

TYÖRAPORTTEJA 116/2023 WORKING PAPERS

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# OCCUPATIONAL SAFETY AND HEALTH RISKS AMONGST FOOD DELIVERY WORKERS



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FACULTY OF SOCIAL SCIENCES  
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# ABSTRACT

This study explores the perceived occupational safety and health risks involved in food delivery work in different operating environments, for example platform work and equivalent work, in trade and transport operating environments. Ten food courier service workers, eleven food delivery workers and ten food delivery supervisors and managers were interviewed. Data were analysed using qualitative thematic analysis. Findings show that significant challenges exist in terms of occupational safety and health risks for those who work on food delivery platforms. Those working in salaried food delivery jobs perceive more occupational wellbeing than platform workers do. Risks of traffic accidents are seen as high, and these are increased more by the time pressure involved in gig work. Workers of the food delivery companies find algorithmic management practices and working alone to be burdensome. Some also experience racist insults whilst working. There are deficits in the supervisory and communal support structures of the courier work. The most pervasive shortcoming is related to the precarious status of food couriers with temporary residence permits, as this often poses a significant barrier to their access to social security. The entanglements of platform work with the external institutional systems, such as the residency institution, are a key issue. These entanglements should be studied more, preferably across different country settings. Ensuring the equal treatment of platform workers in the Finnish labour market requires adjustments in both legislation and its enforcement. Subcontracting amongst food couriers, related monitoring and inspection practices and informal work within the sector are topics needing urgent attention.

# TIIVISTELMÄ

Tutkimushanke selvittää ruokajakelutyön koettuja riskejä erilaisissa toimintaympäristöissä. Tutkimuksen painopiste on alustatyön riskien ja työsuojelun tilanteen erittelyssä, ja sen rinnalla tarkastellaan vastaavaa työtä kaupan ja kuljetuksen toimintaympäristöissä. Hanke haastatteli kymmentä ruokalähettiä, yhtätoista kaupan ja kuljetuksen ruokajakelutyöntekijää ja kymmentä ruokajakelun esimiestä ja johtajaa. Aineistoa analysoitiin laadullisen teema-analyysin avulla. Ruuanjakelun palkkatyöläiset kokivat työhyvinvointinsa parempana kuin alustatyön ruokalähetit. Työturvallisuuden ja -terveyden haasteet ovat huomattavia alustatyönä tehtävässä ruokajakelussa. Liikenteen vaarat koetaan mittaviksi, ja keikkatyön aikapaine kasvattaa niitä. Osa ruokaläheteistä kokee algoritmisen johtamisen käytännöt ja yksintyöskentelyn psyko-sosiaalisesti kuormittavina. Ruokajakelun alustatyössä koetaan myös rasistisia loukkauksia, ja työnohjaukselliset sekä yhteisölliset tukirakenteet ovat osittain puutteellisia. Laajamittaisiin haavoittuvuus liittyy tilapäisellä oleskeluluvalla olevien ruokalähettien epävarmaan asemaan. Maahanmuuttajataustaisilta itsensä työllistäjiltä puuttuu usein sellainen työoikeudellinen asema, joka turvaisi pääsyn sosiaaliturvaan. Alustatyön yhteyttä ulkoisiin institutionaalisiin järjestelmien, kuten oleskelulupajärjestelmään, tulisi tutkia enemmän, mieluiten vertailemalla eri maita. Yhdenvertaisuuden varmistaminen työmarkkinoilla edellyttää toimia lainsäätäjältä ja säädösten toimeenpanijoilta. Ruokalähettityön ulkoistusten ja niiden valvonnan sekä alan epävirallisen työn tutkiminen ovat kiireisimpiä aiheita jatkotutkimukselle.





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This report includes novel research on the timely issue of occupational health risks associated with food courier work. The emergence of digital platform companies in food delivery have come with new types of risks, which are not comprehensively known yet. We analyze also work in transportation and retail sectors to understand better, what is new and different in platform based work and related occupational wellbeing. The results prompted us, and we hope also the reader, to ponder broader issues of employment, migration and precarity.

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*Mikko Perkiö*



# 1. INTRODUCTION

**This study focuses** on an employment sector in which platform work plays a major role: the food delivery sector. The study explores the perceived occupational risks amongst food delivery workers. In addition to direct work-related risks, the study describes risks arising from workers' employment status, migration and access to social security. This study draws from a wider understanding of work-related risks extending from traditional occupational health and safety to psycho-social risks and conditions of employment in the platform economy (Berastegui, 2021).

**Employment conditions** have been particularly relevant to migrant workers' entitlement and access to social security. The broad theoretical framework of the analysis of this study is based on how global platformisation changes employment and working conditions, and this process adopts a national regulatory context (Koivusalo et al. [in press a, b]). Kenney and Zysman (2016) considered the transfer of work-related risks from employers to the responsibility of individuals a key part of the platform economy.

**Progress in improving** employment conditions in the long term is endangered by constant increase of precarious forms of work, such as part-time, temporary and contract work (Kalleberg, 2000; Standing, 2011). The emergence of platform work seems to further erode both employment and working conditions (Tran & Sokas, 2017; Zwick, 2018). Such erosion is concerning, as working conditions and employment are seen as significant determinants of health and well-being of a worker (e.g. Benach et al., 2014; Sorensen et al., 2021). This research analyses this erosion and empirically demonstrates how it appears in workers' lives.

**This research project ORIFODY** refers to occupational risks of food delivery. The research examines working environments and occupational safety of those who work on food delivery platforms and in other delivery work contexts. This project investigates common occupational issues faced by workers operating in each primary process of food delivery (food delivery platform work, product picking, transportation), and identifying the sources of good safety and health for each primary food delivery work. Analyses of this research provide an understanding of the additional occupational risks that come with platformisation and digitalisation. At the end of this research report, policy recommendations are made to pinpoint the problematic practices. The results can help regulators whilst shaping health and social policies for platform work and the adaptation of social security.

In the international context, platform economy is based on the work of the individuals whom technology companies, which own the platform, consider as partners. Platform workers often work on the middle ground between entrepreneurship and paid employment, and they are often in a vulnerable labour market position (Mattila, 2019; Srnicek, 2016; Zwick, 2018). Alongside stable salaried careers, there is another reality of the labour market, which is characterised by gig work and weak employment security (Woodcock & Graham, 2020; Aloisi & De Stefano, 2019). Furthermore, self-employed platform workers have fewer degrees of freedom in their work than those of normal entrepreneurship (Cutolo & Kenney, 2019).

**A trend of non-standard work** and related vulnerability seems to have increased in Finland (MSAH, 2019; OECD, 2019; Pärnänen, 2019; StatFin, 2023). This trend is concerning as social security and pensions are connected to employment relationships or formalised entrepreneurship in Finland. Permanent, full-time salaried workers comprise 63% of Finland's approximately 2.6 million employed individuals (StatFin, 2023). Based on the tax data, in Finland, about 200,000 individuals engage in self-employment that falls outside the social insurance obligation of the Entrepreneur's Pension Act (YEL) (MSAH, 2019).

The threshold for this obligation was 8575 euros per year in 2023 for those who are considered 'living in Finland' (Ilmarinen, 2023). Below this threshold, contribution to pension insurance is voluntary for a self-employed (not employee in paid job) individual. In its October 2020 opinions, the Finnish Works Council stated that workers in food delivery are employed by a platform company such as Wolt and Foodora (TEM, 2020a,b). The Regional State Administrative Agency (AVI) of Southern Finland has instructed platform companies to organise the work of food couriers in employment; however, the companies have refused to do so (AVI, 2021). This dispute is processed via administrative courts (Laatikainen, 2021).

**The Finnish labour market** is harsh for migrant workers, which also this study is going to prove. Ndomo and Lillie (2022) identified migrants' agentic acts of resilience, reworking and resistance that help them for surviving in the Finnish labour market. Resilience was found to be the most relevant strategy for this study. This meant that workers decide on and revise 'their expectations of what sort of job they would accept and how their career would develop'. This research will analyse the balance between professional skills and de-skilling in the context of platform work. However, the platform economy affects Finnish working life by creating new work for immigrants and young individuals who have had difficulty finding employment (Maury, 2019).

**The multidimensional negative impact** of unemployment on health has been recognised since the 1930s (Jahoda et al., 1971, orig. 1932). If working conditions remain decent, the ability of platform companies to increase workers participation in labour market can make a positive contribution. Therefore, the level of working conditions and quality of employment are key issues to be dealt with. Despite the coverage of the Nordic welfare state, many platform workers, when compared to employees, suffer from a lack of social security, for example in terms of occupational accident insurance, unemployment insurance, paid holidays and sick leaves (Jesnes et al., 2020; Mattila, 2019).

**The occupational safety and health** (OSH) implications of platform work have remained under-explored. However, there are valid reasons to assume that OSH policy and practice are also disrupted, for example as a result of bogus self-employment (lacking the benefits of both the self-employed and employees), limited access to social and regulatory protection, requirement to use own capital equipment, difficulty of applying existing labour laws and OSH regulations, algorithmic management, and surveillance through digital tools (ILO, 2021). This disruption challenges the ambitions of the SDG8 to have decent work and the EU pillar of social rights: fair working conditions and equal opportunities (Kilhoffer et al., 2020). Consequently, ensuring that platform work provides a safe and healthy work environment is essential.

**Technological developments** and digitalisation have given rise to different platforms and related platform work (ILO, 2021; Pesole et al., 2018; Poutanen et al., 2020). In addition to the power implications of technological innovations, the new partnership-based model of work means that a typical employer's responsibility no longer exist (Kenney & Zysman, 2016), and simultaneously, a worker's self-realisation is connected to the economy's value production via flexible and non-standard working relationships (Farrugia, 2019; Weeks, 2011). Thus, on one hand, the analysis of this research will increase our understanding of the extent to which added flexibility is geared to the new occupational risks, and on the other hand, worker's well-being.

**This would require** information on the risks of platform work and how forms of employment (paid work, freelance and entrepreneurship) affect OSH. Food delivery industry is a growing and most critical sector of the platform economy in Finland and elsewhere in Europe in terms of occupational safety. Safe Work Australia (2021) has published a guidebook directed at platforms in the food delivery industry. The safety guide identifies the health and safety requirements of work. This research investigates the

same phenomenon and identifies broader dynamics that increase vulnerability of the food delivery platform workers' position.

**The EU published** a directive proposal at the end of 2021, which aimed to clarify the position of platform workers and improve their working conditions. Re-classifying them as employees would entitle them to several social security benefits. (European Commission, 2021a; see also Koivusalo et al., 2021). In February 2023 EU parliament adopted a position on the platform workers directive (Bourgery-Gonse, 2023a). During 2022 and 2023 the European Council, under 6-month presidency terms, has been negotiating on the legal details and formulations of the directive. In April 2023, some disagreement between member countries still remains on the conditions of "a legal presumption of employment reclassifying platform workers from self-employed to employees" (Bourgery-Gonse, 2023b). It is yet to be seen if consensus will be achieved before the EU Council's ministerial meeting in June and a final decision on the directive would be made (Bourgery-Gonse, 2023b).

**This research explores** all dimensions of the United Nations Economic Commission for Europe (UN, 2015) handbook on measuring quality of employment. Dimension 2 on income and benefits is not extensively reported, as there were no indications of income-based vulnerability amongst respondents. During the rapid expansion of food delivery platforms, recruitment is a constant challenge. Thus, platform companies often keep remuneration at a higher level for some time or utilise a lower commission rate (Altenried, 2021). During a later stage, such as between 2013 and 2018 in the US, the growth in the number of platform-based drivers led to a 53 percent decline in average transportation earnings (Farrell et al., 2018). Our study was done during the earlier business wave, as Finland is a latecomer compared to the US. When this positive early phase is changed by platform companies, concerns over income become more prominent (YLE, 2022).

**Table 1. The dimensions of quality of employment (UN, 2015)**

<b>Dimension</b>	<b>Quality Indicator</b>
1	Safety and ethics of employment
2	Income and benefits from employment
3	Working time and work-life balance
4	Security of employment and social protection
5	Social dialogue
6	Skills development and training
7	Employment-related relationships and work motivation





## 2. BACKGROUND

**This chapter consists** of three sections: Section 2.1 introduces the development of food delivery services. Section 2.2 explains why and how food delivery forms an important case to understand OSH in relation to the change of work. Section 2.3 presents relevant legal cases and disputes in the area.

### 2.1. DEVELOPMENT OF FOOD DELIVERY SERVICES

**Same-day food and grocery delivery services** have been growing as a result of expansion of fast and accessible mobile internet (IGD, 2019), and the role of smartphones has become critical for the development of the food delivery industry (Order Meal, 2022). Furthermore, the COVID-19 pandemic, with individuals avoiding contacts, boosted the popularity of food delivery services (Perkiö et al., 2020). Each market has large-scale platform companies serving a rapidly growing customer base. In Finland, two main online delivery platforms dominate the local market: Foodora Oy (owned by Delivery Hero, based in Germany) and Wolt Oy (a Helsinki based technology company). Wolt is owned by US company Doordash that purchased the former in a 7-billion-euro deal that was the most expensive takeover in Europe's rapid delivery market and the second largest corporate transaction in Finland's business history (Lee & Kruppa, 2021; YLE News, 2022).

**Before the emergence of digital platforms**, restaurants typically had their own delivery personnel, or restaurant staff members performed delivery services. A similar model was used in some grocery stores or chains. In 2003, Gastronomitti launched food delivery operations in Helsinki, Tampere and Turku, accepting orders over phone; however, it filed for bankruptcy in 2007 (Tuppurainen, 2007). The brand existed for a few more years, mostly focusing on deliveries of groceries from grocery stores (Hakkarainen, 2015). Since 2007, the restaurant 'aggregator' Pizza-online brought together pizza and ethnic food delivery by the restaurants offering food deliveries in Finland. In 2012, the German online food delivery service Delivery Hero acquired the Finnish 'aggregator' Pizza-online and soon merged it into its platform Foodora. Restaurants in the premium service pay 16–22% of the price plus value added tax (VAT) as a commission for the online ordering service. The restaurants organise the delivery themselves (Toivonen & Björkstén, 2019). The 'aggregator' model in Finland and other countries usually offered customers an opportunity to see and compare menus from different restaurants, read and write reviews and place orders. The restaurants could get new customers and better visibility from 'aggregators' through additional marketing channel (Hirschberg et al., 2016).

**Wolt was established** in 2014 in Helsinki and, by fall 2021, it operated in 23 countries and, in 27 towns of Finland. In 2021, over 100,000 delivery workers were registered with Wolt globally and over 4,000 in Finland alone (Halonen & Pikkarainen, 2020). However, the platform company globally has only 3,600 formal employees – mostly in IT and support roles. Foodora was launched in Helsinki in 2015 and while writing this report operates in 20 towns in Finland, Sweden and Norway. It is owned by the multinational company Delivery Hero that operates in over 50 countries globally. In Finland, Foodora reported that it works with over 2,000 delivery partners with their number constantly growing (Halonen & Pikkarainen, 2020). Foodora and Wolt are estimated to be equal in size in Finland (Raeste, 2020). Differing from Finland's contractor-based model, in Norway, approximately 40% of food couriers are employees and the rest are contractors. In Norwegian big cities, riders may choose between these options. There is a collective agreement between the trade union and the company regulating bicycle food delivery (Eurofound, 2021).

**Cooperation between** grocery stores and delivery platforms is ever deepening, and collaborations have become increasingly common abroad. For example, since August 2021, Uber Eats has partnered with Australia's biggest supermarket chain – Woolworth Food (Reuters, 2021). In Finland, before the COVID-19 epidemic, the online market of food and groceries had only 3% share of entire online retail industry. We assume that the epidemic was a big push to the online retail market as S-Group reports 460% growth in sales between 2019 and 2021 (S-ryhmä, 2022). Two companies, Kesko and S-Group, control over 80% or almost entire grocery market in Finland (Päivittäistavarakauppa Ry, 2021). The Norwegian online retailer Oda launched its operation in the Helsinki region in February 2022 and started as a challenger to Kesko and S-Group (Pulkinen, 2022). Online grocery stores usually operate their own delivery networks by outsourcing delivery work.

**Quick commerce refers** to delivery within 1 h of preparation an order (ChannelSight, 2023). Both Foodora and Wolt expanded their scope in quick commerce. They opened their own grocery stores and began offering same-day grocery deliveries in addition to their usual restaurant deliveries (Kivilahti, 2021). 'Dark stores' is a term that refers to retail stores that are 'not open to the public and only fulfil online orders' (Collins, 2023). Foodora opened its first 'dark store' in Helsinki and then second in Tampere with about 2,000 items selected from which the delivery worker picked products and brought the order to the customer within 1 h (Korte, 2021). Wolt has also partnered with several Kesko and S-Group grocery stores to deliver products to customers (Kesko, 2022; Pirkanmaan Osuuskauppa, 2020). However, retail chains have kept the majority of regular online shopping of grocery delivery in their own hands. Therefore, traditional and fast online grocery delivery complement rather than compete with each other (Kivilahti, 2021). One-fifth of Wolt's volume in Helsinki is quick delivery of items other than meals from restaurants, and the company focuses only on urgent supplies, not on a weekly grocery order (Raeste, 2022).

**Digital services apply** algorithmic management to businesses; however, this algorithmic control is also applied to workers. This could potentially have an intrusive effect on worker's mental well-being. Control over delivery workers is increasingly technologised. Amazon uses AI-powered cameras paired with a smartphone app for monitoring a delivery driver's behaviour and real-time interfering (including sound signals or stopping the vehicle). Behavioural safety monitoring is used in the algorithmic management applied to drivers (Sonnemaker, 2021; Lekach, 2021). A platform delivery worker is typically an independent entrepreneur whose work is under constant technological monitoring from the moment of logging into the app. AI-powered technology enables the collection of a large amount of information from multiple sources, reading traffic signs, road markings (through front facing cameras), speed, breaking and duration of pauses (Netradyne, 2022; Onita, 2022; Williams, 2021). This information is used for automated monitoring of the driver's behaviour and making judgement on worker's concentration, driving style and behavioural pattern in following traffic rules: fitness to perform tasks (Gurley, 2021; Kay, 2021). This information is gathered as input to the algorithm to suggest or make decisions on the worker's pay and access to tasks.

**The technological means of work** control and management are expanding throughout companies in the transport sector (Wang, 2010). A growing number of delivery workers and drivers are under technological surveillance, and they have become objects of non-transparent algorithmic decision making. The effects of these technological means of control are potentially quite controversial: from increasing productivity in some cases to reducing productivity in others, from reducing risks to physical accidents to increased mental stress caused by reduction of privacy and threat of declined incomes (Charlwood & Guenole, 2022).



**There are significant differences** in the degree of technological and algorithmic control of food delivery workers who work for Foodora and Wolt platforms. The overall perception is that one platform implements lesser control of delivery workers' performance, whilst the technology is focused primarily on predictions of demand, delivery times, efficiency of traffic flows and delivery speeds (interview with platform representative). The other platform is perceived to have a shift system and tight control over worker's time and analysis of demand and delivery times (Mbare, 2021). There is no way for an outsider, whether for a delivery worker or anyone else, to obtain full information about the algorithmic management of these platforms. No regulation exists that requires platforms to inform workers on how and on what grounds tasks are distributed, and how the information these platforms collect from workers affects their future work opportunities (van Doorn, 2017). Algorithms (driven by the AI) affecting automated decision making are not transparent or accessible for delivery workers (Silberman & Johnston, 2020). 'There is no way to dispute a "deactivation" of an account denying one's access to work or challenge the data that has been collected' (Woodcock, 2020).



