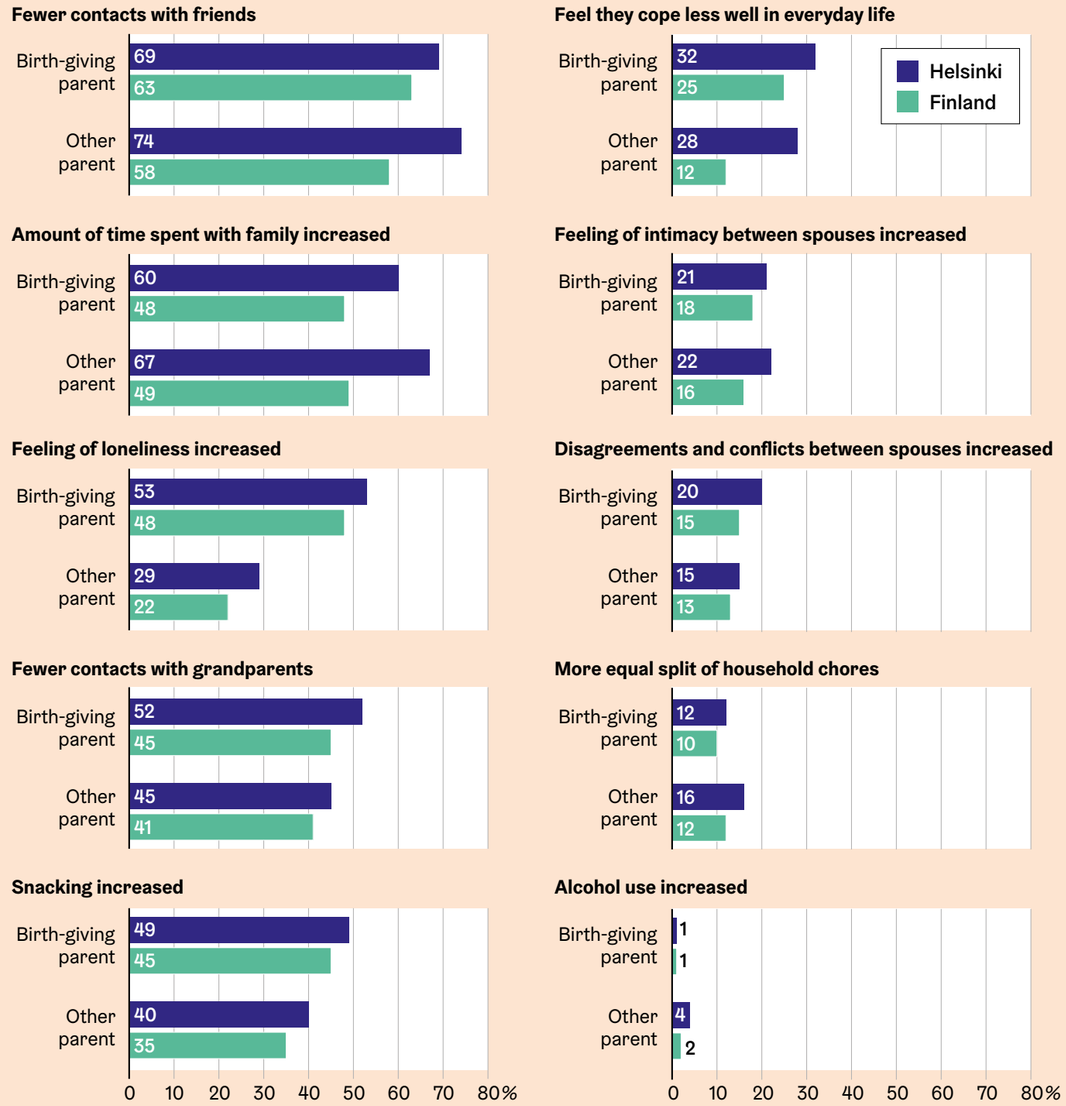
The indicator is based on the following question: "After the baby's birth, have you received adequate support from professionals of different fields (including the child health clinic) for the following issues?"

