

SOCIAL HARM IN THE AUSTRALIAN GIG ECONOMY: AN APPROACH TO DETERMINE ACCOUNTABILITY OF GIG COMPANIES AND THEIR ALGORITHMS FOR HARMING GIG WORKERS

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ABSTRACT

The Australian gig economy is causing complex levels of damage to vulnerable workers, who experience harms including underpayment, road accidents and mental distress from their based work. The current labour classification of gig workers as independent contractors shifts all costs and liabilities of the gig work from the gig company to these labourers, who often belong to the most vulnerable categories of workers in Australia. Labour and criminal laws and legal cases are yet to provide a set of protections for gig workers and struggle to find a balance between autonomy and algorithmic control to determine an employment relationship and offer a set of already existing legal protections against these harms.

The thesis proposes an alternative to the current insufficient laws and cases using zemiology—a branch of criminology—and two zemiological approaches: principles drawn from ultra-realism and technology harm. Under zemiology, damages in the gig economy are considered forms of ‘social harm’, which are proximate and serious impediments to workers’ autonomy, and systematically affect vulnerable gig workers as a social cohort.

There are two categories of social harm in the gig economy that this thesis identifies: gig company harm and algorithmic harm. Gig company harms can be financial, physical, psychological, legal and other forms of harm caused directly by gig companies. Through selected ultra-realist principles used in the thesis, gig companies use their ‘special liberty’ from the independent contracting model and the ‘pseudo-pacification process’, intended as harming without exercising violence through market control, to cause social harm to gig workers. Gig companies generate a relationship of harm by creating a system of unilateral terms and conditions through their Guidelines containing an absence of moral responsibility and contractual stability towards gig workers to accumulate income and at the same time dispossessing working rights to prevent them to exercise their autonomy.

Algorithmic harms are unintentional effects of the algorithm, defined as a ‘tool of harm’. Through the ‘technology harm’ approach, and specifically the ‘stratigraphy of harm’, algorithmic harm emerges when the gig workers are forced to use the algorithm to perform work. This triggers ‘unintentional generative utility harms’ (bugs or glitches in the platform), ‘intentional generative utility harms’ (algorithmic changes and preferences) or ‘instrumental technicity harms’, (non-systemic job allocation or unfair account deactivation), which cause a range of financial, physical and psychological harms that gig workers cannot avoid because they lack the autonomy to challenge the algorithm’s decisions. The harmful relationship between the algorithm and the gig worker is determined by the interface of the app, called ‘interface harm’, which is a form of ‘use harm’ where the gig worker is directly but unintentionally harmed by the algorithm when used, which causes either immediate, long-term, physical or psychological harm.

DECLARATION

I certify that this thesis:

1. does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university
2. and the research within will not be submitted for any other future degree or diploma without the permission of Flinders University; and
3. to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

Signed.....

Date.....

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LIST OF STUDENT PUBLICATIONS DURING CANDIDATURE

1. Marmo, M., Sinopoli, E.A. & Guo, A. 2022, 'Worker exploitation in the Australian gig economy: emerging mechanisms of social control, *Griffith Law Review*, vol. 31, no. 2, pp. 171-92.
2. Sinopoli, E.A., Marmo, M. & Guo, S. 2021, 'Submission No 210 to Commonwealth Senate - Select Committee on Job Security, Canberra, ACT.

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LIST OF ABBREVIATIONS

AU\$ = Australian Dollar

Cth = Commonwealth

NSW = New South Wales

QLD = Queensland

RQ1 = Research Question 1

RQ2 = Research Question 2

SA = South Australia

SBS = Special Broadcasting Service

TWU = Transport Workers Union

VIC = Victoria

INTRODUCTION TO THE THESIS

The landscape of the Australian gig economy

Technological advancement and easier access to online spaces make it possible today to carry out working activities in ways that were not thinkable before. Smartphones and apps have created an interconnected world that brings people closer even if located in various parts of the globe. Through online spaces, people connect to network, for leisure activities, to work and to request a service. The gig economy falls under this interconnection as any work or service carried out by an individual mediated by online platforms that connect workers with consumers who request such service for a fee (Fair Work Ombudsman 2022a).

When people think of the gig economy in Australia, they often think of companies like Uber, Uber Eats or Airtasker. It is quite common to use Uber for personal transport, or Uber Eats for food delivery, or Airtasker to find a professional for a service, such as a plumber or an electrician for a household repair. These are all platforms which use apps to manage the connection between the 'gig workers' and the client who uses such apps for a service. For example, Uber has apps for drivers and riders to carry out their work, and another app for clients to request a ride or a delivery (Uber 2022e).