## 2.2. FROM OCCUPATIONAL SAFETY AND HEALTH RISKS TO EMPLOYMENT CONDITIONS

**According to Kokkinen et al. (2017)**, the improvement of workers' physical safety at work has been a key achievement in Western industrialised countries, including Finland. However, the challenges of physical safety at work are not over yet. An EU-level assessment in 2010 states that one-sixth of workers are exposed to hazardous chemicals and one-third to heavy physical loads, a large amount of repetition of movements or noise (Kokkinen et al., 2017, 193).

**Employment status** plays a significant role in one's responsibility for occupational risks. The legislation defines significant responsibilities for the employer for the safety of employees. Occupational Safety and Health Act (738/2002) states that employers have an obligation to monitor the work environment, identify work-related hazards and apply the necessary corrective measures. The employer must also train employees about the conditions of the workplace and the appropriate work methods and safety instructions (Työsuojelu.fi n.d. a).

**Kokkinen et al. (2017)** wrote about the divergence of working life trends and a mixture of opposite trends taking place in Finnish working life. This means that some groups of workers (based on education, occupation or income, etc.) may experience worsening working conditions whilst the general trend is of improving working conditions. Food delivery sector is a crucial case as it could be that of worsening working conditions or have a fraction of worsening working conditions within it, because the combination of gig work and transportation has been proven to cause severe occupational risks (Barrios et al., 2018). For example, Christie and Ward (2019) analysed health and safety risks amongst individuals who drive for work in the gig economy. They identified following four avenues in the gig work context, which are associated with risk of collision: (1) workload and related fatigue, (2) distraction due to a working interphase, (3) piece-based rates creating pressure to deliver quickly causing risk to speeding, and (4) having no risk management in place.

## *Review of OSH in food delivery*

**Generally**, occupational health, safety and risks of platform work have not been widely studied. However, although some scholars (e.g. Hauben et al., 2020; Kilhoffer et al., 2019; Lane, 2020; Tran & Sokas, 2017) have highlighted its potential risks and health and safety challenges arising from working conditions, scientific knowledge on the nature, effects and prevalence of these occupational health and safety risks remains little (Berastegui, 2021; Tran & Sokas, 2017). OSH deals with all aspects of physical, mental and social health as well as the safety of workers at a workplace. It is concerned with the working environment, working conditions and work equipment. Platform work can expose workers to occupational health and safety risks, which may be equal to or worse than traditional employment (Urzi Brancati et al., 2019; Tran & Sokas, 2017).

**In Finland**, food delivery is the most visible type of platform work (Mattila, 2020). It offers labour market opportunities to young individuals and particularly to disadvantaged (im)migrants in Finnish labour market, thus providing them with income opportunities to help them supplement their living (Mbare, 2023). Studies that have investigated food delivery platforms across countries have ascertained higher risks of accidents and road safety amongst couriers (e.g. Alsos & Trygstad, 2018; Barrios et al., 2018; Christie & Ward, 2019). These risks are related to psycho-social work factors, such as high work intensity and workload, which resulted in fatigue as well as pressure to violate traffic rules, increasing the risk of accidents. Generally, couriers do not undergo professional health and safety training (Christie & Ward, 2019; Eurofound, 2018; Lehdonvirta et al., 2019), which makes them prone to higher risks of traffic accidents. In addition, distraction by phone whilst driving and poor weather conditions contribute to road safety risks (Christie & Ward, 2019). As couriers spend a whole day working outside, either cycling or driving, they are prone to adverse weather conditions, which also increases their risks of accidents (Alsos & Trygstad, 2018; Eurofound, 2018; Huws et al., 2017). Couriers use their own vehicles (e.g. cars, bikes, scooters), which may not be inspected and ergonomically approved for work and increase risks of accidents and musculoskeletal disorders (aches, pains and strains). Studies by Eurofound (2018) and Kilhoffer et al. (2019) found evidence that some bike couriers, who experienced breakdowns, were unable to afford repair costs for the bikes, and thus, they lost work. Though platforms provide them with work uniforms for all seasons, the safety of these uniforms is unknown. In addition, musculoskeletal disorders (aches, pains and strains) have also been associated with platform workers who sit in cars for long hours and whose duties are physically demanding (Hauben et al., 2020; Lane, 2020). Employment brings an employer with comprehensive responsibility of working equipment and the maintenance of the same. In platform work, relying on self-employed contractors, responsibility of working equipment with related risks trickles down to each worker.

**Food delivery platform** work within the two platforms, Wolt and Foodora, in Finland is associated with a psycho-socially burdening work environment, thus increasing psycho-social risks and work-related stress. These psycho-social risks can result, for example from the use of algorithmic management, precarious nature of the job, high work intensity, longer working hours, poor career development and prospects, poor workplace social relations and illusionary flexibility and autonomy. High workload and work intensity were found to result in both mental and physical exhaustion amongst couriers in Helsinki (Mbare, 2021). High work intensity and high occupational workload are risks to the health, well-being and safety of workers.

**Studies on platform work** (e.g. Eurofound, 2018; Huws et al., 2017; Mbare, 2023; Urzi-Brancati et al., 2019) have highlighted poor career development and prospects amongst platform workers. This was evident amongst food delivery platform workers in Helsinki, who were highly educated compared to the

skills required for food delivery platform work (Mbare, 2023). First, because food delivery platform work does not require special education skills, a mismatch between capabilities (high education etc.) and work is likely. Second, there may be poor opportunities for career development. The aforementioned factors may lead to loss of professional identity, thus posing risks of occupational stress. Similarly, workers in low-skilled jobs and those who have difficulties in professionally identifying themselves are prone to occupational stress (Berastegui, 2021).

**Although these food delivery platforms** portray themselves with notions of flexibility and autonomy (Jesnes & Oppegaard, 2020), previous studies (e.g. Goods et al., 2019; Griesbach et al., 2019; Heiland, 2021; Mbare, 2023; Veen et al., 2020) that have studied various kinds of food delivery platforms across countries have ascertained a divergent operating environment. Although food delivery platforms may have varying organisation and management systems, studies have revealed that platforms with a higher level of flexible and autonomous work environment were operating at the expense of the health and well-being of couriers (Goods et al., 2019; Mbare, 2023; Veen et al., 2020). However, there is a consensus from multiple scholars that flexibility and autonomy are the main motivating factors and attractions for platform workers. Whilst occupational health and safety risks related to limited flexibility and autonomy are well documented in scientific literature, it is worthwhile to have a deeper understanding of the perception of platform workers on flexibility and autonomy. A factual side of autonomy is that food delivery platform work is characterised mostly by lone working. As a result, it portrays a risk of adequate social and emotional support at workplace, which is a risk to psycho-social well-being. A systematic review by Berastegui (2021) indicated that some platform workers seek emotional support as well as information on their work from 'virtual communities'.

**Majority of platform delivery workers** are young men in their 20s and with (im)migrant background. Precarity consists of delivery workers having the most unstable work, often combined with studies and other work. High precarity and temporary gig-based positions hinder the formation of collective organisation, which can influence working conditions. Those in informal, precarious and marginalised worker positions are described with the concept of social movement unionism, a distinction from trade unions (Dixon, 2014; Fernández-Trujillo, 2019; Meyer, 2017; Paret, 2013). Another move to tackle precarity and the domination of delivery companies is the formation of local delivery co-operatives. These co-operatives can offer fairer working conditions for delivery workers by being 'digital platforms that sell goods and services' but adopting the 'democratic ownership and governance structure of workers' co-operatives' (Jones et al., 2021).

**The existing regulatory** framework shifts the responsibility for OSH risks from management to individual digital platform workers, who do not have access to the statutory social protection of employees (European Agency for Safety and Health at Work, 2022, p. 20). This shift of risks, costs, responsibilities and liabilities by the platforms poses health, well-being and safety risks to the platform workers. In addition, the contractual agreement between platform companies and workers is mostly done online, and the terms and conditions of the partnership agreement are reportedly unclear or incomplete (Daugareilh et al., 2019; De Stefano & Aloisi, 2018; Eurofound, 2018; Garben, 2017; Prassl, 2018). The lack of clarity of the partnership model in couriers' minds, and online contracts puts the platform worker at a risk of exploitation (Hauben et al., 2020).

## 2.3. LEGAL DISPUTES ON PLATFORM WORKER'S EMPLOYMENT STATUS

**The novelty** of the concept of platform work has led to considerable socio-political conflicts across the world. Companies, workers and policy makers struggle to define the playing field on which platforms operate (Vallas & Schor, 2020). On-location platform work, especially food delivery (alongside taxi transportation), has sparked heated debates across the European Union and globally, which is mostly caused due to its working conditions and ambiguities of its contractual agreements.

**The position of platform workers** in the labour market has been the focus of multiple legal cases, including court cases (Eurofound, 2018; Pesole et al., 2018). This section summarises some recent legal disputes on food delivery platform workers' employment status across countries.

### *Finland*

**The Finnish Labour Council (FLC)** issued the first legal statements, for the two major companies separately, on food delivery platform workers' employment status in Finland in October 2020. The non-binding opinions of the FLC (disagreements between employer members of the tri-partite committee) considered couriers to be employees of their respective platforms. The opinion of the FLC was in response to the request on the correct employment status by the Regional State Administrative Agency [AVI] of Southern Finland. After the opinion, the AVI made a decision that called on food transport platforms to arrange food delivery jobs as employment in accordance with the statement issued by the FLC in 2020 (see TEM, 2020a,b). As Wolt refused to comply with AVI's instructions stated in its decision, the dispute was processed by the Administrative Court of Helsinki (see Helsinki Times, 2021; YLE News, 2021).

**The opinion of the FLC** is non-binding, and no changes have been made to meet the demands of this official recommendation. This opinion seems to have paved the way for more legal issues on food delivery platform work. Following this ruling, AVI instructed the food delivery companies in Finland, Wolt and Foodora, to keep a record of couriers' working hours in accordance with the Finnish Working Hours Act. AVI further investigated Wolt's operations and considered their couriers as employees. This ruling coincides with two out of three rulings by the Finnish Workers' Compensation Centre (TVK), in July 2021 (TVK, 2021). One ruling out of three defined this work performed as an entrepreneur. In June 2021, the Finnish Centre for Pensions (ETK) stated that food delivery platform work was performed under an employment relationship; however, it announced later that this does not necessarily apply to all food delivery work in Finland (ETK, 2021). On the contrary, in August 2021, the Administrative Court for Helsinki region ruled on a dispute between Wolt courier and the tax administration, concluding that a delivery worker was indeed an entrepreneur and was liable to pay VAT when acting as Wolt's courier. The courier claimed to be employed by Wolt and therefore not liable to pay VAT (YLE, 2021).

**Following** the opinion of the Finnish Labour Council in October 2020 on the employment status of food delivery platform workers, a relevant trade union for service workers, Service Union United (PAM), filed a case against Wolt at the District Court of Helsinki in July 2021. PAM was representing a former Wolt courier and asked the court to consider that the plaintiff was an employee of Wolt, who could claim holiday compensation under the Working Hours Act and Annual Holidays Act. This was the first legal case of food delivery platform work in Finland to be taken to court (see PAM, 2021). The case was not yet ruled by the end of April 2023.

## Internationally

**Comparable disputes** with the Finnish cases on food couriers' worker status have taken place in several other Western countries. Table 2 introduces court decisions that have come to opposite conclusions on the worker status, depending on which argument plays a role in the justification (see Appendix 1 for more detail).

**Table 2. Western court decisions on couriers' worker status**

Case	Worker Status: Employee	Worker Status: Self-employed	Justification	Source
Deliveroo, Court in Barcelona, 2021	x		Large control/company to pay social contributions to its 748 couriers	Aloisi and De Stefano (2021); De Stefano (2018); UGT (2021)
Foodora, Labour Tribunal of Turin, 2018		x	Freedom to choose when to work	De Stefano (2018)
Foodora, Court of Palermo (2020)	x		Large algorithmic control how to conduct work	Aloisi and De Stefano (2021)
Deliveroo, (the Italian General Confederation of Labour) to a tribunal in Bologna (2020)	x		Deliveroo's algorithm was discriminatory as it prioritised work shifts to top-rated couriers and did not take into account the reasons for couriers' absences from work	Aloisi and De Stefano (2021); Planet Labour (2021)
Deliveroo, the Paris Court of Appeal (2017)		x	Freedom to choose when to work	De Stefano (2018)
Deliveroo, UK, the High Court (2021)		x	Contracts allowed worker to request a substitute for their shifts	Lomas (2021)
Deliveroo, Belgium, the Administrative Commission for the Governance of the Employment Relationship (2018)	x		Couriers did not have the freedom to organise their working time	De Stefano (2018)
Deliveroo, The Australia's Industrial Relations Tribunal (Fair Work Commission; 2020)	x		Unfair dismissal of its courier; platform exercised a lot of control over its couriers through its algorithms	Veen et al. (2021)





# 3. THREE MIRRORS FOR FOOD DELIVERY PLATFORM WORK

**The risks of food delivery work** can be analysed through three mirrors highlighting its critical dimensions. **The first mirror** reflects the form of the employment relationship, and if such relationship exists. Part of the data of this research comes from organisations where the work is done by employees. This differs from platform-based food delivery, which is done by a self-employed individual or entrepreneur. The question of employment status is fundamental to understand the quality of employment (see UN, 2015 framework). Overall, this has been the issue of the widest debate on platform work.

**The second mirror** looks at the spatial division between the occupational arrangements of online shopping *before delivery* (product picking) to the *actual delivery* to the customer who placed the order. With the help of this mirror, differences between the *work done indoors*, for example product picking, and the food delivery done *outdoors* can be ascertained. This helps to understand whether there is a possibility that work in a worse working environment is done through self-employment, meaning a double burden in the low quality of employment amongst the food couriers.

**The third mirror** indicates the importance of the *vehicle* in food delivery work. This mirror is inspired by the transport operators of daily goods. They operate with vans and lorries that are safer than bicycles and scooter for workers. This helps to understand whether there is a possibility that more dangerous work to be done through self-employment, meaning another burden layer in the low quality of employment amongst the food couriers.

**These mirrors often overlap**, because both food product pickers and transport company drivers work in salaried employment relationships. These comparisons provide this study a unique opportunity to observe the core of food distribution work, which is increasingly being done as platform work. In this study, retail and transportation managers were interviewed, in addition to workers, enabling the researchers form a more holistic view on what food delivery work is within these employment settings.

**Through the three mirrors**, three dimensions and **research questions** on platform and delivery work are explored:

- 1. How do food delivery workers and managers perceive risks and vulnerability in the food delivery work across different employment positions?**
- 2. How do the food delivery platform workers understand their employment, social security and risk sharing with the platform company?**
- 3. What are the psycho-social risks involved and how to balance between stress burden and job satisfaction?**

## 4. METHODS AND DATA

**The ORIFODY project** relies on in-depth interviews. We adopted abductive content analysis on the data, which means that analyses try to find a balance between verifying pre-known aspects and giving room for unknown data-driven avenues towards new insights.

**The themes of the interviews** included *worker status, autonomy and control, social security and risk sharing, perceived risks, mental well-being and operating environment*. In-depth interviews with open-ended questions allowed capturing lived experiences and kept the interviews open for emerging themes throughout the process. The interviewers wrote field diaries during the process of data collection to interpret the data more precisely.

**The qualitative approach** is justified as it produces experimental knowledge on the novel phenomena of food delivery workers in different settings. The sample size provides possibilities to develop novel theoretical insights (Mason, 1996). The sample size for this study was 31 (plus 20 earlier interviews), which made comparison in experiences between differently organised employment types possible.

**Participants** were recruited on voluntary basis by purposeful sampling for interviews conducted between October 2021 and January 2022 in Tampere and Helsinki. Table 3 introduces food delivery platform workers and Table 4 introduces other food delivery workers and managers. Overall, following was done:

**Interviews** of 10 platform food delivery workers, 11 salaried food delivery workers and 10 managers working on food delivery were conducted.

- Participants were between 19 and 54 years of age.
- In all, 26 men and 5 women were interviewed.
- A higher education degree or pursuing higher education were the most typical educational backgrounds for the interviewed platform workers. Vocational education was the most common education level amongst salaried workers, and a higher education degree was a typical educational qualification for a manager.
- One courier's interview was conducted in Finnish; however, all other couriers' interviews were held in English. One platform company manager was interviewed in English, and the rest of the managers were interviewed in Finnish.
- The length of the audio-recorded interviews was between 52 and 97 minutes. The Finnish interviews were translated into English when citing the transcripts.



**In the results chapter**, we will use ‘Q’ referring to questions by interviewer, and ‘FDP’ (food delivery platform), ‘S’(supermarket), ‘T’(transport) or ‘A’(staff agency) and numbers (1–29) referring to interviewees. Each interviewee (participant) has the respective code. Each food delivery platform worker received a code FDP01–FDP10 in text. However, in table 3 below, FDP workers appear in random order to ensure anonymity. Participants’ age, length of stay in Finland, as well as the duration of their platform work were also all classified into categories to ensure anonymity. There were fewer concerns about anonymity and vulnerability among workers and managers of retail, staff agency, and transportation (table 4). There were two interviews in which both manager (M) and worker (W) were present. Those interviewees share the same code number but different letter (M vs. W). The main characteristics of the interviewees are introduced in Tables 3 and 4.

**Table 3. Social demographics of food delivery platform workers**

<b>Age, gender and stay in Finland</b>	<b>Duration of work in platform</b>	<b>Highest education</b>	<b>Main source of income</b>
25–29-year-old female (im) migrant, who has lived in Finland less than 2 years	Part-time, less than 6 months	Bachelor’s degree student in Finland	Yes
18–24-year-old male (im) migrant, who has lived in Finland less than 2 years	Part-time, less than 6 months, sub-contracted by courier	Bachelor’s degree student in Finland	Yes
35–39-year-old male (im) migrant, who has lived in Finland for 2–6 years	Part-time, more than 36 months	Completed higher education in home country	No, has a main job (cleaning)
50–54-year-old male (im) migrant, who has lived in Finland for more than 6 years	Full-time, between 6 months and 36 months	Master’s degree from Finland	Yes, and no other job
30–34-year-old male (im) migrant, who has lived in Finland for less than 2 years	Full-time, less than 6 months	Degree from home country	Yes, but has another part-time job (Posti) at night
25–29-year-old male (im) migrant, who has lived in Finland for more than 6 years	Full-time, between 6 months and 36 months	Never completed school	Yes, and no other job
Male (im) migrant, who has lived in Finland for 2–6 years	Part-time	Bachelor’s degree student in Finland	Yes, and no other job
30–34-year-old male im(migrant), who has lived in Finland less than 2 years	Full-time	Bachelor’s degree student in Finland	Yes, and no other job
30–34-year-old male (im) migrant, who has lived in Finland for more than 6 years	Between 6 months and 36 months	High school outside Finland	Yes, and no other job
Male, non-immigrant	Part-time, more than 36 months	University student in Finland	No

**Table 4. Food delivery workers and managers in salaried employment**

<b>Participant's code (defined below the table)</b>	<b>Age, gender and immigrant background</b>	<b>Role</b>	<b>Highest education</b>	<b>Employment status: full or part-time</b>
D11W	35-39-year-old male, non-immigrant	Driver	Vocational school	Part time
D12M	20-24-year-old, male, non-immigrant	Manager	High school	Full time
D13M	40-44-year-old, male, non-immigrant	Top manager	Higher professional education	Full time
D14W	20-24-year-old, male, non-immigrant	Driver	Primary school	Full time
D15W	25-29-year-old, male, non-immigrant	Driver	Vocational school	Full time
D16M	40-44-year-old, male, non-immigrant	Top manager	Professional or university-level education	Full time
FDP17M	25-29-year-old, male, immigrant	Top manager	Higher university-level education	Full time
S18M	35-39-year-old, male, non-immigrant	Top manager	-	Full time
S19M	35-39-year-old, male, non-immigrant	Manager	-	Full time
S20W	35-39-year-old, male, non-immigrant	Worker	Vocational school	Part time
A21M	45-49-year-old, male, non-immigrant	Top manager	-	Full time
A21W	25-29-year-old, female, non-immigrant	Worker	-	Full time
S22M	30-34-year-old, male, non-immigrant	Top manager	Higher university-level education	Full time
S23M	40-44-year-old, female, non-immigrant	Top manager	Higher university-level education	Full time
S24W	30-34-year-old, female, non-immigrant	Worker	Vocational school	Full time
D25M	40-44-year-old, male, non-immigrant	Top manager	Lower university-level education	Full time
D26W	20-24-year-old, male, non-immigrant	Driver	Vocational school or lower university-level education	Part time

S27M	45-49-year-old, female, non-immigrant	Top manager	Vocational school	Full time
S28W	25-29-year-old, male, non-immigrant	Worker	Primary school	Full time
S29M	35-39-year-old, male, non-immigrant	Top manager	-	Full time
S29W	25-29-year-old, male, non-immigrant	Worker	-	Full time

D: transport company; S: supermarket; A: staff agency; W: worker; M: manager

**The study used** abductive analysis (Timmermans & Tavory, 2012) that is an analytic middle position fit to this study. This analytic stance combines inductive insights of data-driven constructivism and theory confirmation on the already known occupational risk dimensions. In analyses, we move back and forth between empiric data and conceptualisation in uncovering the reciprocal relationship between workers' views on and regulatory context of the OSH of food delivery. The abductive content analysis combines deductive and inductive elements to build a holistic understanding of the results (Graneheim et al., 2017).