AFTER THE birth of the baby, two out of three birth-giving parents had needed support with the baby's feeding (Figure 6). Approximately one-half had felt a need for support related to the baby's sleeping, personal coping or other baby care except feeding. Roughly half of the other parents needed support for the baby's feeding or sleeping and other baby care.

Pandemic takes toll on Helsinki families with babies

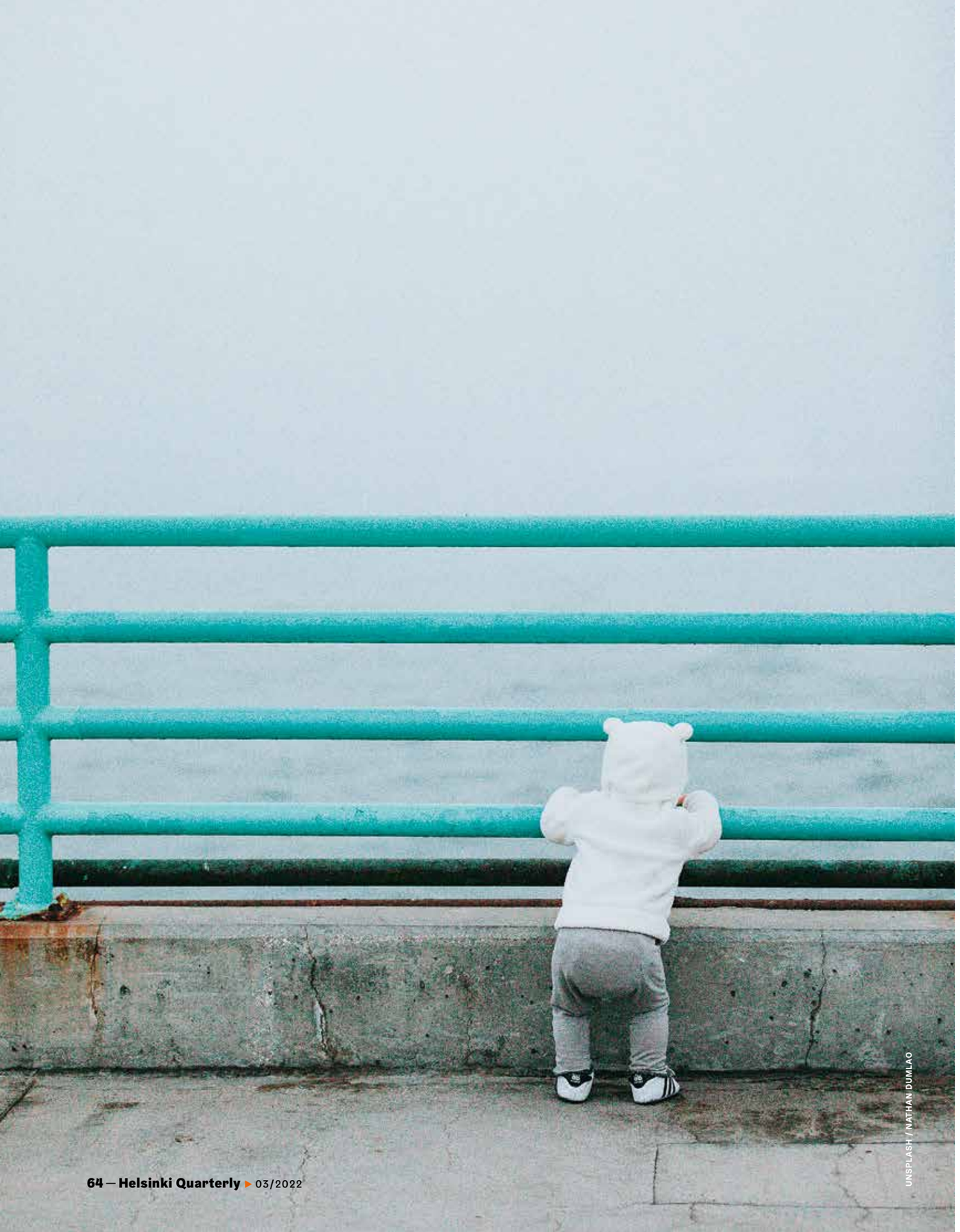
Questions related to the coronavirus pandemic were added to the survey questionnaire in July 2020. Consequently, the number of respondents for this topic is slightly lower than for the other areas. Over one-third of the birth-giving parents and a quarter of the other parents in Helsinki had felt worried that they or a family member might contract the coronavirus. Around one-fifth of all parents had been concerned about infecting others with the coronavirus. The shares were somewhat higher than nationwide. Helsinki parents had also been more worried than average about how their pregnancy, delivery, and stay in the delivery hospital would be handled during the coronavirus pandemic.