The apps that connect or mediate between the gig worker and the client often function through algorithms, which allocate the request of a service from the service requester to the job performer, or calculate fees, speeds or distances between the two parties, or even deactivate workers' accounts if the algorithms' calculations, using a rating system put in place by a given gig company, show a continuous poor performance of the gig worker (McDonald et al. 2019, pp. 16-7; Wood et al. 2019, pp. 64-5).

With the sole use of the apps, gig workers are considered independent workers who choose how and when to work and being their own bosses (Jamil & Noiseux 2018, p. 18) with the autonomy and flexibility to self-manage their working days.

These digital connections between gig workers and clients, which were unheard of until 10-15 years ago, are now a common everyday practice. However, these connections possess profound contradictions and controversial aspects that require more scrutiny.

One of these is the actual definition of gig economy. While generically defined as provision of services using online platforms for a fee (Fair Work Ombudsman 2022a), the gig economy is a more complex phenomenon. Using the transport services as an example, 'catching an Uber home' is a service part of the gig economy. However, returning home using traditional taxis is not gig economy, but both use apps and online platforms which connect clients and workers.

The problem with the definition of gig economy is its nature of 'catch-all term' to include a range of industries and companies but does not really define its main features to distinguish what is gig economy and what is not gig economy. Additionally, those platforms that use algorithms don't even explain how they work, but only their role in managing workforce (Commonwealth Senate 2018, p. 73).

The use of algorithms is also not an exclusive feature of the gig economy, nor do all gig companies use algorithms or, if used, are designed differently depending on type of industry or work to perform (Athreya 2020, p. 95; Kaine & Josserand 2019, p. 493; Kilhoffer et al. 2020, p. 262; Walker, Fleming & Berti 2021, p. 29). Airtasker, compared to Uber Eats, does not use its algorithm to allocate jobs, but only a rating system to deactivate low-performing accounts because Airtasker is an online space used to advertise jobs, while Uber Eats is a food delivery service which instead uses primarily the algorithm to manage food orders. Nevertheless, they are both part of the gig economy (Fair Work Ombudsman 2022a).

This definitional problem is not the only issue. These gig workers are often forced to work long hours under the rain, are paid very little, and experience depression, anxiety and sometimes death (Gildfind 2019, p. 21; Kilhoffer et al. 2020, p. 76; Transport Workers Union 2020, pp. 37-8).

However, these workers are not considered employees in Australia. Instead, they are classified as independent contractors and, by virtue of this classification, they carry all burdens and costs to maintain their equipment, like a bike or car to deliver food or people, or working tools to make repairs, and if they suffer damages they must have the money to cover all expenses. If they are involved in an accident, there is no medical leave available to them; they will simply not work and not earn (Barratt, Goods & Veen 2020a, p. 6).

This draws a delicate point: Australia is facing a paradox, where gig companies and their algorithms 'connect' people through autonomous work and apps and granting them access to novel sources of income, but at the same time rely on laws that 'disconnect' workers from their basic labour rights for the sake of bringing a range of services to customers using the independent contractor model.

The question of the classification of gig workers as independent contractors is a core issue of the gig economy (Barratt, Goods & Veen 2020a, p. 6). In Australia, as independent contractors, they fall under the *Independent Contractors Act 2006* (Cth). The Act does not provide any form of protection to gig workers. Instead, employees, who are covered by the *Fair Work Act 2009* (Cth), enjoy labour entitlements, such as leave, minimum wages or compensation for accidents. Hence, the gig economy creates a category of workers that suffer from damages like any other worker in Australia but are not properly regulated and are exposed to harm. Until the Australian Parliament or a court or tribunal creates a framework of protections, gig workers are a subclass of workers who suffer the negative consequences of their job.

However, the Australian gig economy has other problems. Most gig workers are temporary migrants who move to Australia under working holiday arrangements or student visas. These can prevent migrants from finding regular employment in Australia due to the temporary nature of their visas. Without a better choice, nor social security benefits enjoyed exclusively by Australian citizens and permanent residents, they may turn to the gig economy as it may fit better with their needs (Barratt, Goods & Veen 2020a, pp. 11-2).

With poor regulations that deprive workers from basic rights and a class of labourers that lack protections due to their social status, the cost of the gig economy in Australia is vast. On one hand, the issue is not purely a question of legal classification of gig workers but is also a social concern for those who live in Australia in a situation of precariousness and do not find a fitting alternative other than gig work.

On the other hand, companies like Uber are benefiting from these problems and are increasing their power and control. Uber reported for 2020 a revenue of more than AU\$1 billion compared to AU\$906 million for 2019. In terms of profits, in 2020 Uber made AU\$7 million, while in 2019 only AU\$1.6 million (Khadem 2021). This increased further in 2021, producing a revenue of AU\$2 billion and profits for AU\$9 million (Foote 2022).