**The deductive part** of the analysis aims to identify perceived occupational risks across various positions of food delivery work. The inductive analysis, the data-driven exploration, allows for gaining clarity on how contextual factors, such as rules and permits of migration and access to social security, operate as conditions to occupational wellbeing and employment-related risks.

## 5. RESULTS

**Food delivery** consists of blue-collar work that is organised as salaried employment as well as gig work via digital platforms. The latter is usually conducted through self-employment, and the commonly applied partnership model seems to ease access to the labour market amongst vulnerable groups, such as migrants. For some individuals, food delivery becomes a career, data of this study suggest that some couriers have worked for 4–5 years in food delivery sector. This research explores the perceived occupational risks amongst food delivery workers and shows that traditionally organised food delivery jobs are perceived relatively positively irrespective of the contract (temporary, part-time or permanent), but not for platform work.

**This chapter** is divided into five sections. Section 5.1 concerns physical risks. Section 5.2 analyses psycho-social risks. Section 5.3 discusses working time and income as fundamentals of well-being at work. Section 5.4 focuses on social and communal structures of work. Finally, Section 5.5 analyses how migration adds vulnerability to workers' lives in the food delivery sector.

### 5.1. PHYSICAL RISKS

**The chapter begins with** analysis of how workers can be protected from physical risks in their working environment. This section shows how traffic, a key context of food delivery, is perceived as a risk amongst food delivery workers. Not all food delivery work studied here takes place in traffic. Therefore, the division of working indoors and outdoors matters to the perceived physical risks. Working outdoors leads to climatic and weather-related occupational risks intensified amongst newly arrived migrants, which are also reflected in this section. The aspect of vulnerable migrant labour will further be analysed in Section 5.5 from the angle of occupational injuries.

#### 5.1.1. OCCUPATIONAL SAFETY: PHYSICAL BURDENS OF WORK

**The food delivery sector** basically consists of manual blue-collar work with an identified risk scenario on physical burden. The platform-based food delivery courier work is physically demanding and particularly risky when it is done by cycling (Gregory, 2021). Modern electric bicycles or scooters can ease the physical demands of the courier. Electric cargo bikes provide another option (Narayanan and Antoniou, 2022). Despite using electric vehicles, riders are light and relatively fast-moving road users in danger of traffic accidents. Gregory (2021) documented a few recent courier accidents that have gained wide public attention. Enhancing safety of such workers would involve a combination of practices and policies. Providing protective equipment by companies can enhance workers' efficiency and safety. The number of protective items provided by the platform company has been increasing and the set provided varies between the companies. For example, in autumn 2021, at the time of interviews, Foodora provided helmets for riders in Tampere, but Wolt did not provide the same.

'**FDP06**', who worked for Wolt, told the equipment he uses at work. He specified what Wolt provided and what was his own.

**FDP06:** *Ok. I have equipment like I get in Wolt. It's a bag, it's a t-shirt, it's a jacket, it's trousers. But myself equipment it's my bike, it's my scooter, it's my car, I have my helmet for safety, and I have clothes, it's my own too, my phone of course, my battery bank, just power bank, and gloves, or mask for safety to my eyes, and that is all, I think.*

**'FDP03' and 'FDP02'** said about Foodora:

**FDP03:** *They give out jackets, and they are warm, they are like rain proof, and they have reflectors so you can go comfortably at night with no fear or accidents, and also the helmet. So those are the equipment, and obviously the bag pack.*

**In addition to being** physically burdensome, cycling may provide exercise and health benefits. However, it was more commonly linked to physical burden, tiredness and pain than to overall health. The laborious aspect of the food courier job is described below.

**Q:** *Ok. Have you experienced any injuries or accidents while at work?*

**FDP03:** *No. I haven't. May be just getting tired on the muscles, because you are cycling you just feel some muscle pains.*

**To avoid tiredness** of workers, FDP03 welcomes scooters as a solution.

**Q:** *Ok. So, what do you think would be the ways of improving wellbeing in your job?*

**FDP03:** *I think if there were scooters, I was thinking they should provide scooters the same way they provide helmet and jackets. There should be Foodora scooters because they can't fully abolish using bike and using the scooters or something because these short distances are where cars can't actually deliver. So I think they should have their own scooters so it will be less tiring compared to bicycle and less expensive because if you are renting the scooter it will be actually more expensive.*

**The avoidance of employment** by platform companies has relevance to the use of vehicles. If a platform company introduces a vehicle to their courier, they would be seen as responsible for the consequences of its usage. A study on patient records in 2014–2020 in greater Los Angeles has reported that injuries with E-scooters equal in numbers to what was previously reported with motorcycles (Ioannides et al., 2022).

**Excluding burdensome cycling** in courier work, physical exhaustion and related safety risks to an intermediate level were assessed, as described below by a salaried delivery worker (D15W). Physical burden, for example delivering to high buildings without a lift, also takes place amongst grocery delivery workers in transportation companies.

**Q:** *Ok. And so, what physical health risks do you see in your work?*

**FDP04:** *First of all, you know there are times when you have orders, the orders are very heavy, when you go to deliver it, maybe you find the person you are taking that order to*

*lives on the top floor and then may be it's 10th floor. And on that 10th floor, when you go there you find that there's a problem with the elevator, the lift. So you have to walk up, carrying that big luggage of food. (...) Sometimes you can even, during your shift you can experience even 10 times of such happenings. But the end of the day you will feel like there's some pain on your shoulder, you are not like 100% okay*

**Q:** *Well, it would just be that some homes are located in apartment buildings that don't have an elevator, so that's a bit of a problem..*

**D14W:** *Yes, it's a bit heavier. Not if ten boxes go there, but you have to run up and down those stairs a couple of times. But at least you get good healthy exercise.*

**Q:** *If you compare to that previous warehouse job*

**D15W:** *This is much lighter and more comfortable compared to that.*

**D15W:** *Yes, and in Helsinki and Kannelmäki (...) there were many [buildings] without elevators. Then you go to the fourth floor without an elevator, with eight boxes.*

**Q:** *Is there any physical load, is it too much or is it appropriate?*

**D15W:** *(...) medium, well, let's say it's not too light and not too heavy (...)*

**The backpacks** used by couriers are often mentioned as a risk factor.

**Q:** *Ok. May I please ask you, what health and safety risks do you see while using this app or any other equipment like bag, bike?*

**FDP10:** *(...) Then on the risks, well, if you are for a very long time with the backpack, I guess you can develop some pain if you are carrying a heavy backpack, with shoulders and also with your own food and tools and all the other things that I carry in the backpack. Yes, sometimes it has felt like some back pain after a long day. I don't see any other risks but also the backpack is big so sometimes you can hit something with it. Sometimes it is a bit difficult to fit in the elevator if they are small because the bag is something like 40-50 centimetres, and its shape is a cube. Sometimes it feels too big.*

**Cycling and carrying** deliveries are not the only physically demanding parts of delivery work, yet working inside a supermarket was not perceived as burdensome. Overall, product picking is a physically demanding job, as described by S23M, a top manager in a chain supermarket: "So if you pick products for eight hours, depending on the store, she will take a good 18,000, 20,000 steps per day, which is a physically good run."

**Supermarket-owner** (S18M) regards product picking as ergonomically positive when compared to the other works in supermarket:

**Q:** *(...) are there any similar occupational safety risks or concerns here on the food delivery side (...)?*

**S18M:** *Well, the first thing is that it's a really versatile job, even physically. In other words, there are no such static ones, and again, the product picking is light when small quantities are made at a time. I think it's one of the best jobs in terms of ergonomics.*

**A supermarket worker** emphasises the diversity of tasks in the supermarket, product picking being one of the tasks. The supermarket owner thinks that a full-day spent in just product picking could be dull. However, this is the case with several product pickers in bigger supermarkets.

**Q:** (...) That it doesn't seem to go to one-sided or does it?

**S29W:** Well, no. That it's quite versatile and I like the fact that you can do a lot of everything.(...)

**S29M:** Yeah. Yes, it could be a pretty boring working day if you only did product picking. I don't know how things have been handled in large units. That there is some rotation of tasks there, that sometimes you can go to work as cashier for a little while and (...)





## 5.1.2. TRAFFIC: WHO IS IN DANGER?

**Traffic serves as an occupational risk context** for many individuals operating in food and grocery delivery. Working time issues and various occupational pressures contribute to fatigue and distraction, which are common risk factors amongst gig work drivers (Christie & Ward, 2019). Furthermore, piece-based rates create time pressure in delivery linked to speeding and for having no risk management in place (Christie & Ward, 2019). Results of this research resonate with these insights. Even though drivers and couriers both want to present themselves as wise and responsible workers and citizens, the tension of making more money by breaking rules was recognised by some respondents.

**Furthermore**, it was identified how the level of safety related to one's employment status and vehicle has an effect on how one perceives traffic-related risks. Traffic forms a safety context between the two transport employment positions analysed here (product picking is excluded). In platform-based food delivery, traffic-related risks are what one has to be constantly scared of due to light equipment and vehicles. However, in traditional transportation, often conducted in vans or lorries, traffic risks are widely about being mindful of *other individuals*. This division is documented in the following quotes. Traffic is a context where your own understanding of accident risks and calm mind and wisdom on safety practices are needed.

**The vehicle matters** greatly for the level of risk of occupational hazards. Furthermore, climatic conditions, including cold weather and darkness, matter. When many couriers are from warmer countries, some climatic conditions may pose wider risk factors for, for example, somebody living first winter ever and conducting delivery work in climate with snow.

**Driver D11W** ends up worrying about the safety of others in the traffic when he is asked to compare working conditions between his jobs.

**D11W:** (...) in my opinion, the hardest part here is the carrying and that, but the main thing is that it's quite mental, when you're in the center, you have to take everything into account, light traffic, everything you have to take into account, the elderly, children, cyclists, that's all fast food couriers, Wolt, Foodora. You have a lot to do.

**Time pressure**, employee rights and traffic risks are connected. If the meal break is the responsibility of the employer, and the latter does not take care of it, this could create a wide traffic safety risk. Drivers are more concerned about others than themselves.

**D11W:** (...) you don't have time to take a meal break, that's me.. we have the same system that we have, when it's included in that day, it should be kept in principle as it should be. I've talked about this before with my superiors, because you do talk about such a dangerous profession, you drive a car and if your blood sugar goes too low, it's a bad thing.

**Q:** Have you ever had a bad moment when you weren't quite okay with it?

**D11W:** You'd be lying if you said otherwise, but it's true, sometimes you have to have chocolate and something like this to get your blood sugar up so you don't fall asleep.

**Q:** But you take care of yourself pretty well?

**D11W:** Of course. I remember it because, I drove a property maintenance pickup for five years, I sanded yards and, I drove a Kramer, I maintained yards, and saw, then you could

*understand all the best how dangerous my profession is. Then you have to keep your eyes open.*

**Q:** *What do you mean you don't see these risks in your own work? What kind of risks do you see?*

**D14W:** *(...) If you don't follow the traffic closely during rush hour, you might even hit cars there. There's quite a lot to take into account. Especially when in the center, there's hustle and bustle everywhere.*

**Bike couriers** worry about their own safety, and some of them have precise practices on how to ensure safety.

**Q:** *Ok. When cycling, I suppose you use this Wolt app. Does it distract you while cycling? Do you get any distractions from it?*

**FDP09:** *No no, I use ear buds. So when I get a task, I get like a sound alert that there is task available to take. I stop the bicycle, I look at the task, I take it or not, then I continue*

**Q:** *Ok. Does that mean you have to all the time put more effort in concentrating, or?*

**FDP02:** *You have to be active, because you know you are handling almost 2-3 things because you are on the road, you have your phone, and you have the food. So, if you don't be careful, like, when you concentrate on your phone, you might fall, you might pour the food and you see like you'll cause more troubles. So, the good thing, before you start, you know where to go, and if you don't know the direction you take an holder you put there.*

**There were some** couriers who have had minor accidents and some who had not.

**Q:** *Ok. Do you have any fear for road-traffic related accidents if I may ask?*

**FDP03:** *Yes, yes, I do.*

**Q:** *What kind of?*

**FDP03:** *I am using a bike. A bike has more risks, and with winter coming, it will be more slippery. So I might just slip out of the road, maybe into the main road, something like that. Like slipping or maybe falling down. So those kinds of risks. And also, that one that's maybe going to the main road.*

**Q:** *Ok. And may I ask you about risks in your job? What kind of risks do you see in your job when working with Wolt?*

**FDP06:** *My work is need more moving. I have 100 kms per day on my scooter or my bike everyday. When weather is rainy or snow, it's very risky and I need to be very careful that I do not have trauma.*

**FDP10:** *Then another risk is being outside on the streets where traffic is dangerous, and I have had three accidents and those were my faults. I was just going alone and fell from the bike because one, there was slippery snow and I fell. The other two because the tram track were wet so I wasn't careful enough there and I slipped and fell. There are*

*also other traffic problems like this track the pedestrians, this track cyclists, this track the drivers, I haven't had any accidents with those, nothing big but its always a risk. I have many close situations where I had to shout to them like 'hey give way'. So you need to be very careful not to have accidents with those people.*



### 5.1.3. CLIMATE AND WEATHER CHALLENGES

**Not all food delivery work** studied here takes place in traffic. Therefore, the division of working indoors and outdoors matters to the perceived risks. Working outdoors leads to climatic and weather-related occupational risks, which are also reflected in this section. Managing winter conditions in Finland is an important occupational issue, even more for those who are less familiar with the climatic conditions of Finland.

**Amongst interviewed couriers**, as many as nine out of ten were relying on bikes or scooters, and there was only one who used a car to conduct the work. Reliance on bikes or scooters increases worries about accident risks, particularly during winter, as well as about the physical burden of courier work being tiring.

*Q: Ok. And what physical health risks do you see in your work?*

*FDP08: So far, everything is ok physical wise. But in winter there is some really problem that we have to face.*

*Q: Ok. Would you please elaborate.*

*FDP08: So, in winter, including our winter tyres, sometimes we get slipped out. I mean there is snowy road, so it may be occur some physical disease like some physical injury. So, this is the one thing. And another thing is some people have like sinuses problems, so they have problem during winter working outside. And some people they are having problem like they get like some blood in their nose. So, for this winter like really, if it is really cold. But I don't really getting any problem since when I started my work. There is only getting one problem that was, I slipped out once or twice during my work in food delivery.*

*Q: Ok. Did you get any compensation from the Wolt or Foodora?*

*FDP08: When I started, at that time there was no insurance allowance, or there is no insurance benefits from Wolt and Foodora, but after few months, they started it.*

**Furthermore**, he (**FDP08**) explained how to prepare winter:

*"In winter, of course they say that, through mail, that you must have back light and front light. So I have back light. Back light must be red light and front light must be a spotlight. So, and we have to change our tyres from summer tyres to winter tyres. And we are using like winter clothes that is provided by this company."*





## 5.2. PSYCHO-SOCIAL RISKS IN FOOD-DELIVERY

### 5.2.1. MULTIFACETED STRESS FROM FOOD DELIVERY PLATFORM WORK

**Food delivery consists** of blue-collar work, which is organised as salaried employment as well as gig work opportunities via digital platforms. Based on the analysis, the psycho-socially burdensome forms of food delivery work concentrate on the work done as platform work. The over-representation of migrants in food delivery gig work in Finland was revealed in a previous study by Mbare (2023), who highlighted how both Foodora and Wolt made it easier for migrants to work with them owing to their minimal requirements, which was a main attraction for them to work on these platforms. The local language, Finnish, was not a requirement of couriers. Coupled with less interaction in the job, this attracted even the newly arrived migrants to the job. Migrants did this job for purposes of earning income to sustain their living in Finland due to a lack of labour market opportunities (Mbare, 2023). Whilst this was the case with many of the participants of this research, the interviews also revealed a section of participants who had this job as their first job in Finland whilst they still integrated in the society, whereas students did it as a part-time job for its flexibility, which enabled them to balance it with their studies.

**Participants who** had this job as their first job in Finland were newly arrived migrants in Finland and had no knowledge of labour laws or working conditions in Finland. Therefore, they compared their jobs and working conditions to those of their home countries. Despite the widely documented precarious nature of platform work, this group of participants was more concerned with their ability to 'work hard' (for longer hours and many days a week) and earn income, which appeared far more than it would be in Finland when they converted it to their home currencies. This was also a motivation for many of them to continue working on the platforms. Working regular hours as stipulated in the Finnish Working Time Act would not generate them enough income to support their living, which clearly depicts a low income.

**The interviews indicate** a major skills-career mismatch amongst participants, as many of them were highly educated compared to the skills required for delivery work. Whilst just a fraction of participants mentioned about having some education from their home countries, many participants were master's/ bachelor's degree graduates from Finland or were bachelor's degree students. Owing to this over-skilling, we argue it could result in de-skilling should they be dependent on and work in the platforms for several years. However, as many participants considered the work temporary and were looking for 'better' jobs, this study could not prove a possible obsolescence of skills.

**However,** considering the vulnerabilities of migrants in the Finnish labour market and the difficulties they have in finding professional jobs that match their educational skills, it is likely that many of the participants would continue working in the platforms for longer periods, which could not only result in de-skilling but also dependency in platform work, thus eroding their professional skills. This is evident from a courier, who at the time of the interview had lived in Finland for over 15 years. Besides being fluent in the Finnish language, he was a master's degree graduate from a university in Finland. Due to difficulties in finding a professional job, he was frustrated and stayed a jobless for few months whilst figuring out his way forward in the labour market. Then, he decided to shift his focus from professionalism to making money. That is when he decided to take up full-time work on food delivery platform. As he mentioned, he was contented in the job and was intending to work there for as long as the platform existed in Finland, even if this could last until his retirement. He emphasised that he was no longer interested in any other job due to earlier labour market frustrations as an immigrant.

**Even though** many participants mentioned delivery work to be temporary and they only did it whilst they integrated into society or whilst completing their studies, the example of the courier discussed above also shows the possibility of this job becoming a job of dependency and long-term reality amongst migrants instead of a steppingstone to better jobs. However, for newly arrived migrants in Finland, it was useful whilst they integrated and gained footing in Finnish society. Hence, it can be surmised that the vulnerabilities of migrants in Finnish labour markets made the food delivery platform work more attractive to the participants compared to its flexibility.