COMPARED TO the nationwide average, a significantly larger proportion of Helsinki families with babies felt that the amount of time spent with their family had increased during the coronavirus pandemic (Figure 8). On the other hand, their contacts with grandparents or friends had decreased more often. Helsinki residents also experienced more loneliness and scored lower than the nationwide average in coping in everyday life. The feeling of intimacy between spouses had increased more often in Helsinki during the pandemic, but disagreements and conflicts between spouses had increased in Helsinki more than the nationwide average.



Source: Urban Research and Statistics / City of Helsinki. Data source: FinChildren/THL.

FIGURE 7. **Experiences of parents during the coronavirus pandemic, Helsinki and nationwide.**



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EVERY TENTH Helsinki parent felt that the coronavirus pandemic had affected the family's financial situation negatively. This was higher than the national average (6% of birth-giving parents and 5% of other parents). One in ten of Helsinki's birth-giving parents had taken part in co-operation negotiations (e.g., to discuss staff reductions) during the coronavirus pandemic, while four per cent had been unemployed and six per cent laid off. As for the other parents, nearly 20 per cent had been in co-operation negotiations with their employer, seven per cent had been unemployed and 14 per cent laid off. The percentages of Helsinki parents included in co-operation negotiations were higher than the national average. The percentage of other parents who had been unemployed during the coronavirus pandemic in Helsinki was also higher than the national average (5%).

How to support families struggling with exhaustion, sleep problems or lack of social networks?

As stated at the beginning of the article, Helsinki families with babies are generally doing well. Almost all Helsinki parents are happy with their lives, parenthood and intimate relationships. However, they face challenges such as exhaustion and sleeping problems more often than average. The pandemic has also caused a strain for Helsinki families with babies. That said, it must again be noted that the present analysis is not based on a representative sample of Helsinki parents. A more detailed research material would be necessary for determining whether the Helsinki residents' answers differ according to their origin or educational background, for example, and how the different findings are linked to each other. Further questions arising from the above analysis might include to consider whether there is a link between the parents' sleep problems and their exhaustion and whether a narrow social network is related to these findings. These factors might then explain the frequency of such results in Helsinki.

THE EXPERIENCE of exhaustion observed in this analysis is not a unique finding, since similar results have been obtained elsewhere, too. An international comparative study published recently found that Finnish parents are among the most exhausted in the world and that they experience exhaustion more commonly than Swedish parents, among others. Proposed explanations for the high level of exhaustion among Finnish families include loneliness, lack of support networks and individualistic culture (Roskam et al., 2020). The COVID-19 pandemic has also played a role in this. According to the Federation of Mother and Child Homes and Shelters, the pandemic has increased the sense of loneliness among parents of babies, leading to a significant rise in the use of the organisation's online chat service (Federation of Mother and Child Homes and Shelters, 2021). A Finnish study examining the well-being and health of families during the first wave of the coronavirus pandemic found that parents who had used social services but had been left dissatisfied with the outcome experienced the most symptoms of exhaustion during the pandemic (Lammi-Taskula et al., 2020). Inadequacy of support services was a theme commonly raised by parents in Helsinki. For example, 49 per cent of the birth-giving parents needed support on baby sleep, but only some of them felt that the support received from professionals was sufficient. Such results constitute an incentive to identify and develop forms of adequate support for the baby's sleep problems and the parents' exhaustion. Forms of support for expanding social networks could also prove valuable. However, the survey did not examine in more detail whether parents wished for a broader social network specifically for the management of daily routines. ■