**The interviews** revealed an added layer of stress in relation to residence permits amongst couriers who were living in the country under a temporary residence permit (type B). These were mainly those couriers who were granted residency in the country for the purposes of their studies. Wolt allowed its couriers to work as much as they wanted, but Foodora allocated its shifts to migrants on the basis of their residence permits (Mbare, 2023). This implied that Foodora couriers who were students with residence B (temporary), were only allowed to book shifts of maximum 25 h/week (currently the official allowance is 30 h/week on average during study months) whereas those who had A (continuous) or P (permanent) type of residency were allowed shifts of up to a maximum of 40 h/week as stipulated in the migration law. This exposed students to more financial risks, owing to the low pay by the platform and the inability to compensate with longer work hours (Mbare, 2023).

**In the renewal** of their residence permits, some participants shared the challenges they faced regarding the extension of their permits. As they reported, their agreements with the platform companies were based on business contracts (not work contracts), which made it impossible for them to prove the sustainability of their income to migration officials. Therefore, they felt forced to either register as entrepreneurs or look for salaried jobs that could back up the renewal of their residence permits. As this seemed to add more stress in their lives some of them wished that platforms would introduce different kinds of contracts that could aid in the renewal of their residence permits. This, as they mentioned, would enhance their well-being at work. **FDPO4**, for example, mentioned:

***FDPO4:** But the other problem is that Wolt cannot, you cannot use the agreement that you have with Wolt to renew your permit. So it means that you must have other job, or you must register as an entrepreneur, and you have your own company. That's when you can use that to apply.*

**When asked about** the best ways of improving his well-being whilst working on the platform, he said:

***FDPO4:** Well, the first thing is that if they can introduce work permits, then that would be much better for so many people because like for me right now, I am not able to do Wolt full time because I need a job contract, and Wolt cannot give me that. So I have to have another job, the one that can give me, that I can use for renewing my permit, and then I can do Wolt part time. But if the Wolt was to give a job contract, then I wouldn't need to have 2 jobs, then I would just decide to do Wolt full time.*

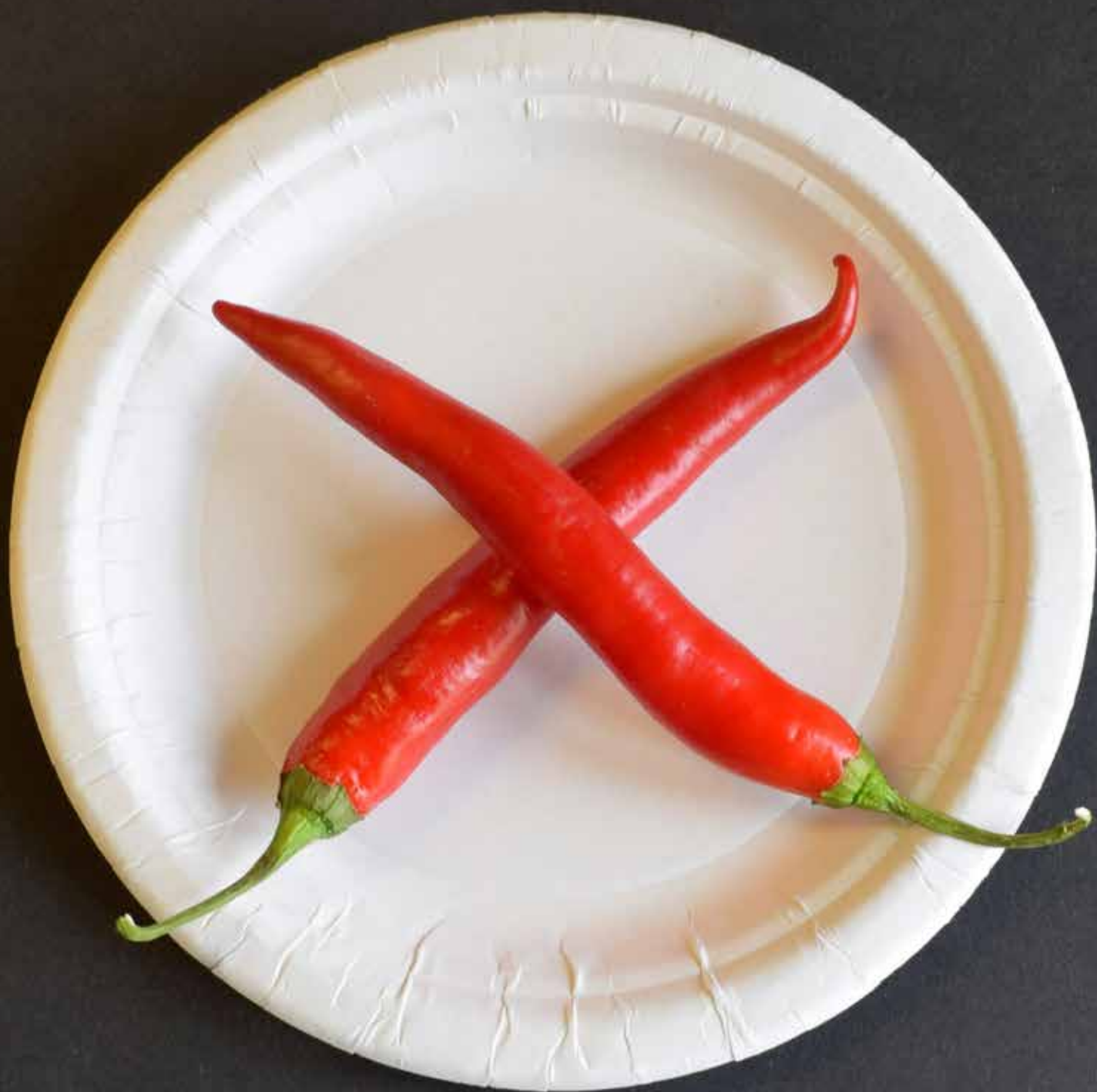


## 5.2.2. ALGORITHMIC MANAGEMENT AS PSYCHOLOGICAL RISK

**Algorithmic management** is commonly used in platform work to assume managerial functions of platforms in controlling, monitoring, evaluating, rating, disciplining and allocating work to workers (Lee et al., 2015; Mateescu & Nguyen, 2019; Wood, 2021). The interviews of this research showed that both platforms, Wolt and Foodora, used algorithms to allocate work to their couriers, which prompted them to monitor the locations of their couriers as work was allocated to couriers on the basis of their proximity to restaurants. Participants reported the impossibility of working on the platforms without consenting to platforms to monitor their locations. A study by Mbare (2023) determined that Foodora couriers were subjected to penalties arising from the monitoring of their locations, for example in cases of logging in the app from different locations or logging after more than 5 min.. These penalties were in the form of demoting them to lower badges.

**Möhlmann & Zalmanson** (2017) characterised algorithmic management by automatic implementation of decisions. This was the case with Foodora when it automatically lowered couriers to lower badges should they not work within the set rules of the badge system. This badge system enhanced psychological stress amongst couriers, as those in lower badges had difficulty getting enough work shifts, which enhanced their financial stress (Mbare, 2023).

**According to** our interviews, Wolt employed light use of algorithms in the management of their work forces and participants of Wolt did not report any psychological stresses arising from it. In contrast, Foodora's use of algorithms included evaluating couriers' performances, ranking and disciplining them. As a result, it applied extensive supervision towards couriers, which was quite frustrating for participants.



### 5.2.3. FOOD DELIVERY PLATFORM WORKERS EXPERIENCE DISCRIMINATION

Food courier gig workers occasionally face discrimination and racism within their work environment, mostly from non-native restaurant workers as well as whilst working in the streets (Mbare, 2023). Participants reported aspects of racism and discrimination from non-native restaurant workers, which included disparage, contempt, verbal aggressiveness, disrespect and unfriendliness.

**In addition**, the participants reported that they faced similar discriminatory experiences in their physical work environments whilst at work. For example, when moving across the streets during deliveries, bike couriers reported verbal abuse from other road users. Whilst picking deliveries, they experienced violence related to the occasions when someone tried to steal their bikes. Furthermore, those who delivered food by car reported abuses from other drivers in relation to parking spaces. In addition, couriers also reported verbal abuse and physical aggressiveness at the destinations of deliveries, which were either from some residents in the delivery neighbourhoods or some customers.

**On the basis of** the interviews of this research, these abuses pointed out racism and ethnic discrimination towards food courier gig workers. These experiences of racism and discrimination abated participants' psychological well-being whilst working on these platforms. As some of them mentioned, they felt demoralised collecting deliveries from restaurants that discriminated against them. In some cases, participants reported intentionally rejecting tasks coming from those restaurants due to fear of the kinds of treatments they would experience in those restaurants.

### 5.2.4. FLEXIBILITY AND AUTONOMY: TRUE AND FALSE

**Autonomy** and flexibility of platform work has inspired discussion in both scientific and grey literature, following its emphasis by platforms in their marketing strategies when seeking couriers. This research used autonomy and flexibility to describe the independence of couriers around shifts and tasks.

**This research** showed varied experiences of autonomy and flexibility in these two platforms owing to the differences of their management systems. In both platforms, couriers were able to choose their own work time, with Foodora couriers working on shifts and Wolt couriers switching on their apps and starting to work. However, the shift system of Foodora was regarded as psychologically strenuous for participants belonging to the same, owing to its inflexible work time options and less freedom around booked shifts. 'FD02', who worked on both platforms, said it was easier and more convenient to just open her app at any time and start work in Wolt than committing to booked shifts in Foodora.

**In this research**, an increased mental pressure of committing to shifts amongst the participants of Foodora was observed. This was heightened by the rules of the 'badge system' where, as mentioned by participants of Foodora, cancelling shifts or not going for shift 'goes against your ranking' and were punished by placing them in lower badges. Thus, in Foodora, although couriers were able to choose shifts, the 'rules of the system' limited their freedom when choosing shifts and around task execution. Its appraisal system 'forced' couriers to sometimes pick on shifts regardless of whether they fit their schedules or not, posing limits on their flexibility and autonomy.

**In contrast**, this research found that couriers who worked in Wolt had the independence to work freely whenever they wanted, without any penalties. Despite the increased flexibility in Wolt, a study by Mbare (2023) found that it did not enhance the psycho-social well-being of couriers. Mbare argued that this

flexibility can spur overworking (*working several hours a day many times a week*), which, combined with the high intensity of the work, is a risk to burn out. In addition, as argued by Mbare et al. (forthcoming), this may result in occupational overload and interfere with work–family interface, including work–life balance.

**Nonetheless**, the findings showed paradoxical autonomy and flexibility in Foodora, which is a similar finding to many other studies of platform work (e.g., Jarrahi et al., 2020; Laursen et al., 2021). However, whilst Wolt couriers had higher flexibility and a more autonomous work environment, akin to Mbare’s (2023) finding, it was a two-edged sword to their psycho–social well-being.

## 5.3. EMPLOYMENT-RELATED VULNERABILITY

### 5.3.1. WORKING HOURS AND WORK PRESSURE

**The regulation of working time** still is an issue in blue-collar work, regardless of the type of employment. In the salaried work aspect, the certainty of hourly income was valued amongst employees. The opportunity to work at the time of your choice in platform work according to the Wolt model is perceived very positively. However, this model comes with the risks of over-work and related exhaustion. Gig-based earning seems to intensify some occupational risks and this section provides examples of how the occupational risk factors co-exist and influence one another.

**In line with** the European regulatory context, classification of worker status remains a major issue in Finland’s food delivery business. The majority of platform workers were self-employed individuals, and this mode of work splits opinions amongst workers. Salaried employees were most satisfied, particularly those with monthly salaries. This research analysed the food delivery sector, where the weekly workload amongst the studied persons was diverse and part-time work was common amongst platform workers. In addition, a part-time job provides extra income on top of a main job.

*Q: Ok. So, are you employed there in that other job?*

*FDP04: Yes, I am employed. I am a permanent employee.*

*Q: Ok. And how many hours do you work in Wolt?*

*FDP04: Wolt, it depends, sometimes I can do even 2 hours, sometimes, 5 hours, sometimes 7 hours, it depends.*

*Q: Ok. In a day, or?*

*FDP04: Yes, in a day, but mostly I work like 4 times a week.*

**Gig work setting** remains a risk and stress factor. Part-time work is not tiring, and it provides opportunities to rest but creates less income opportunities, which might be a source of stress.

*Q: Ok. So, if I may ask you, could you please tell me, what risks do you see in your job?*

*FDP10: Well, there is a risk of not earning enough money because my earnings depend on the amount of orders that I make and there is no guarantee that I will have enough orders.*







**Sufficient remuneration** may compensate for vulnerability, which may explain why food delivery platform workers were not widely against self-employment. Check in the following text how two Wolt couriers have opposing opinions against two of their colleagues on whether their platform work should be organised as a salaried job.

*Q: Ok. That was my last question for you. May I ask you, is there anything else you would like to add to this discussion?*

*FDP04: Well, I think it's about Wolt, Wolt itself. I think it would be much better for them to consider giving out job contracts. Because for those job contracts, they come with so many things like, you can be able to have an annual leave, which is aid, and things like insurance. Like right now, you see, for people who are working in Wolt, if you have to pay for insurance, you have to do it by your own self (...)*

*Q: Ok. So which one would you like to be? Would you like to be an employee, or would you like to be an entrepreneur?*

*FDP06: I want to be employed by Wolt.*

*Q: Ok. And may I ask you, now that you are working as a self entrepreneur, would you like to be an employee in these food delivery companies?*

*FDP08: Not really because if I don't be like an entrepreneur, there is some, there will, maybe like strict rule that you have to work just these hours and you have got this money and you don't have any flexibility to work like whenever you want now. (...)*

*Q: Would you like those who work for Wolt to be defined as wage earners and, in the role of employee, and again Wolt, in the role of real employer? Would you like a salary like that?*

*FDP01: [thinks for 10 seconds] In practice, I don't, because just because I can't fulfill them.. the obligations of a paid job and that has actually been from the beginning why I applied there in the first place.*

*Q: What do you think was the obligation of paid work?*

*FDP01: Come to the place at the agreed time, for example, and then I can't control it (...)*

**There was substantial variation** in the preferred mode of employment amongst platform workers. A similar variation was also found in the Wolt survey conducted by Taloustutkimus (Wolt, 2021a). This study surveyed Wolt couriers who own a Wolt account and allowed contact and 42% ( $n = 1539$ ) of them responded. Amongst those who responded, 56% wanted to continue as self-employed contractors and 25% wanted to become employees.

**The managers** interviewed in the retail and transportation sector saw advantages and disadvantages in having their own employees familiar with the job versus having temporary staff via staff agencies. Interviewed employees felt that their employer took their working time-related wishes into account. In contrast, gaining enough weekly working hours, accompanied by higher monthly earnings, was a critical issue amongst employees towards employers.

**Employers** of salary-based food delivery work also seek efficiency, and regulation of working hours is one way to achieve this. The form of the employment relationship allows for different levels of flexibility in

the use of labour. The chief executive officer (CEO) of a same-day delivery platform has both employees and self-employed partners, and he sees that both have their benefits in conducting the deliveries.

*I think benefits of having own employees, having employees is that the quality is much better, we have much more control of availability. And having freelancers is the flexibility. I would say those two things. (FDP17M)*

**The form of the employment status** and how much workers can influence their work setting has effects on job satisfaction and the psycho-social burden of work. Most interviewed employees are in permanent full-time jobs with monthly payroll, but a part of the labour (temporary and hourly pay) is obtained by employers through staff agencies. Across all studied food delivery occupations, students were satisfied with part-time work. Based on this qualitative data, a good balance between permanent and part-time work was agreed on by employees across the supermarket's product picking and salaried food (grocery) transport.

**Product picking** goes well once a worker knows the working environment, which tends to favour the company's own employees. Managers assess the pros and cons of extra work from staff agencies. 'Not knowing products and environment' are clear negatives contrasted with flexibility as a positive factor.

*Q: If it comes to the work of those collectors, what is your typical product picker like, what kind of working week and what length of shift does he do?*

*S23M: Well, perhaps the most common model is the same 30-hour-a-week work contract, that six-hour days and, from six in the morning to 12, or from seven to one, are perhaps the most typical. There are also full-time employees, in which case there may begin work at 5 a.m. be as many as five, who may participate first in our dismantling and shelving, the easier the collection is, the better the goods are on the shelf (...)*

*Q: That is, renting staff of the staff agent gives you flexibility(–), and they have their own arrangements for how all those things are handled, if something happens or something like that?*

*S18M: Yes, the employer is the other company and we then pay based on hours of service to them [staff agent], and they take care of everything else except the work management is here on site. It does quite go according to normal extra work principles, and quite simply it has been agreed with this company, we are offered at least four hours, for those who are here, that's the job [product picking]. So they [extra workers] are flexible in the other direction, if necessary they will do it for longer, it is pretty much guaranteed, in any case, the basic salary is the same for them as well (...)*

**Own employees** are important, but efficiency also matters. In the following quote, the flexibility offered by rental workers to the manager of a large supermarket weighs more than the additional training they must provide for the extra staff.

*Q: If you compare the fact that now the main part of the product picking comes from an staff agent's workers, (–), then if the same was done by the in-house's own people, what are the advantages and disadvantages of using a cooperative company for*

*S18M: Absolute benefit is flexibility, with a staff agent. The operating model was that*





they take care of product picking and help with other unloading tasks if necessary, and go home. From an efficiency perspective, it is a more efficient solution for the shift planner, and in general for the company. That is by far the biggest benefit, the downside of course is that there is some turnover in the rental workforce, there are different types of workers and it requires more induction training from us, the more people change.

**However**, in a medium-size supermarket, the owner-manager has come to the opposite conclusion, and he relies on his own employees.

**Q:** Are your part-time workers extra workers or are they just recruited from somewhere?

**S29M:** I have my own staff. We rarely use any hired extra labor. So, everything is our own.

**Q:** How many full-time employees and how many extras do you have?

**D25M:** Well, yes, we have 90 on the payroll, so I would say that 60 of them are full-time. Or at least full-time so that he does this for a living.

(...)

It's one of our values, and the other thing is that we don't use staffing companies for personnel either, that it's one of our values that our [company's] name actually reads on the dude's payslip. It doesn't read any Barona or Iisi or anything like that. Just because I haven't found it yet, I haven't found the thing about those staffing companies either, that what is the advantage for us, we are paid more for that person than for our own. Because, well, it's easy that if someone gets sick, seemingly easy that if someone gets sick, we get a new man there. But in my opinion, when logistics are underestimated or underestimated, logistics and the skills of the driver are underestimated, that when it's not just driving a car from one place to another, it's necessary, no, not just anyone can do it.

**A salaried transport worker** hired via a staff agent thinks that the number of weekly working hours matters for job satisfaction and enhances worker's commitment in the transport sector.

**Q:** We talk about work all the time.. is it part-time, the current one?

**D11W:** At the moment, we have most of the employees with a zero contract, it has not yet been permanent, but there has been talk that it would also tie employees having 40 [working] hours a week. That's probably one of the reasons, I can honestly say that if the hours are kept to a minimum, quite a lot of people leave the transport industry as well, which is a pretty bad thing.

**Q:** What is it that the hours remain at the minimum, how much does it mean?

**D11W:** Let's be honest, they stay there for 25 and 30 hours... a full week is 38 hours, or what is it, 37 and a half hours, but I've always wanted it to be at least. (...) I'll make it for almost 40 hours.

**A salaried supermarket worker** from the Helsinki region described his/her employment contracts and typical working time.