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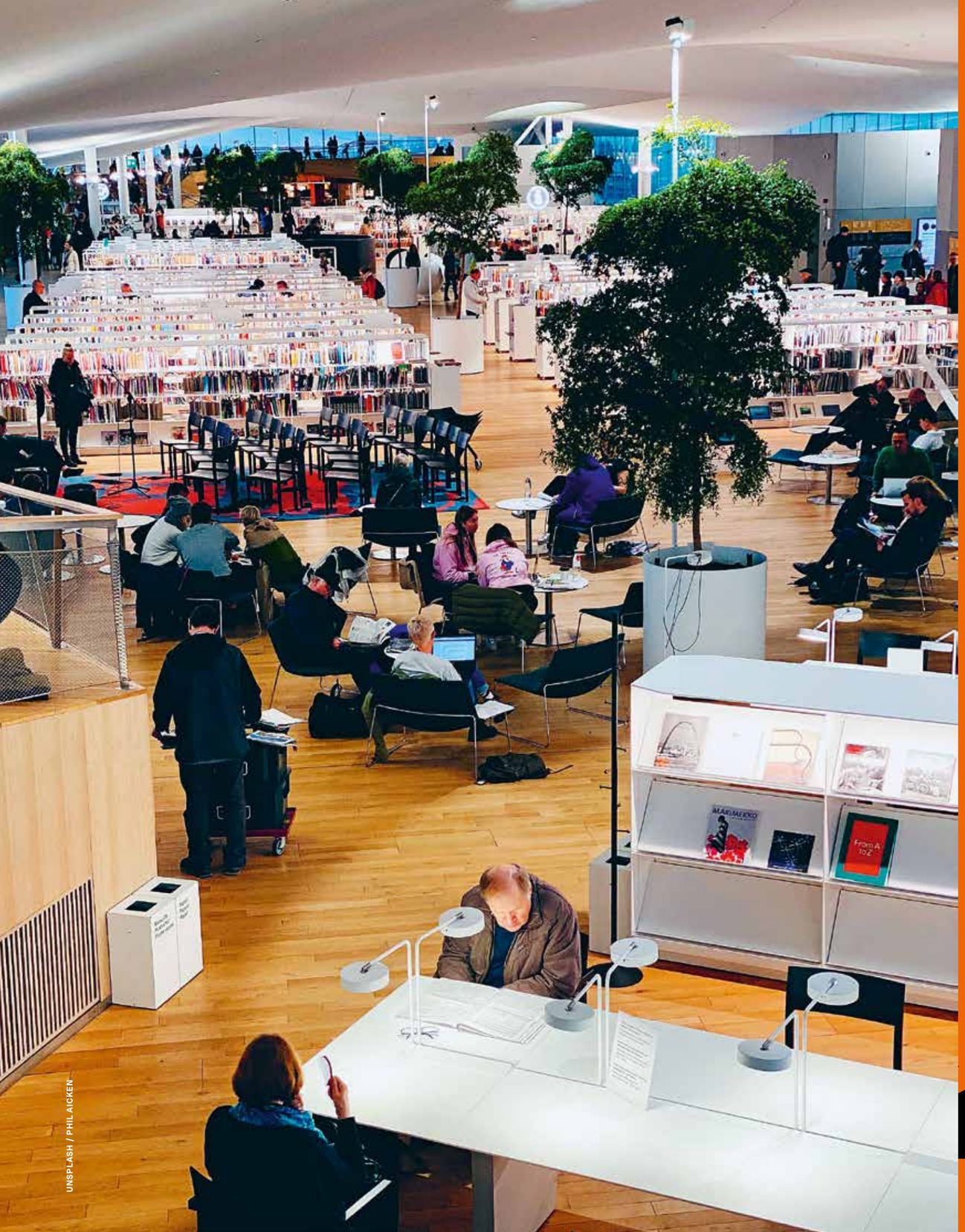

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