**Q:** Does that full-time position also mean monthly salary?

**S28W:** Yes, full-time monthly salary employee, we don't have fixed-term contracts. All contracts are permanent, that's your hourly contract. It is said that probably a third of us work full time.

**Q:** And it seems that, do I understand correctly, that even hourly salary workers have enough work, roughly, as much as they can do?

**S28W:** Yeah, that's enough. Some people even do even more at this moment with their own consent and wish.

**The platform-based food delivery work** is allocated in two different ways: *shift work (Foodora) versus unlimited work (Wolt)* (Mbare, 2021). The shift work at Foodora provides more autonomy to couriers with the highest batch number, as they were the ones to choose first their shifts. In Foodora, couriers had the freedom to choose work shifts from what was available, and their badge ranks determined how many shifts they had access to. Moreover, they could book for a maximum hours/week depending on their residence permits. However, this system caused stress to the workers due to their worry about keeping their ranking as high as possible and as all would like to have access to good shifts and enough work.

**Wolt couriers** had full autonomy on when to log in and out of work. They could work as much as they wanted, without any limitations. This freedom proved to be a double-edged sword to their occupational well-being because it included risk of over-work and fatigue, as will be discussed later in this section.

**The fairly positive situation** amongst salaried workers may be compared to platform food delivery workers, who often work long hours to compensate for low income levels.

**Q:** Ok. In a week for example, how many hours would you say you work in a week?

**FDP06:** In a week, let me count. From 40 until 45 I think. No, from 40 until 55 hours. Week to week is different. Sometimes 40, sometimes 55.

**Q:** Yeah. What have you experienced at your work that you would say are a big risk to your health and wellbeing?

**FDP08:** So, first of all when I am doing work for a long time, so it gets really tired for me. Like, sometime I work for more than 15 hrs, mostly I have worked 10 hrs. So that time I have experienced a lot of pressures and lots of headaches, sometimes, its not like every time. So I think like during busy times, and I have worked 10 hours and some few break in between, that time I have felt like I am sick, I feel weak. If normally you are working 10 hours and lots of working, so you will get weak.

**Respondent FDP17M** was the CEO of a same-day delivery platform, and he highlighted the regulation of working hours as a key to occupational well-being. "I would say too long work hours is not the challenge for us because we have working hours management, so basically we don't allow drivers to take more than 40 hours."

**Opportunity to influence** working time also takes place in salaried jobs, and salaried food delivery jobs do not guarantee that all workers get the desired number of working hours. For couriers residing in Finland under student residence permits, the work maximum was 25 h/week, which was controlled

strictly by Foodora. Since spring 2022 (Migri, 2022a), the limit has been 30 h/week as annual average, including holiday weeks but excluding internships. Opportunities and risks for over-work peak when the platform company does not care about the number of active hours, as is the case with Wolt.

**For example**, 'FH08', who was a Foodora courier and had a student permit, mentioned "*I can't pick up shifts more than twenty-five hours. If I pick shifts twenty-four and twenty-five hours and they will not give me next shifts, they say that you are already have twenty-five hours completed.*"

And 'FH18' who was of Foodora courier but had a permanent residence permit mentioned by Foodora: "*they have you know, limited hours to like 40 a week.*" (FH, data of the earlier project)

**There was often ambivalence** 'one hand this, the other that'. Thus, the satisfaction with the courier work varied, which is well reflected in the following quotes.

**Q:** (...) are you going to continue as a food courier or are you looking for another job?

**FDP01:** *It mostly depends on whether I have any options. It's mainly been that I haven't really had any other options than this.*

**Q:** *If there are options, then what?*

**FDP01:** *If... I really don't know. At least I don't want to burn that contract in the stove. I don't love it, it's just okay, it's a bit like playing a video game where you go there and go there and then get there*

**Q:** *Ok. So, would you say you are satisfied with your job?*

**FDP09:** *I would say I am satisfied with what I produce so far. (...) then that would be no of course not. I would like to have a very, something that would be considered like a better job, or something inclined to my career. (...) I am satisfied with the fact that I am making money so that I can provide for my family. I am not satisfied with the fact that maybe I am still doing this kind of work.*

**Work pressure** and related occupational risks seem more intense in gig-based food delivery work than in delivery work with more permanence. The intensity of food delivery platform work includes a paradox. During quiet times, one works harder and still earns less. At a time of high demand, the income level increases and so do the risks. The level of earning influences occupational risks via the pace of work. The temptations of gig work increase speed and bring occupational risks. Thus, the physical and psycho-social risk factors are intertwined and connected to how work is organised.

**A salaried employee's** working day includes statutory paid recovery breaks. In platform work, breaks belong to one's own time. In addition, a self-employed individual should count the vacation time allowance of a salaried employee (9–11% of income) when comparing the income level to salaried work (Annual Holidays Act, 2005). Recovery, which is enhanced by breaks and vacations, can have a risk-reducing effect on the job.

**Long working hours** increase occupational risks, which is why employees' annual working hours have defined limits. Limits to working hours do hold only if the platform company sets the limits for the courier partners that operate on an entrepreneur or self-employment basis. Moreover, an over-work schedule did not reduce work pressure. Work was intense amongst couriers, as they tried to maximise income owing to the unpredictability/uncertainty of future/next tasks and income. In addition, Foodora couriers were simultaneously racing against the parameters of the badge system, which heightened work pressure.

**The comparison** shows that employment is no guarantee of needed breaks during the day. Employees' daily schedules and work tasks can be adjusted in such a way that the time available for breaks is uncertain, as was described by a transportation worker, who is employed via staff agent. Skipping a meal was linked to a hurry.

***D11W:** But sometimes if I get the morning, evening, day and evening loads at the same time, then it's much easier to play it, you can play when taking a meal break, because if all comes in row, then to be honest, you don't have time to take a meal break (...)*

**An energetic**, permanent, full-time employee product picker has a flow in her job. She thinks positively about the work pressure and assessment of her (excellent) work performance.

***Q:** Well, what kind of product picking work do you have?*

***S24W:** It's pretty fast, so you can go fast there, that's all.. But I like it. I like this because it's really the same, you can't immediately see the traces of my work performance. (...) Just this week on Monday and Tuesday, the collection efficiency for the whole day has been two hundred. One was 202 and the other was 197. It's quite possible to get there. And no, that was the original goal, but I think the team goal is lower, 150 or 160.*

***Q:** What about the rest of the load? How do you see the amount of work or the rush or time pressure in the product picking work? What did you say about it?*

***S24W:** Well, in my opinion it's so calm pace [laughter] that there's nothing awful about it.. I think it's like that, when the planning work is done and those schedules and when everyone knows the schedule and so on, then there is no hurry at all.*

### 5.3.2. INCOME SECURITY AND LACK OF IT

**The gig work settings** are proven to be psycho-social stress factors. The question whether part-time work is good or bad depends on a person's situation. Part-time work is less exhausting, and it provides an opportunity to rest and pursue other things in life, but conducting part-time work with fewer hours one earns less, which can be a stress factor.

**FDP01 summarises** how efficiency is in the heart of gig work and gig pay.

**Q:** *What must be done, how must one act to earn well?*

**FDP01:** *To do as many as possible, as many, in the shortest possible time. As many orders as possible in the shortest possible time.*

**Q:** *Okay, be quick.*

**FDP01:** *Yeah.*

**Q:** *Are there other factors?*

**FDP01:** *No others actually. (...)*

**The Wolt survey** gives a reference context for courier's talk on their income. However, the recruitment method of the Wolt (2021a) survey can lead to a bias where the more experienced, skilled and those who earn the most are more likely than others to respond to the survey. A Wolt courier who has his own Wolt account works an average of 22 h/week billing an average of 15.69 euros per average online hour (the time when the courier either delivers or is available to deliver). When operating costs, including 25% commission to Wolt and social security expenses, are deducted from the total income, the net income level remains relatively low when compared to the minimum salaries of the food delivery sector's employees. There are couriers who do not have their own account and rely on rental agreements with such courier partners who have an account. This arrangement means incomes are divided between two delivery persons, substantially eroding the amount gained by someone who did the actual delivery work (Palkoaho et al., 2023).

**This income level** makes one food delivery worker describe his or her work as the survival of the fittest.

**FH07** *(data of the previous project): the work is such that you have to be really hurry, because that is the nature of the job, it's like survival of the fittest, you have to be really hurry to get something decent because some days when you come to work for eight hours you will not get even half of the minimum wage.*

**Q:** *Ok. So, if I may ask you, could you please tell me, what risks do you see in your job?*

**FDP10:** *Well, there is a risk of not earning enough money because my earnings depend on the amount of orders that I make and there is no guarantee that I will have enough orders. So that all depends on the amount of shifts that Foodora is publishing; and the amount of orders that customers will order; and then the amount of people that is working at the same time- so too many people working and too little orders and will be misery for everybody, and the other way around if many orders too few people would be very profitable. So that's one risk.*











**However**, most food delivery workers are content with the wage level offered, particularly those who work in partnership with Wolt. However, the gig- and task-based wages have substantial downsides, such as uncertainty. It remains unclear whether the wage level would remain at the same level in future, as there was already a cut in the Wolt's mileage compensation, which is an important part of total wage (YLE, 2022). In the world's megapolis of New York and Beijing, the offers of food delivery companies have become less rewarding than they were in the early years of platform-based food delivery (van Doorn & Chen, 2021).

**Q:** *Ok. And would you say that you are satisfied with your job?*

**FDP05:** *Yes, exactly.*

**Q:** *Why?*

**FDP05:** *I like it.*

**Q:** *Ok, but why? Why do you like it?*

**FDP05:** *Because I get money. And apart from money, I aim two things at the same time.*

**Q:** *What two things?*

**FDP05:** *Health mostly.*

**Q:** *Ok. How is it contributing to your health if I may ask?*

**FDP05:** *If you think cycling, in my opinion, you cannot even compare cycling to gym. It is the most effective form of exercise because it is highly coordinated to more or whole part of your body and it burns calories.*

**Q:** *Ok. And may I ask you about your income? Have you counted how much money you earn per hour in Wolt?*

**FDP06:** *It's different amount. One day it can be 10 or 15 euros per hour, and another day could be 30 euros per hour. I think it's range from 10 euros to until 30 euros.*

*(...)*

**Q:** *Ok. And may I ask you, are you satisfied with your job?*

**FDP06:** *Yes, I am fully satisfied.*

**Q:** *Ok. And why if I may ask?*

**FDP06:** *Because in my situation, for example, somebody living in Finland, like me who don't know Finnish language, this salary what I get is very nice for my situation.*

**When operating costs** and social security expenses are deducted from the total income, the taxable income for a large part of couriers falls below the limit defined in the YEL: 8575 euros per year amongst persons who 'live in Finland', so have sufficient permanency with their residency in Finland. In this case, for example the payment of pension insurance is voluntary a self-employed (not employee in paid job) individual. Moreover, the YEL threshold does not apply to temporary migrant workers, who may continue to be self-employed despite earning more than 8575 euros a year.

## 5.4. LESSONS FROM SALARIED WORK SETTINGS: ADDRESSING WORKING COMMUNITY AND SOCIAL SUPPORT

**This section** explores four structures that seem to enhance workers' well-being where food delivery is done as salaried work. These four social elements consist of the existence of lone work, access to occupational health care, recreational activity and trade unions. The results are presented mostly as questions in this section, as data and evidence amongst platform workers do not allow stronger formulation.

### 5.4.1. WHAT TO DO WITH LONE WORK?

**Employment status** strongly influences one's sense of working community. A large share of the work in food delivery is relatively lonely. The Finnish Occupational Safety and Health Act (738/2002) in Section 29 recognises lone working and how harmful it can be. Työsuojelu.fi (n.d. b) state: *'Working alone comes with a heightened risk of injury and violence as well as psycho-social workload.'*

**Autonomous elements** in work are also appreciated, which became apparent in this study. However, platform work comes with a thin sense of community, as couriers work independently, separate from other couriers. In line with the trend, salaried food delivery jobs, both product picking and delivery transportation, are largely performed by employees separate from co-workers. However, these salaried food delivery occupations include substantial social support, as the product picker quoted below states, quite the opposite to what is available for platform workers. In particular, the retail store offers the necessary social support and advice for employees, as a worker (S24W) states below. For example, internal radio via ear buds connects an employee to team and supervisor, as a top manager (S23M) describes. One apt tool brings in all the main forms of social support.

**Q:** *You said that you can, can ask for help and get help from friends. How lonely, or how do you see doing this alone and doing it in a group as part of this collecting work? Can it be too lonely or do you have a team.. How do you see it?*

**S24W:** *Well, no one can be alone here. In any team, I've been to Lielähti and Kaleva, Kangasala, just Koikkari, gathering in all the teams, that you don't have to do it alone there. You can get as much help as you want.*

**Q:** *How did the product picking work, is it done solitary or how much of a team element does it have, you talked about product picking teams, but what is the element of interaction with co-workers or supervisors?*

**S23M:** *Well, we have walkie-talkies, ear buds, and in a way there is some communication that, if we can't find a certain product, have you collected raisins today, I can't find this and that raisin now, and then someone can say that they are still in the in-coming load, has not been shelved yet. (...) Or they don't know that, the customer had ordered soy yogurt and it's not available, if it can be replaced with oat yogurt or.. such discussions, the team helps you with that collection. (...) But in itself, the product picking itself is done alone, that you go alone with the cart and, like doing something independently, but then, that social element comes from that [above].*

**The 'lone work'** characterises jobs in transportation. There is a variation between transport companies in how much social support their workers receive. Within the transportation sector, both platform workers and rental employees (e.g. extra workers hired via a staff agent) seemed to be connected to a smaller amount of supervisory support compared to the permanent salaried workers. Below, a CEO of a same-day delivery platform states how he appraises the loneliness of the delivery workers. Then, a transportation manager (D13M) provides his judgment.

**FDP17M:** *So, I think the biggest problem is that they are very lonely, so basically, I mean that they are in their car and they quickly just go take the food or whatever they need to take, and then they deliver, and especially nowadays when they leave it behind the door they really don't have much communication with anyone.*

**D13M:** *Yeah. If you compare in that way, in the store and in this, think about the warehouse as well, then we are in the same place. And on the delivery sector, yes, they are very lonely. (...) It's the communication via the schedule app or the phone or WhatsApp. You use these tools.*

**Employees' views** are consistent in the following aspect: Personal support at work increases well-being and makes work more efficient. Like many jobs done via platforms, food delivery is also individual work done without physical contacts of fellow workers or physical supervision by platforms. Regarding platform work, the social support (supervision) is just a phone call or chat. Below, a courier shows disappointment in the app/chat-based communication mode. In gig work, any delay related to problem solving and waiting decreases the earnings of the platform workers. At the time of data collection, Wolt had arranged the possibility of telephone connection, but Foodora provided just a chat connection, and it had not arranged telephone support for its workers. It is noteworthy that chatting and writing during a delivery mission involve traffic risks. This means the way of establishing contact with someone who can help matters. The weakest solution applied includes helping workers via chat.

**Based on the interviews**, Wolt and Foodora couriers in Helsinki and Wolt couriers in Tampere regions did not have a common work premises where couriers could meet and build collegiality amongst work mates. Although Foodora couriers in Tampere had a common work premises, the way work was organised diminished their ability to maintain workplace relationships amongst themselves, which was stressful for some participants, as it made them feel more isolated.

**An earlier study** of food couriers in Helsinki by Mbare (2021) found that the lack of common work premises affected the well-being of couriers at work in the sense that they did not have a place to have their breaks, charge their phones, repair their bikes, go to toilet, etc. The research found that this was a stressor to some couriers because they had to do these things at street level.

**This forms a stark contrast** to product pickers working on set indoor premises with rooms for switching clothes, toilets and space for having breaks. Transport companies who operate as employers also provide these necessary physical premises.

#### 5.4.2. HIERARCHY WITH ACCESS TO OCCUPATIONAL HEALTH SERVICE

**Finnish legislation** defines significant responsibilities for the employer for the safety of employees (Occupational Safety Act 738/2002). Occupational health care follows the same pattern of responsibility.

Some employers in the food delivery industry are appreciated for the extensive occupational health services they provide; in contrast, in some firms, the extent and coverage of occupational health services varies amongst employee groups.

*'Employees are entitled to preventive occupational health care financed and arranged by the employer. The provision of medical care is voluntary for employers.'* (Kela, 2022a). Self-employed occupational health care is voluntary; however, Kela, the social insurance institute of Finland, provides reimbursement on the sickness costs for self-employed individuals under the Self-Employed Persons' YEL-insurance (Kela, 2022b). Platform workers fall into the category of self-employed individuals and are expected to finance and provide occupational health services for themselves.

**Access to and supply of** occupational health services form a hierarchy between worker categories. The minimum is the worker's own voluntary responsibility/no services, which is a common situation amongst platform workers (first quote below, FDP07). A legal minimum of occupational health services may be common amongst staff agents (quotes D12M and A21M below) for their rental employees. The transport manager quoted below works in a company branch that utilises rental employees from the staff agency, another branch of the same corporation. The staff agency provides the HR services. This is reflected in the leaner occupational health services of the employed drivers (D12M), compared to the supervisory staff. The (A21M) quote introduces how another staff agency manager, who provides product pickers to supermarkets, organises the level of occupational health service along the weekly hours of an employee.

**Q:** *And where did you get your healthcare services from?*

**FDP07:** *Well, normal doctor. But KELA does not help you when you have these kind of flu and stuff. They don't help you with anything.*

**Q:** *Ok. And do you get some compensation from Wolt?*

**FDP07:** *No, we don't.*

**Q:** *Do you have regular employees like you and a few more, here is the IT manager, you must have some, (–) health [service] agreed with a company, right?*

**D12M:** *Yes, yes.*

**Q:** *And if I understand correctly, you have your own, and the others, the temporary workers, they have their own?*

**D12M:** *Yes, they have their own.*

**Q:** *In [staff agent] company X and that takes care of it.*

**D12M:** *Yes.*

**Q:** *Do you know that they have, for example, access to doctor as part of the occupational health agreement?*

**D12M:** *I'm not quite sure what all that covers, occupational health, but I know it, well, especially, through a staff agent company, so that, the occupational health they use, so I'm sure you don't [talks laughing] I wouldn't choose it at least, for my company under any circumstances. (...)*

**Q:** *What kind of package, (...) the minimum for occupational health is quite thin, so what [occupational health] services do you have for the employee?*

**A21M:** *It depends a bit on the person, we have the fact that when we have a lot of people who do gigs, one, two, we have to do it 15, 20 hours regularly a week to be part of occupational services. (...) those who do 15, 20 hours, most of them have this basic*

*package. Then those who do, have been with us longer, and clearly do it for more than 30 hours or with a monthly salary, then they have a wider package (...)*

**The retail owner** (S18M) utilising also rental staff agency, unintentionally states the division in access to occupational health care between 'own personal' and 'rental labour'. The majority of their product pickers are through staff agents, which only allows general medical care for a few workers.

**Q:** *(...) how do you see occupational health, accidents and all that, how has this system worked so far and is it working?*

**S18M:** *Well, yes, that being said, luckily the law defines quite a lot in that too, that of course. And with us, that also includes general medical care, which is of course voluntary for the employer, and then it belongs to our own personnel*

**A high-quality end** of the occupational health services is demonstrated by an employee product picker (S24W) working for a large retail company.

**Q:** *As an employer is a major company, what kind of occupational health services do you have?*

**S24W:** *I think they are really good. I'm always there if I have something that needs to go to the doctor, just call them. (...) so I had a stress reaction to it. (...) I went to occupational health and (...) then I got all the way to Tays [a university hospital] (...). But I was able to talk with a psychologist really well and, no matter what, I can manage at work and get ahead in life, and this is how it is. If I've been sick, every time I need to see a doctor, I can.*

#### 5.4.3. HOW DO EMPLOYERS SUPPORT WORKERS' WELL-BEING: GET TOGETHER, CULTURE AND SPORT

**Overall, the responsibility** of the employer is reflected beyond occupational safety and organising occupational health services to employees. In addition to occupational health services, other wellness policies, including culture and sports vouchers and recreational activities as well as social events, exist which seem to be important for workers' well-being. The companies with permanent staff seem to invest in these facilities the most. Staff agencies see the importance of shared well-being policies, but they are not investing in it, and the platform companies lack these policies as they deny their roles as employers.

**Large platform companies** in Finland focus on the individual level instead of programmes enhancing team spirit. The companies have occasional business programmes (promos) that are monetary incentives used to get a stronger hold of the market and strengthen newly recruited partners' motivation. These can have some positive effect on the well-being of employees; however, as they are optional, random and short term, they have little impact on the well-being of the workers. There is also a risk of adverse effects and frustration once those temporary benefits are gone.

**Avoiding the role of employer** and emphasising the partnership model typical of platform work leaves little or non-existent role for the enhancement of working community. Amongst the food couriers, the independence of the work was appreciated, but a lack of collegial relations was also brought up.

The courier (FDP01) describes the value of shared premises for meeting colleagues as well as how co-incidentally an effort to get workers to sign the revised partnership agreements with a platform company led to an event that resembled a social get together typical to employer companies. He saw this get together in a positive light.

**Q:** (...) how could improve wellbeing at work, within Wolt?

**FDP01:** If I, I'm just going, from the point of view of what would be realistic, well, maybe it could still be just, okay, maybe Wolt, maybe that employer could, in my opinion, emphasize on the fact that we, between us, somehow manage to get along or to deal with each other or something. (...) when there was the office in Tampere and we were there, sometimes, and then, through that, we had to have more contact with others and then we got to know each other. And then (...) the contract was renewed, and we were all wanted to sign it, so they arranged for us that we didn't have, there was food and there were drinks, there was no alcohol, nothing like that, but, there was such a get-together, a bit like by accident.

**A rental employee driver (D11W)** sees the value of social activities organised by the employer. But the manager (D12M) of the same company says they do not have this culture. In the third quote, a supermarket owner argues the value of this and finally a top manager (S27M) of a large supermarket chain adds ways to enhance workers' well-being and sociability.

**Q:** What else do you have in the work community, do you have sauna evenings or pre-Christmas parties or something?

**D11W:** As a matter of fact, it should be, but there hasn't been much talk about it. Because, your weekend doesn't seem like a lot of driving, your weekend would be great if the these were arranged, yes this would be great if it were. That's for sure, it would increase bonding, there would be more, for sure there would be community and team spirit even more if you set this as a team.

**Q:** (...) would it be possible to think to organizes the pre-Christmas party or the sauna evening (...) how is it, the fostering of a working community?

**D12M:** These are the things that has been left out. We actually don't have anything outside of working hours. There is not pre-Christmas parties or sauna evenings organized from our side. We don't really have that culture.

**Q:** What kind of work community activities do you have, don't you have any parties or, of course, the Corona period has affected the social side of it a little?

**S22M:** Now, after a long time, about a month ago we had a social sauna evening, that it had already been two years since the previous one.

**Q:** What is their meaning, the meaning of these joint events for employees?

**S22M:** It allows you to get to know people you don't meet very often, and it creates a sense of togetherness. I have used to reward those who succeed there. The participation in these events has been very good, the group has considered them a very pleasant event, almost everyone has come.

**Q:** (...) what do you have in the retail sector, such as social recreational days or pre-Christmas parties or something else, what kind of social activities does the employer organize?

**S27M:** Now, of course, in these challenging times, there have been few, but yes, at the level of the team and the (whole) store as well, maybe we do try to put in a certain number of social recreation days every year. It has also often happened to us that the beginning of the year is a bit like a late Christmas party for all the stores, maybe it's this type. (...)

**Q:** What do you see as the significance of these events for wellbeing at work?

**S27M:** Yes, I can see that something like this is needed and needs to be organized. But I feel that, as far as I can tell, the employees at stores are also very active internally, that the staff there get along with each other and do organize their own programme, without that the employer has necessarily done anything about it. Through Epassi system, for example, last year we also got support for sports and culture. As far as I understand, it will be there for this year, too.





#### 5.4.4. DOES TRADE UNION HAVE POTENTIAL?

**Collective bargaining** is an important way of reducing work vulnerabilities. The EU's regulatory initiatives on improving the working conditions of platform workers aim to allow self-employed individuals a right to bargain their working conditions (European Commission, 2021b). This would create an exception to the competition policy, as self-employed business holders are allowed collective action, which has earlier been seen as a violation of free competition.

**Mainly because of** the self-employment position, most food couriers are not members of any trade union. Some are members of the Service Union United (PAM), a trade union. This is usually because they have done or are doing other salaried work within service industries. It is natural for product pickers of supermarkets to be PAM members, and most of the transport company's driver employees belong to the AKT, Finnish Transport Workers' Union. The existing unions are in a problematic situation with platform work, as trade unions are used to serve employed individuals, and that is not the legal base with platform workers who are self-employed. Instead, some fragmented and weak collective action has been observed occasionally (e.g. see YLE, 2022). Most food couriers are not unionised for many reasons, including ignorance, as one food courier did not know about trade unions before the interview.

*Q: Ok. And are a member of any trade union?*

*FDP08: No.*

*Q: Why not?*

*FDP08: Trade union?*

*Q: Yeah*

*FDP08: Can you give some examples like what mean trade union?*

*Q: Workers' association. Are you a member of any workers' association?*

*FDP08: May be no because I just listen this from you for the first time. I didn't know about this.*

**One concrete reason** not to join existing trade unions is that membership in the union's unemployment fund does not guarantee unemployment protection. In contrast to someone who ends up unemployed from a salaried job, a self-employed individual cannot receive an earnings-related unemployment allowance proportional to the income of the platform job.

**At the other end** of the opinion spectrum on workers' unionisation, courier (FDP01) believed that organised couriers could be a decisive actor in enhancing improvement in working conditions. This courier also described one small crisis meeting between active couriers.

*Q: What's the situation there, is it about this, how is it, getting to be organized or are people joining together or forming some kind of joint activity or association? What's the situation?*

*FDP01: I remember an ad, someone, solidarity-*

*Q: Justice for couriers?*

*FDP01: Yes, I remember someone like that. I don't know what happened to it. That spirit, with these workers, at least when I saw it, when we had a very active, discussion group, that spirit was quite disorganized, that is, as the saying goes, "free.. every man for himself" (...) Well, in my opinion, probably just the work atmosphere, the fact that there is no working community, so it certainly feeds it (...) If it's there on the employer's side,*

*I'm sure it's really fine that, they won't get anything (organization) like that done for a while.*

**Q:** *What could be the use of such an organization?*

**FDP01:** *Absolutely, it would be significant, I say significant is not enough, I think it would be a decisive benefit. A single courier.. we, let's say frankly, we have had similar disputes, disputes, with that company, similar disputes that, I have suggested, among the employees, to hold a strike.*

**FDP01:** *(...) We don't, we've never really had anything, events, we've never actually gathered for anything even though we might have been, what's five years?*

**Q:** *Yeah five years yeah.*

**FDW01:** *That was actually our only crisis meeting, what the hell are we going to do now they cut off from us, then we will, I remember somewhere at an ABC fuel station meeting was held. But that sense of community.*

**Q:** *And you yourself organized it at an ABC..*

**FDW01:** *Yeah.*

**Q:** *..organized by the couriers, and it was the only one.*

**FDP01:** *Yes, and there were certain, active people.*

**The collective organisation** amongst platform-based food delivery work remains weak, whilst existing trade unions still protect employed food delivery workers' rights, these trade unions, like PAM, are just opening an avenue to engage and influence food couriers' working conditions (PAM couriers, Finland, 2023).

**To summarise** the section on social support structures, employer-based jobs have diverse forms of social support such as coaching or mentoring (enculturation) as well as collegiality and personal and emotional support. Technical support is increasingly offered via apps and digital programmes across the sector. Individualised couriers are seeking forms of advocacy and collective action, since cuts in compensation are pulling couriers together to find ways to influence their working conditions.

## 5.5. VULNERABLE MIGRANT LABOUR

**Food delivery work** has a visible local/non-local (migratory) hierarchy. Mostly local workers exist in transport and retail, and primarily workers with an international background deliver food via digital platforms. Of the 21 people interviewed in transport and retail, all but one (he was from the EU) were locals. A manager (D16M) describes below how the immigrant workers form a low share of the labour force in salaried transportation in the Helsinki metropolitan area. In contrast, 9 out of 10 interviewed couriers were from abroad, and the high share is verified by a delivery company manager (FDP17M) in the Helsinki metropolitan area. All but one of the food couriers used the English-language app, and they mostly speak English in their work.

*Q: Can you estimate the percentage of drivers with an immigrant background in your company?*

*D16M: Now there will be an estimate. That's... I'd just guess around 10 or 20 percentages.*

*Q: What percentage you have migrant or immigrant workers and how many percentages local workers?*

*FDP17M: I would say the amount of local workers is very small, I would say 90 percent are immigrants.*

**This section explores** themes that emerged in relation to migration and work. It introduces content attitudes amongst couriers that balance frustration with de-skilling presented in Section 5.2. In addition, the pivotal role of residency is examined. Furthermore, different food delivery jobs require different levels of Finnish skills, so the role of language is analysed. The section on migrant workers ends with a description of the weak understanding of social security.

### 5.5.1. REFERENCE POINT MATTERS TO SELF-ASSESSED OCCUPATIONAL WELL-BEING

**There is significant variation** amongst platform workers in how they perceive their working conditions. There are mixed reasons why one likes a job. Migration background seems to be a factor that often makes individuals more content with their working conditions in Finland. Individuals may compare their perceived working conditions in Finland to those in their country of origin. Some migrants think that their quality of work in Finland may be compromised due to their modest Finnish language skills.

**Courier** (FDP06), who recently moved from a nearby country, is content with the work. In addition, a South Asian origin university bachelor's student (FDP08) is partially satisfied with the food courier work.

*Q: Ok. And what makes you happy to go to work? What's exciting about your work that you are always happy to go to work?*

*FDP06: It's really simple, and I am happy that I can get money if my work is good. It's good salary, it's not difficult.*

*Q: Ok. And do you sometimes find your job challenging?*

*FDP06: No, not difficult challenge I think because you fill the propose, and not difficult.*

*Q: Ok. And may I ask you, are you satisfied with your job?*

*FDP06: Yes, I am fully satisfied.*

*Q: Ok. And why if I may ask?*





**FDP06:** *Because in my situation, for example, somebody living in Finland, like me who don't know Finnish language, this salary what I get is very nice for my situation. And I am satisfied because it suits for me for my situation.*

**Q:** *Ok. And if I may ask you, would you say you are satisfied with your job?*

**FDP08:** *Yeah, I am really satisfied with Wolt. Foodora not so much because they have some issues that I don't like from my perspective. (...) But if I want to work with Foodora, I have to take shifts and I have to go at the exact time that the shift is started. So that's the difference between Wolt and Foodora, and its what I like most with the Wolt.*

**A courier with no education** has had many disappointments in his life. He is also critical of the food courier job. His critical statement may be interpreted cautiously. Having him as a worker could also be seen as an achievement, and it talks about the potential of the inclusion attached to the platform economy.

**Q:** *Ok. So, would you say you are satisfied with the job?*

**FDP07:** *No I'm not.*

**Q:** *Why?*

**FDP07:** *Not work of my choice. Second, no respect. Third, no consistency. Fourth uncertainty. Fifth you are not curable than you think.*

**In addition**, courier interviews indicate a vast mismatch between the skills of the highly educated participants compared to the skills required for delivery work. The related frustration is documented in Section 5.2.1. In contrast, there was clearly less mismatch in the transportation companies, where less educated individuals, many with vocational degrees, seemed very pleased with their jobs.

**Q:** *Okay. Well, what does this job look like?*

**D14W:** *Well, it seems quite good that the bosses are at least nice and all the co-workers are really nice. The only thing here now is that there are sometimes a bit heavy days when there are no elevators. And there is so much stuff.*

**Q:** *What do you like about this job?*

**D15W:** *It's been a changing experience that I once drove a truck and then it was, I was there for five years when I moved here from Oulu, I was working in a warehouse for five years and then when I came here, it just happened that there is a good gang here and everybody gets along that there is no nagging or that there is a good working atmosphere and nice guys.*

**D11W:** *I've been working for this company for two years, then I used to drive fish earlier (...) I stayed a little bit, then I got hooked, it's a profession, it's nice.*

**Q:** *So you're hooked now?*

**D11W:** *Yes, I like this field [driving lorry], it's really nice.*

**Q:** *(...) can you say that you are satisfied with the work?*

**S20W:** *Yes, yes.*

**Q:** *What makes you happy?*

**S20W:** *Probably the versatility and the fact that myself have been somehow progressed here, could imagine that many others are not necessarily quite so satisfied [laughs].*

**The platform-based** food delivery workers live through the mismatch between their scholarly competencies and the skills required in the work. Section 5.2 analysed the psycho-social burden and frustration attached to this mismatch. This is evident from the participant FDP05, who, at the time of the interview, had lived in Finland for over 15 years, was fluent in the Finnish language, and had a master's degree from a university in Finland. However, he was content with work as courier and with the opportunity to make money but frustrated for not having got a professional job despite having searched for it.

### 5.5.2. RESIDENCY AND PERMIT

**Although the role** of immigrants as part of the platform economy is significant, the information related to it is incomplete (van Doorn et al., 2020; van Doorn & Vijay, 2021). Despite platform work offering earning opportunities, it is a compromise for many. Studying offers a residence permit that allows work. After years of study, the insecure continuation of the residence and work permits pose a migrant food courier's psycho-social stress. Obtaining a work permit has demanding criteria regarding the nature of the applicant's work. Platform work and self-employment (so called light entrepreneurship) can be problematic in obtaining a work-related residence permit.

**Besides the psycho-social challenges** platform food couriers face at work and the adequacy of the wage levels, social security protection and migration regulations are anticipated. For example, a study on the psycho-social stressors of food delivery platform work in Helsinki revealed that the maximum work shifts for its migrant couriers was dependent (besides other merits) on their residency statuses in the country (Mbare, 2021). Platforms are known for their low wages, and migrants with temporary residency permits suffer from low total wages within the platform, as their weekly working hours are limited. In essence, this leaves them in a more economically vulnerable situation. In addition to the vulnerabilities of platform work amongst migrants, immigration laws also control and limit their labour activities.

**Jukka Könönen** (2019) has analysed immigration regulations for migrant employment before obtaining permanent residency status amongst non-EU migrants in the Helsinki area. In situations where a migrant may wish to change his or her temporary residency status to a more permanent status through work, it gets challenging. Overall, the residence permit system increases dependency on the person or institution to whom the grounds of the residence permit are connected (Könönen, 2017; 2019).

**Platform workers** are even more vulnerable than dependent employees, as their self-employment position may be compared to work on zero-hour contracts with regard to platform workers lacking the key requirement: work contract. In addition, there is no proof of regular income. It is a key requirement for residence permits (Koikkalainen et al., 2011). Those with temporary residence permits are the optimal labour force, as they are usually not entitled to Finland's social security, which further lowers their bargaining power. In this regard, this section identifies migration status as an added layer of occupational health and safety risks amongst couriers.



**For a self-employed** (not employee in paid job) individual, stabilising one's residency and work permit is more complex than it is for an employee. Much is up to the type of residence permit; for example, if one has resident permit type A (continuous) or P (permanent), one has all options available to formalise the role as entrepreneur, which improves the position with access to social security. Naturally, as an entrepreneur, one has to pay social security payments, such as pay for the YEL-insurance. If one is, for example a student with residence B (temporary), he/she may function as an entrepreneur only in a limited company and cooperative under weekly working time limitations, because he/she should be employed by the business entity, demands the law (NewCo Helsinki, 2018). The latter is a complex and expensive arrangement compared to self-employment.

**For entrepreneur's residence permit**, the entrepreneur applicant needs to get a positive assessment from the Centre for Economic Development, Transport and the Environment (ELY Centre). Then the Finnish Immigration Service Migri processes the application (Migri, 2022b). Once the applicant is a food courier, there is a weak possibility of getting the entrepreneur's residence permit. There is a thin line on earning enough, but not too much. In the latter case, having such a high-income level is seen as a risk to be able to sustain it. Those who have family members abroad have further worries with so-called family reunification, which requires proving adequate earnings to sustain the family's living in Finland.

**Revealing** the aforementioned dynamics was a case that was reported more widely in relation to a decision not to renew a residence permit of a Ghanaian Wolt courier entrepreneur, who had had a non-permanent residence permit as an entrepreneur. The extension of the entrepreneur's residence permit was refused. He had earned over 5632 euros in a month on average in 2021 to fulfil the earning requirement for a family reunion. A statement by the ELY Center behind the immigration authority's decision states that 'maintaining such a level in the longer term is not credible'. During the appeal, he combined a salaried job and Wolt courier work as an entrepreneur (Kosonen, 2022). Finally, the administrative court renewed this Ghanaian Wolt courier's residence permit and admitted his wife and three daughters to Finland with 1-year residence (Karvinen, 2023).

**Amongst migrant workers**, the temporary nature of their status brings concerns about their own job opportunities in the future. Holders of Finnish citizenship or permanent residence permits are freed from these permit concerns. The interplay between immigration, residency, work permits and social security protecting risks is an extensive and challenging context for a worker. This research was able to identify the main characteristics of these dynamics based on the interview data.

**Q:** *Ok. So, what kind of residence permit do you have by the way?*

**FDP02:** *Student resident permit.*

**Q:** *Ok. And what significance does it have on your work? How does it affect your work?*

**FDP02:** *Maybe I will just say it's the limit of working time because for a student you can't exceed certain hours. You can't exceed 25 hours in a week. Maybe I can just say that one but there's no much effect on it. Of course at the end of the day the main goal is the studies.*

**Q:** *Ok. So how important is your residence permit in your work?*

**FDP02:** *It is very important.*

**Q:** *Ok. How?*

**FDP02:** *It's important because without a residence permit, I could not be here.*

**FDP06 struggles** with these unsettled requirements regarding who is eligible to renew a working visa and continue to work in Finland.

*Q: Ok. And, if I may ask, have you thought about the difference between being an employee and being an entrepreneur?*

*FDP06: Yes. I know about this difference. It's a big difference because if I, I don't know exactly but the difference is my relationship with government and TE-toimisto in Finland is with my tax and pension fee. If I want to be employed, it will be better for me. It will be better for me because my legal situation in Finland was more strong, but when I working like entrepreneur it's not a strong position. I can't fill papers in immigration. (...) It's a big trouble for me.*

*Q: Ok. Does that mean you need a resident permit to be in Finland?*

*FDP06: Yes of course, I need and I want get a residence permit like employee. In Posti, I am employee and is very good for me. I tried get a residence permit like posti employee but I can't get this like entrepreneur in Wolt.*

**FDP04 is knowledgeable** that Wolt self-employment may not be used to apply for a work permit. Imaginary employment with Wolt would make renewing work permits easier and it would end a dual-job problem and overall, it would enhance well-being at work.

*Q: Ok. May I ask you, what is the significance of a work permit in your work?*

*FDP04: Well, you cannot work without that work permit. You must have a permit that allows you to work in Finland before they can even accept your application.*

*Q: Ok. And is your job dependent on the renewal of this permit?*

*FDP04: Yes, my job is dependent on this permit.*

*Q: Ok. And what does the residence permit mean for your job?*

*FDP04: Well, for me to work in Wolt, I must have a resident permit. But the other problem is that Wolt cannot, you cannot use the agreement that you have with Wolt to renew your permit. So it means that you must have other job, or you must register as an entrepreneur, and you have your own company. That's when you can use that to apply.*

*Q: Ok. And what do you think would be the ways of improving wellbeing in your work if I may ask?*

*FDP04: Well, the first thing is that if they can introduce work permits, then that would be much better for so many people because like for me right now, I am not able to do Wolt full time because I need a job contract, and Wolt cannot give me that. So I have to have another job, the one that can give me, that I can use for renewing my permit, and then I can do Wolt part time. But if the Wolt was to give a job contract, then I wouldn't need to have 2 jobs, then I would just decide to do Wolt full time.*

*Q: Ok. So, does that mean that if Wolt would have you as their employee then you would work full time?*

*FDP04: Yes, probably I would work full time, depending on the remunerations of Wolt. You know it also depends on what they are going through. But I would work full time.*

**The interconnected rules** that regulate migrant's right to work and earn, his/her residency and furthermore to be protected against social risks are confusing and should be investigated thoroughly

through another research project. However, salaried work is also preferred to self-employment, as access to a few possible schemes of Finland's social security requires salaried work amounts to at least EUR 768 per month at the 2022 level (Kela, 2022c). However, without sufficiently permanent residence, one is entitled to no or a very limited set of social security. Kela makes the decision on whether one is entitled to social security benefits. Thus, access to social security forms another 'juridical division of labour' (Könönen, 2019), that has a close relation to one's migratory status.

### 5.5.3. LANGUAGE SKILLS AND JOB HIERARCHY IN FOOD DELIVERY WORK

**Language skills** are regarded as an important working-life capacity. Different worker positions in food delivery require different provision of communication abilities, and language skills form a hierarchy in the food delivery sector. Finnish language skills define which labour market positions are possible with certain capacity. Work-related language requirements and the levels of skills amongst potential workers might cause stress and a feeling of discrimination. For those with limited Finnish skills, courier jobs are the only available options from this sector, as food delivery work organised by digital platforms allows courier to choose a working language. These low-threshold jobs are a very welcome opportunity amongst these workers. All couriers interviewed, apart from one native courier, use the English app and speak mostly English in their work.

**Comparatively**, Finnish language skills seem to be a gate to those food delivery employment positions, which are executed as employees, with social security and employer-provided occupational health and safety protection. Attitudes amongst supermarket supervisors and managers show that the required level of Finnish language varies and so does openness towards migrant labour.

**It was commonly agreed on** that a worker in supermarkets needs Finnish skills for reading work-related supervisory materials and product labels, which are elementary in product picking. Furthermore, communication with customers as well as with the team are in Finnish. A retail top manager lists these requirements below.

*Q: (...) what kind of language skills or Finnish language skills are expected of a product picker?*

*S23M: Well, you have to be like that, good enough Finnish language skills to be able to read, instructions, orientation material, bulletins, and you have to understand the products, everything, you have to read the product descriptions from time to time so that, for example, the customer can write that all products must be gluten-free. (...) That there isn't a single employee at the moment who doesn't speak Finnish, because that would require us, like you, to translate all the instructions into another language as well. And that, in a way, that team communication, again that, everyone in that team surely doesn't know English like that (...)*

**Finnish is important** and the common language ('lingua franca') in Finland, but the service sector should be reasonable in terms of high language skill demands it poses on its workers. An experienced worker from the Helsinki metropolitan area critically notes that once there are severe workforce challenges, Finnish language requirements should be relaxed. Moreover, during COVID-19, many restaurants were closed, and their workers were shifting to supermarkets that were short of workers.

**S28W:** (...) I think it's just a good thing that we can get labor, no matter where. Sometimes when there's a shortage (...) He understands me, even if we find English as a common working language, I don't mind the fact that even though I don't speak English very well in my opinion, but if things are understood, that's enough.

**Q:** You have a slightly lower threshold. In that sense, you are more flexible, what, not everyone is necessarily that flexible.

**S28W:** Yes, yes. Sometimes, from the customer's point of view, the older customers may even get angry that "are there no Finnish-speaking salespeople here anymore?" There is something about your immigrant background, so you hear it every now and then. (...)

**Q:** Can your business tolerate the fact that the customer may be momentarily a bit overwhelmed, but someone who can speak Finnish is found there to answer his/her question?

**S28W:** It will tolerate this. It's not a real problem now. At that point, I have also discussed the subject with the customer once, that it is not a problem right now, that he is a restaurant worker and he is helping us, that he does not have work [in restaurant] at the moment. (...)

**The change in attitudes** towards increased flexibility with language requirements indicates that more service sector employment is likely to be available for those with limited Finnish skills. These jobs are likely to be part-time but real employment instead of self-employment. This trend of reassessment of Finnish language requirements might erode some of the current migration-related employment hierarchy within the food delivery sector.

#### 5.5.4. BARRIERS AND CONFUSION IN ACCESS TO SOCIAL SECURITY

**Salaried jobs provide** good access to social security; however, self-employed workers face challenges in both access to social security and understanding the practices and processes of social security. One such decisive practice is the possibility for a self-employed individual to be insured under the Self-Employed Persons' Pensions Act (YEL) when the following criteria are met (Ilmarinen, 2023):

- You are aged between 18 and 67.
- You work as a self-employed individual for at least 4 consecutive months.
- Your YEL income is at least EUR 8,575,45 per year (in 2023).
- You work in your company.
- You live in Finland.

**Furthermore**, "The mere fact that you own a company does not obligate you to take out YEL insurance; you must also work in your company. The legal form of your company and your ownership share also play a role in determining whether you need to take out YEL insurance." (Ilmarinen, 2023).

**The available tax data** shows that about 200,000 self-employed workers are not covered by YEL insurance, as they do not meet the above criteria (MSAH, 2019, 56). There are non-permanent self-employed migrant workers who do not "live in Finland" thus, they are not allowed a full selection of entrepreneurship (NewCo Helsinki, 2018), or they do not qualify to have a YEL-insurance. For the self-employed individuals, lack of YEL-insurance means no access to comprehensive social security. However, having met the above YEL criteria, equal social protection compared to employees would cost

40% of self-employed workers' gross wage, which might be seen as a high cost for social insurance (Perkiö et al., 2021). More than one-half of the platform workers interviewed for this study were students. Students receive specific health services; however, Finland's (Kela's) social security for non-native students is very limited.

**This ORIFODY study** focuses on two key social security issues that remain pivotal to understanding health-related occupational risks: *sickness* and *injuries*. There are other social security issues such as pension, unemployment insurance and parental social security, but as those are less directly involved in the occupational risk context, these are left out of the scope of this research. Instead, the research explores how social security against sickness and injury links to migration practices, as this nexus is pivotal for the well-being of many food delivery workers.

## Sickness

**In Finland**, the employee is entitled to salary during illness for at least 9 days deductible period of sickness allowance or partial sickness allowance. Based on the sectoral collective agreement or the employee's personal employment contract, the employer may be obliged to pay wages for the period of illness, even after the deductible period (Kela, 2022d). In the United States, workers entitled to paid sick leaves are more likely to take time off for sickness or injury than those without paid sick leave (DeRigne et al., 2016). In Helsinki, earlier interviews of platform food couriers working on a self-employment basis indicated that most of them assumed that they did not have access to paid sick leave (Savi, 2021). The increase in platform work may create a division amongst workers in terms of those who had paid sick leave and those without it.

**Any 16-67-year-old resident** of Finland is entitled to KELA's basic sickness allowance after 9 days deductible period. The scheme applies when no employer is paying salary during the first 9 sick days or there is no entrepreneurship and YEL scheme is providing income compensation. However, this 9-day waiting time makes the sickness allowance a weak scheme to protect platform workers – those with sufficient residence – meaningfully when they are sick. This is why the use of KELA's basic sickness allowance amongst platform workers should be studied in more detail. It is to be remembered that the most vulnerable platform workers are undocumented immigrants, some of whom may be doing informal sub-contracted food delivery work. Those undocumented immigrants have no rights to Finnish social security.

**Furthermore**, waiting times for access to public health care vary by municipality, and only essential health care is granted for those with a weaker residence status.

**However**, some food couriers exist who work as entrepreneurs, and they are obligated to pay a YEL (Self-employed Persons' Pensions Act) insurance scheme. This scheme gives them entitlement to income-related security, including sickness insurance. Moreover, it seems whether entrepreneur food couriers who pay the YEL know about their rights.

**There is mixed awareness** and understanding of the social security system amongst food couriers. Most platform food couriers like FDP02 are confused about their entitlement to sick leave. Even entrepreneur FDP09, who would have the strongest entitlement to the scheme as an entrepreneur, is confused. Someone like FDP10 knows the scheme better, though he does not know the relationship between YEL and KELA.

*Q: Ok. And have you ever fallen sick during your work?*

**FDP02:** No.

*Q: Ok. And do you know whether you have some social benefits that you can rely on in case of any sickness?*

**FDP02:** No.

*Q: Ok. Do you know whether Wolt provides some sort of sick leave payments?*

**FDP09:** I'm not sure. I know we pay an insurance. That YEL insurance thing. So to be quite honest I am not familiar how it would work, if I was to be sick and I was to like get access to the YEL or if that YEL is some kind of health insurance or not. I don't know for sure.





**Q:** *Ok. And what kind of social benefit or social security can you rely on in case illness prevents you from working?*

**FDP10:** *I have this entrepreneurs' social security, this YEL, and that should pay for the sick leave in case I need it, but I have never had to rely on that. So, I don't know how easy it will be to get it.*

**Q:** *Ok. And what is YEL insurance if I may ask.*

**FDP10:** *Well, it's the social security for entrepreneurs.*

**Q:** *Ok. And do you pay for this insurance every month?*

**FDP10:** *I have to pay for it every month yes.*

**Q:** *Ok. And do you know if there is any KELA's sickness allowance or sickness benefits?*

**FDP10:** *Well, I don't know what is the relationship between this YEL and KELA. So, if there is sick leave, I don't know who is paying for that in the end, like if its YEL or KELA pays a part of it. I don't know how it works because I never have to request it so I am not sure.*

**The perceptions** of sick leave between platform work and salaried food delivery work may be compared. There is prevalent confusion about the nature of social security for sickness amongst platform workers. Within the retail sector, details on sick leaves were far less unclear. However, a staff agent renting product pickers to the retail stores suffered an increase in sick leaves during the COVID-19 epidemic. In transportation, variation was found between the perceptions of sick leave amongst the company heads. One director was proud of their sick leave percentage being as low as 1.7, whilst another from another appreciated company had a comparable rate between 5% and 8%. Where sick leave is a right and costs the employer, there is an incentive to find effective ways to keep workers healthy. Self-employment privatises the risk of sickness and the cost burden shifts to the worker.

### **Occupational injuries**

**Statutory security** is a comprehensive protection scheme for salaried workers as their employer takes out insurance against accidents at work and occupational diseases. The same protection is also available for entrepreneurs. Lawyer Elina Holmas (2020) writes: *"An entrepreneur who has taken out YEL insurance can insure himself with insurance corresponding to an employee's accident at work. (...) the content of insurance cover, the level of indemnities and the indemnification procedure are provided by law. (...) the level of compensation for loss of earnings is based on YEL earnings, as is the entrepreneur's other social security."*

**When a very small minority** of food delivery platform workers are employees, and a few couriers are YEL entrepreneurs, an estimation is that the majority are without statutory protection. Instead, there are voluntary personal insurances, but then the content of insurance cover and the level of indemnities are usually lower than in statutory insurance. In addition, business partners such as platform companies may take insurance to their contractors, as is the case with Wolt. The company provides voluntary personal insurance for occupational accidents with the maximum coverage of total incapacity for work or a compensation of death of 50,000 euros (Wolt, 2021b). This is a much lower level of compensation than the statutory scheme would provide in a similar situation.

**Couriers feel positive** when Wolt offers them insurance. However, they do not understand the fundamental difference between statutory security and voluntary private accident insurance in the case of occupational hazards. When operating in a high-risk business, the difference is crucial.

**When asked** about accident insurance, a wide variation was found in awareness of the protection against risks. There were those who did not know (FDP03 and FDP09) as well as those with guesses and limited knowledge (FDP02 and FDP06). Then, there were those who were optimistic about the coverage (FDP04) and finally those who understood (FDP05) the main condition in getting protection when facing a work-related injury, which one has not caused oneself.

**Q:** *Ok. And how about accident insurance?*

**FDP03:** *I can't say because I don't know.*

**Q:** *Ok. And do you know whether Wolt offers any accident insurance?*

**FDP09:** *Not that I am aware.*

**Q:** *(...) do you have access to occupational health services?*

**FDP02:** *Not that much, but it's just that when you get an accident or something arise, they can cover you. That's what I know with Wolt. But in Foodora, I haven't heard about it.*

**Q:** *Ok. And would you say you have an occupational accident insurance?*

**FDP02:** *Maybe because I haven't tried. Nothing has happened to me, so I can't say it's working because I haven't visited the hospital, but you can see on the app like: 'file your insurance' and all that.*

**Q:** *And do you have any insurances?*

**FDP06:** *Yeah, I have insurance from Wolt. I don't know what exactly it is, but I know that if I have an accident or if I had any sickness, I have an insurance about it, but I don't know how it works exactly coz I never get it before.*

**Q:** *Ok. But I remember you mentioned there is an accident insurance provided by Wolt, right?*

**FDP04:** *There is an accident insurance, but it is only for the person. That is, if the driver had a problem or rather if the driver has an accident and maybe he gets some disability, something that will forever change his life. That's when Wolt will come in.*

**Q:** *Ok. If I understood you correctly, are you trying to say that Wolt provides accident insurance?*

**FDP05:** *Not exactly, really. The accident insurance depends on how they look at it. If the accident is caused by you then they don't consider it. But they are not responsible for medical costs. (...) it's an accident that you have not caused, only if is work related.*

**The retail business owner** summarises well the secured position of an employee in food delivery in Finland.

**Q:** *(...) how do you see occupational health, accidents and all that, how has this system worked so far and is it working?*

**S18M:** *Well, yes, that being said, luckily the law defines quite a lot in that too, that of course. (...) And the accident insurance covers from the one's passage to work, when the home door closes behind you, an employee in Finland is pretty safe from an insurance point of view. In a way, there really isn't much that can be improved.*

**There is confusion** in understanding one's right to social security in cases of sickness and injury. In addition to views on sickness and occupational injuries, it would be crucial to study the perceptions of platform workers on pensions and related payments, or on unemployment and related social security. For example, during COVID-19, unemployment benefits have been made available for self-employed individuals and entrepreneurs without a requirement of giving up the activity. This level of knowledge demonstrates workers' understanding of their worker status and related rights and responsibilities. Such analyses were not fit to the focus of this study.

## 6. DISCUSSION

**This research explored** occupational and employment-related risk in food delivery sector. The risk profiles differ both according to the workers' employment status and their occupational roles as food delivery workers. The research identified work-related risks mainly through the following three windows: physical, psycho-social and social (collective). Then it expanded the risk analysis to the institutional vulnerabilities, which consist of employment status, occupation and related access to social support mechanisms and social security. The most powerful vulnerability boiled down to migrant worker status and related social processes of residence and working permit, intensified with a thread of exit from the country amongst several workers, which further increased vulnerability. See these summarised in Figure 1 as a perspective of food courier, the most vulnerable worker position identified in this study.



**Figure 1. Main categories of risk factors in food courier's work**

**The working conditions** of the delivery work form a stark contrast between classic salaried retail and transport work and platform work-based food delivery.

**Even though drivers and couriers** both want to present themselves as wise and responsible workers and citizens, the gig-based wage or bonus increases the hurry and tension of making more money by breaking traffic rules, which increases the risk of accidents. Furthermore, as food delivery platform work is defined mainly not to be covered from statutory insurance against accidents at work and occupational diseases (Holmas, 2020), situations with low or no compensation are likely to exist. All mental, physical and social occupational risks are perceived higher in the platform work than in the corresponding classic salaried retail and transport work in food delivery. This division can be conceptualised by the fact that the legislation defines the employer with significant responsibilities for the safety of employees. Moreover, large employer companies have their own policies and corporate programmes to promote the health and well-being of employees. Large platform companies also have some incentive programmes that may have a positive impact on employees' well-being; however, those are temporal, optional and weaker in how much they contribute to workers' well-being.

### *Physical risks*

**The working environment** for physical security differs significantly between sectors. In the retail store, product picking is done indoors and in a safe environment. Regarding transportation, our study identifies similar kinds of concrete risk dynamics as Christie and Ward (2019) discovered with the gig work drivers facing time pressure, which comes with increased risks.

**The intensity of food delivery platform work**, often with strictly performance-based wages, includes a paradox. During quiet times, individuals work harder and still earn less. At a time of high demand, the income level increases, but so do the temptations to break rules; for example speeding, which brings occupational risks. Almost all interviewed food couriers defined traffic accidents as the main risk of work, which makes this a robust outcome. The links of risks to weather and climate conditions as well as how to deal with them, were mentioned by more than one-half of the respondents. The vehicle type matters greatly for the accident risk in traffic. Bicycles and scooters are riskier for drivers than cars, which are lighter than lorries, etc. When an employer exists, the managers may pay attention to individual drivers and make decisions about which drivers they send to the city centre's demanding traffic; however, in platform work, it is up to a courier her-/himself to decide when, how and where to work.

**Different activities** within food delivery are physically burdensome, such as riding bikes for long hours, repeated climbing stairs to high buildings and a large number of steps during one's shift in product picking. Regarding courier work, Wolt (2021c) encourages couriers to think thoroughly about which vehicles to select. Wolt recommends health aspects, earning potential and weather conditions – all should be included in the courier's decision about which vehicle to choose on each day.

### *Psycho-social environment*

**The contemporary food delivery sector** showcases the increased roles of psycho-social burden in blue-collar work. Working time regulations protect employees from working too much; however, those are replaced by soft norms of the companies in the platform economy, and the practices of controlling working hours vary between platform companies. Foodora organises their work in 4-h shifts, but Wolt

allows courier partners to decide how much they work (Mbare, 2023). Long working days increase earnings but compromises on time spent on other things, such as family and recovery. In salaried employment, working time arrangements play a significant role. Naturally, both the minimum shift length (4 h) and the number of weekly hours are important factors for the overall earnings level. A high work intensity, which is clearly more prevalent in platform work, is the most important of the psycho-social risks associated with food delivery work, though salaried drivers are sometimes burdened by tight schedules.

**Algorithmic management** makes work efficient and helps all parties who engage in the platform economy. However, algorithmic management is a multifaceted source of stress (Mbare, 2021; Berastegui, 2021). Automated decisions may be a source of stress once small behavioural issues (e.g., being late by more than 5 min.) may lower one's rank in the batch system utilised by Foodora (Mbare, 2021). The lower rank may severely affect the courier's earning possibilities in a way that is not in relation to a small mistake.

**There are tendencies** that challenge the dignity of couriers. First, many highly educated individuals perceive that work in food delivery means de-skilling and moving further from their own profession. Second, racist attitudes from restaurant workers stress food couriers beyond the level of occasional discriminatory experiences across the studied service occupations.

**Courier work** is one of the occupations where one can survive almost without Finnish (or Swedish) language as the working language. Wolt and Foodora applications are available in languages other than Finnish, like English. In product picking, Finnish language matters more for customer satisfaction and safety (e.g. reading text for customers with allergies). However, it is important that Finnish language skills are given a justified role when recruiting to supermarkets and the transport sector.

### **Social structures**

**Workplace social support** plays a significant role in occupational well-being (Berastegui, 2021; Hill, 1989). Corporations that admit their role as employers think about the well-being of the workers; however, in the case of platform work, the concern of occupational well-being is mainly left to workers. Platform-based food delivery work is designed as lone work, and human interaction is in a small role compared to many other service jobs. This goes to the level that food delivery may be analysed as lone work with related psycho-social risks. Overall, help is occasionally needed, particularly when facing difficult situations.

**Human contact** with supervisors is crucial when facing emotional situations such as discrimination at work. Perceived insults and negative feelings can be shared and discussed when a human supervisor and backing system for interaction exists. However, the support from platform companies is not geared to this kind of situation but rather directly to customer-related matters. When facing problems (also minor ones), communication practices and available channels are decisive. In the employee-employer relationship, face-to-face contact helps with feedback in a holistic and understandable way, which may also enhance work performance. The possibility of accessing colleagues and supervisors via radio-telephone connection is appreciated amongst product pickers. In contrast, chat-based support compared to a direct telephone line was considered a disadvantage amongst couriers.

**The amount and forms** of collegial interaction affect the extent to which food couriers share perceptions about the conditions of their work and possible problems. Instead of extensive collective action, couriers have kept up what happens via WhatsApp. Platform-based food couriers have had occasional, situation-specific cooperation regarding working conditions (YLE, 2022). Toward the end of 2022 and beginning 2023, cuts in mileage compensations pulled Wolt couriers together seeking forms of advocacy and collective action for influencing their working conditions (YLE, 2022; Kulmanen & Karhu, 2023). Only in April 2023 was the first formal interest association established for couriers. The association PAM couriers Finland is an institutional member of the PAM trade union (PAM Couriers Finland, 2023). This indicates that some couriers not only believe in trade unions but also that a trade union is finally interested in protecting platform workers, despite the fact that they are not employees. Meanwhile, collective bargain is regarded as an important way to reduce vulnerabilities of platform work up to the level that the EU's regulatory initiatives aim to allow self-employed platform workers the right to bargain their working conditions (European Commission, 2021b; Euroopan komissio, 2021).

### *Institutional: Migration background matters*

**The sharp division** of migrant workers as self-employed and local workers in employee positions was a surprise, although this qualitative study did not aim to provide numeric evidence. Natives have better-quality jobs within the food delivery industry. One explaining factor is stated by the couriers themselves: The food courier job is a realist opportunity in relation to one's weak Finnish language skills. Moreover, there is significant variation amongst platform workers in how they perceive their working conditions. Migration from low- and middle-income countries as a background seems to be a factor that often makes individuals more content with their working conditions in Finland because individuals may compare their perceived working conditions to those in the country of origin.

**When operating costs**, including, for example 25% commission to Wolt, and social security expenses are deducted from the total income, the net income level remains relatively low when compared to the minimum salaries of the food delivery sector's employees. This is linked to the main limitation of the research. This research, apart from one subcontracted courier, covered couriers who worked with their own accounts. However, there are also couriers (Palkoaho et al., 2023) who do not have their own account, and they rely on rental agreements with such couriers who have an account. This arrangement splits incomes between two delivery persons substantially, eroding the amount which will be gained by the person who does the actual delivery work. This rental work is legal, and it may be done correctly, but part of it is done informally with minimal compensation, making this one of the bottom-level worker positions of Finland's labour market. The extreme cases include human trade and forms of modern slavery. Professor Seppo Koskinen emphasises the obligation of the platform company to engage with the problems in the platform-based food delivery work by increasing monitoring who does the delivery work and under which conditions (Teittinen, 2023). This phenomenon needs to be urgently explored in a separate project utilising ethnographic and participatory methods.

**The interplay** between immigration, residency, work permits and social security is an extensive and challenging context influencing migrant's working opportunities. Jukka Könönen (2019) studied the role of immigration regulations for migrant employment before obtaining permanent residency status amongst non-EU migrants in the Helsinki area. Könönen (2017) demonstrated how immigration regulations increase migrants' dependency on paid employment, which decreases their bargaining power in the labour market. This leads to the formation of hierarchies in labour markets in the low-paid service sector, where employers prefer to recruit migrants in temporary legal positions over local workers and labour migrants. Könönen (2019) called this structure as follows: juridical division of labour.



In light of the analysis of this research, those with temporary residence permits are the optimal labour force for the platform companies, as they are usually not entitled to Finland's social security, which further lowers their bargaining power. Platform workers are even more vulnerable than dependent employees due to their self-employment position without a work contract. Then, there is no proof of a regular income – a key requirement for a residence permit (Koikkalainen et al., 2011).

**For a self-employed** (not employee in paid job) individual, stabilising one's residency and work permit is more complex than it is for an employee. Much is up to the type of residence permit. The residency type affects one's possibilities with access to social security. If one has resident permit type A (continuous) or P (permanent), one has all options available to formalise the role as entrepreneur and get YEL-insurance. Naturally, as an entrepreneur, one has to pay respective social security payments for the YEL-insurance. If one, like a student, is with residence B (temporary), he/she may function as an entrepreneur only in a limited company and cooperative under weekly working time limitations because he/she should be employed by the business entity, as the law demands (NewCo Helsinki, 2018). The latter is a complex and expensive arrangement compared to self-employment.

**The interview data** of this research the interview data, was able to identify the complexity of these interconnected dimensions. However, a specific future project should explore these partly non-coordinated but decisive dynamics affecting blue-collar migrant platform workers, including informal workers, such as undocumented migrants. The lower end would cover extremely vulnerable rental platform workers without their own accounts. Such a project could analyse versions of the vulnerability and related psycho-social stress between different residence and working permit categories, including those with Finnish citizenship or a permanent residence permit, relieved from the worries about their survival, legal standing and right to work.

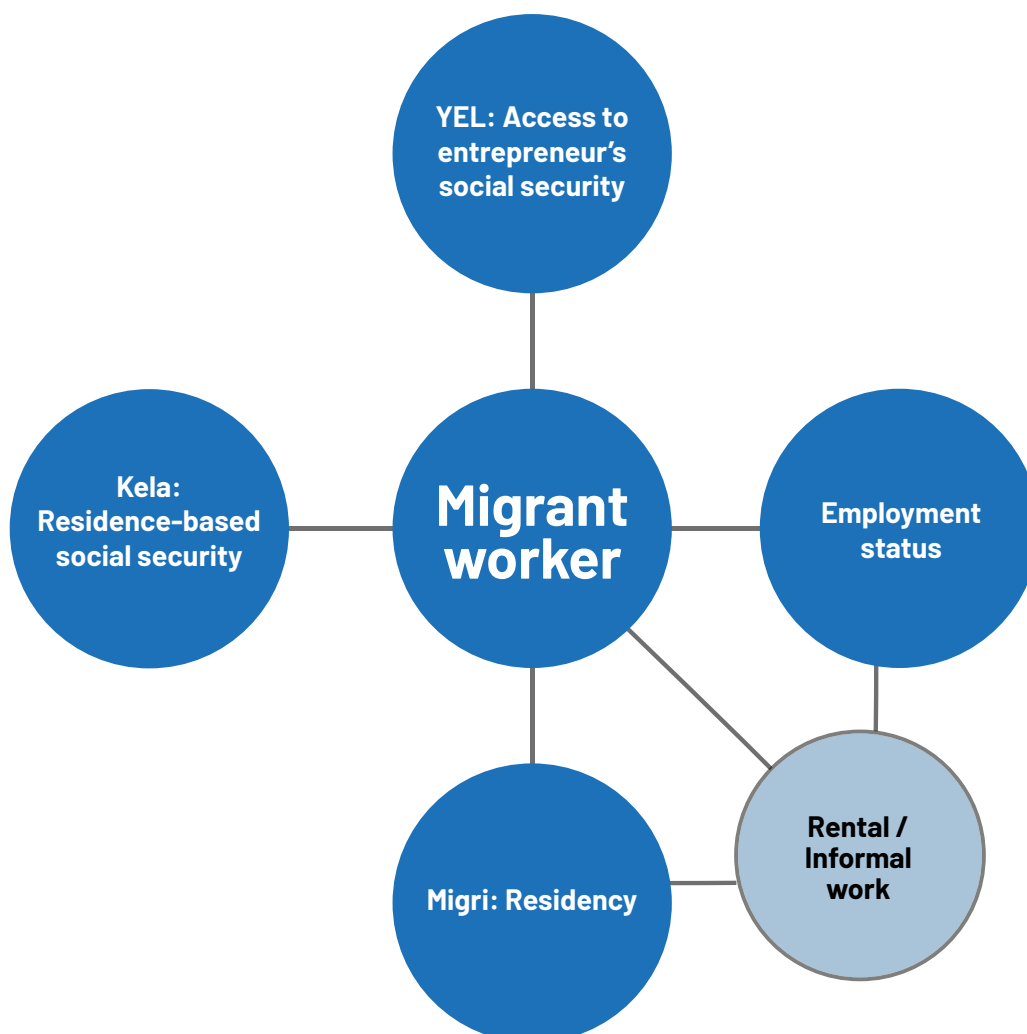
**The studied** food delivery *employees* in the retail and transportation sectors like their work, and they seem to be rather content with their working conditions, including the salary they receive. No major worries were expressed about the social security problems related to their employment. The studied platform workers appreciate the opportunity to earn; however, some migrant workers are disappointed when self-employment as courier seems not to help in lengthening residency. Furthermore, their understanding of the legal basis of the work and the associated risks and safety was fragmented. Some couriers recognise that work based on a partnership agreement – not on a work/employment contract – includes far lighter protection and is accompanied by uncovered occupational and social risks, whilst such risks are covered in salaried work. Overall, migrants' weak or non-existent social security due to their migratory status is combined with self-employment, which also comes with limited social protection, resulting in significant vulnerability visible amongst platform couriers.

### ***Institutional: Access to social security***

**Self-employment** leaves (social) insurance of occupational risks to the self-employed individuals themselves. As, in Finland, the statutory insurance against occupational injuries and diseases comes with employment or formal entrepreneurship, this leaves many self-employed individuals to a weakly protected position compared to the insured ones. Moreover, some couriers with migrant backgrounds may come from countries where informal work is common or from the contexts where fewer occupational risks are insured than in Finland. Furthermore, many migrant couriers are out of the scope of statutory insurance against occupational accidents and occupational diseases. Therefore, it is no surprise that Wolt couriers feel positive when Wolt offers them free insurance against occupational injuries, though that comes with far more modest conditions than statutory insurance.

**The employment status** of food delivery workers forms another sharp division between different types of entitlements to health-related social security. First, self-employed couriers (temporary permit B) without sufficiently permanent residency do not have entitlement either to entrepreneurship and YEL insurance or to national sickness insurance. Workers with temporary residency are not entitled to the basic sickness allowance after 9 deductible days, which is a right of those self-employed with sufficient residency. In comparison, an employee is entitled to full salary during those 9 days, whilst a self-employed individual loses income if he/she is sick and not capable of working. In addition, an entrepreneur with YEL-insurance is well protected for sickness.

**Access to occupational health services** forms another hierarchy up to each food delivery worker's employment status. A permanent employee has first-class access to health services. In contrast, a self-employed individual has the responsibility to organise and pay for access to the occupational health service or rely on the public service. Overall, a wide variation was observed amongst couriers in their level of awareness of the protection against occupational injuries or sick leave. In sum, the couriers were confused about the nature of social security.



**Figure 2. Institutions regulating migrant worker's opportunities and protection**

**Figure 2 summarises** the multifaceted vulnerability that a self-employed migrant worker may face in Finland. Besides access to sufficient work and pay, securing residency in Finland is a constant concern amongst many migrant workers. Kela interprets whose residence entitles social security, and the YEL system defines who can enrol in the entrepreneur's YEL social security scheme, naturally with stable self-pay. Above all, the main question remains in relation to employment status, as if courier work were salaried work, it would improve worker's protection overnight. The rental work, which may be done unofficially as informal work, is marked differently from the other shapes in figure 2, because this does not come from the result of this study. Instead, the importance of the rental and informal food delivery work comes from the investigative media (Palkoaho et al., 2023; Teittinen, 2023). Being a severe human rights issue and urgent research area justify its place in the figure 2.

**Hauben et al.** (2020, p. 9) identify the risks of precariousness in platform work:

- (1) low, fragmented and unstable income,
- (2) low protection of working conditions,
- (3) exposure to particular health and safety risks,
- (4) low social protection coverage for risks; and
- (5) "very low level of collective labour rights and representation".

**We want to expand** these explicit forms of precariousness of platform work (Hauben et al., 2020) to include also the external institutional systems, such as one's residency status. In Finland, residence-based social security has been an improvement from the strictly employment-based social security model. The residence-based social security system aims to provide protection for all, irrespective to one's labour market status. However, the residence-based social security model becomes a problem with those whose residency basis (temporary or non-existent) does not qualify them to social security. Large scale migration into Finland is a relatively new phenomenon, which dates back only to the 1990s. This explains in part why welfare institutions are not geared to serve the needs of newcomers. There are further limitations with the Finnish systems, as Finland's social security entitlement is mainly connected to both earnings and one's formal labour market status (employment or entrepreneurship), so systems only weakly protect those without either of the formal labour market statuses. This links to the above point (4) on Hauben et al.'s (2020) list.

**Many migrant platform workers**, including food couriers, operate in a vulnerable corner where several intersections of precarity reduce opportunities of the workers. The forms and weight of the precarity in the platform work and its entanglements to the external institutions, such as the residency institution, vary between countries. There is need for research to understand the institutions, policies and practises that surround and modify the precarity of platform work. Research on food delivery is a particularly fruitful avenue here, as it is a low-threshold sector providing opportunities to many.

## 7. CONCLUSION

**Operators in the food delivery sector** can learn from each other about making employment conditions fair and working conditions safe. The physical environment is decisive for occupational safety, and it differs significantly amongst the different operating environments of food delivery. The product picking work is done indoors in the store, which is basically a safe environment. Those who deliver food outside are exposed to sizeable personal accident risks, which are related to the means of transportation they use. Food couriers recognise the risks of their work. The biggest risks are faced by a courier new to the winter conditions on a bicycle in the snow slush with a transport bag on his/her back. In contrast, the most secure is an experienced driver in an up-to-date transport truck.

**The most important** of the psycho-social risks associated with food delivery work is time pressure. There is some time pressure in salaried food delivery work, but the gig-based wage system, typical of platform work, creates a rush, which increases the risk of accidents. The risks become more pronounced when one is struck in traffic, simultaneously communicating with his/her digital device to be fast. In addition, an excessive number of working hours – based on the positive freedom to decide one's own working hours – can lead to fatigue, which increases the risk of accidents. This is how psycho-social and physical occupational safety risks are connected. Digital management controls workers via strict, sometimes unreasonable, rules decisive to worker's future work possibilities. It is necessary to have a public discussion about the reasonability of algorithmic management practices.

**The communal aspects** of work are valuable. All workers should have the opportunity for apt guidance in both technical matters and work-related psychological needs. There can be a need for emotional support in unusual situations when algorithmic management modifies courier's job opportunities as well as when discrimination is experienced. The opportunity for collegial relationships is also important for well-being at work. For this reason, it is good to actively combat the negative effects of lone working, which seems to be a common feature in food delivery.

**The employment relationship** is decisive in providing security and safety to one's work, and work-and earnings-related features characterise the Finnish labour law and social security system. Food couriers staying in Finland non-permanently face multifold challenges compared to local employees in the same occupations. Additional struggles exist with residence permits, work permits and access to social security. What is a cost-reducing competitive advantage for a platform company means for food couriers an increased self-responsibility for work-related risks. Based on this research, many food couriers have a limited understanding of the contractual basis of their work. They often lack an understanding of the ambiguous rules and conditions of security systems that could cover occupational and social risks.

## 8. RECOMMENDATIONS

1. Food delivery platform workers should have access to sickness insurance. This can be part of reforming social security systems in Finland.
2. Food delivery platform workers should be provided mandatory insurance against occupational accidents and occupational diseases. This means moving towards statutory insurance. This could reveal the true risk levels of courier work. Working years and average weekly working hours can be considered in the new system.
3. The clarity of the entitlements of a food delivery platform worker should be increased, as this study showed the complexity of the legal position of a migrant platform worker in Finland. This would help to stabilise one's residency in Finland as well as to understand access to entrepreneurship and the YEL-insurance.
4. Work equipment determines safety, and it should be considered which vehicles are safe enough for food couriers to be used during winter. This can be required at an appropriate level of governance (city, region, or state).
5. The government should establish a committee to address the case of food delivery platform work. It should preferably define it as salaried work to bring employee solid social protection for all food delivery workers, even at the expense of the platform companies and customers.

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## APPENDIX 1. INTERNATIONAL LEGAL CASES ON FOOD COURIERS' WORKER STATUS

**In Spain and Italy, for example** there have been disputes filed against Deliveroo and Glovo (food delivery platform companies operating in these countries) as to whether their couriers were their employees. The rulings on these cases are diverse. For example, the Barcelona court in Spain, as well as the Labour inspectorates of Valencia and Madrid, in their ruling, established that couriers of these platform companies were employees and should be salaried. It was argued that these platform companies exerted a lot of control over the amount of time couriers took to complete deliveries and also used their apps to encourage them to work faster. In January 2021, ruling against Deliveroo, the Barcelona court ordered the defendant to pay social contributions to its 748 couriers upon establishing they were employees and not self-employed as claimed by the platform (see, e.g. Aloisi & De Stefano, 2021; De Stefano, 2018; UGT, 2021).

**However**, rulings in Italy on similar issues have been varied. For example, in April 2018, the Labour Tribunal of Turin rejected claims from six Foodora platform workers who sought to be re-classified as employees. In its ruling, the Tribunal argued that the couriers had the freedom to decide when to work and when not to work; therefore, they were regarded as self-employed (De Stefano, 2018). On the contrary, in 2020, a court of Palermo in Italy re-classified a Glovo courier as an employee (Aloisi & De Stefano, 2021).

**In the struggle** to classify food delivery platform workers as to whether they are employees or not, other verdicts in countries such as France and the UK have ruled couriers as self-employed. In November 2017, the Paris Court of Appeal established that a Deliveroo courier was self-employed because he had the freedom to choose when to work. In the UK, the Central Arbitration Committee also ruled that Deliveroo couriers were self-employed because their contracts allowed them to request a substitute for their shifts. The decision was upheld by the High Court in June 2021 (De Stefano, 2018; Lomas, 2021). However, in Belgium, Deliveroo couriers are regarded as employees under Belgian law. This decision



was made by the Administrative Commission for the Governance of the Employment Relationship. The commission argued that these couriers did not have the freedom of organising their working time (De Stefano, 2018).

**The Australia's Industrial Relations Tribunal** (Fair Work Commission) ruled that the plaintiff was an employee of the platform in a case against Deliveroo for unfair dismissal of its courier (in April 2020) for having delivered food 'too slowly'. The ruling was based on the fact that the platform exercises a lot of control on its couriers through its algorithms (Veen et al., 2021).

**In a different dispute** against Deliveroo in Italy, the manner in which the platform uses the algorithm to allocate shifts to its couriers is brought into the spotlight. Three unions of the Italian General Confederation of Labour filed a complaint against Deliveroo to a tribunal in Bologna. The unions complained that the algorithm was discriminatory and hindered the right of its workers to participate in strikes or pursue emergency issues on their own health reasons or healthcare of immediate family members. In its judgement in December 2020, the tribunal ruled against the defendant. The tribunal determined that Deliveroo's algorithm was discriminatory as it prioritised work shifts to top-rated couriers and did not take into account the reasons for couriers' absences from work. As a result, couriers who took part in strikes were automatically penalised (see, e.g. Aloisi & De Stefano, 2021; Planet Labour, 2021).

**Though these legal disputes** and the basis of the rulings are diverse, their decisions reveal the uncertainty and confusion on the situation as well as several features of platform work, which are linked to psycho-social risks of the courier work.

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