Unsurprisingly, these figures coincide with the COVID-19 pandemic which reinforced the Australian gig economy with new precarious workers. The number of gig workers in Australia surged during the COVID-19 pandemic when several businesses closed down and people were left without a job. Finding an alternative became necessary, so people turned to the gig economy to work even during lockdown periods (Actuaries Institute 2020, p. 31). Likely, people in lockdown also favoured the creation of a greater market for the gig economy. A common example is the need of takeaway food options for people while prevented to leave their homes.

Creating a 'perfect storm', the gig economy in Australia has then formed a cohort of workers who are profoundly harmed by type of work.

The issues in the Australian gig economy

The Transport Workers Union (from here 'TWU') has been campaigning against exploitation in the gig economy for years, particularly in favour of gig workers in transport and food delivery services like Uber and Uber Eats. According to survey data related to ridesharing gig workers published in 2019 by the union, 85% of 1,100 drivers were not satisfied with their earnings, making on average AU\$16 per hour, which is below the Australian national minimum wage, which at the time of their survey was AU\$19.49 per hour. The Union received 969 reports of assaults from gig workers who

responded to the union's survey, which included threats (37%), physical assaults (10%) and sexual assaults (6%). For rideshare drivers, the biggest issues are sexual and physical assaults, racism, damage to property, lack of platform support and unfair account deactivation (Transport Workers Union 2019c). In another survey from 2019 on 160 food delivery riders, 76% were earning around AU\$6.67 per hour, significantly below the Australian national minimum wage. Around 45% either suffered or knew someone who suffered injuries. Their biggest issue was the very low pay rate (Transport Workers Union 2019a).

Notwithstanding that these issues have been made public for years, a solution to these issues has not been reached. A possibility to resolve the question may be a reclassification of gig workers as employees (Cherry & Aloisi 2017; Commonwealth Senate 2018, 2021, 2022; Goods, Veen & Barratt 2019; Nossar 2020; Rawling & Munton 2021; Stewart & Stanford 2017). However, this may not be a solution yet, as the Australian Government has not proposed a law that reclassifies gig workers in employees.

The TWU stated that gig workers suffer “over \$300 in wage theft each week” (Transport Workers Union 2019b). Wage theft, which is broadly the denial of working entitlements (The McKell Institute 2019, p. 9), is not a problem only for the gig economy, but in Australia it is a widespread issue in traditional employment (Keane & Dyer 2021), which has prompted states such as Victoria and Queensland to criminalise it (Criminal Code and Other Legislation (Wage Theft) Amendment Bill 2020 (Qld); *Wage Theft Act 2020* (Vic)). A reclassification, while protecting gig workers under wage theft laws, clashes with the reality of Australia not really resolving the issue of wage theft. More and more companies, even recently, have been found to be in breach of wage theft laws. These include some of the biggest Australian companies like the bank Westpac (News.com.au 2022), Melbourne University (Duffy 2020; Royall 2021), important supermarkets like Coles and Woolworths (ABC News (Australia) 2020; Iaria 2021; Lannin 2019), and the travel agency Flight Centre (ABC News (Australia) 2019).

On the other hand, with clear instances of wage theft the focus seems addressing the struggles of gig workers more on financial issues, while they are suffering harms that go beyond the denial of working entitlements. As reported in 2019 by the TWU, gig workers are at risk of physical and sexual abuse, racism and property damages, such as transport and delivery vehicles like cars, scooters or bikes damaged or stolen (Transport Workers Union 2019c). These findings have recently been confirmed and expanded by the McKell Institute Queensland, which reported instances of gig workers suffering stress, and anxiety, injuries, fatigue, low income and sexual harassment, particular women gig workers (The McKell Institute Queensland 2023, pp. 21-2). These issues are the starting point of thesis' discussion, categorising them in financial, physical, and psychological harms.

At the time of writing, Australia has not taken a decisive stance to resolve the issues of harm in the gig economy. While some jurisdictions like Victoria and New South Wales have formed parliamentary

committees to report on how to reform their laws to grant more protection to gig workers (Parliament of New South Wales 2020; The State of Victoria 2020), case law remains anchored to the idea that gig workers are independent contractors, confirmed in latest gig economy case *Deliveroo Australia Pty Ltd v Diego Franco* (2022) FWCFB 156 (from here '*Deliveroo v Franco* (2022)') which holds that gig companies cannot be made accountable under employment laws for dismissing unfairly their workers and disregarding the role of algorithms in such dismissal.

The theoretical positioning of the thesis and the research questions

In such a context where Australia has not yet been able to form a position that protects gig workers from harm, the country struggles to find a solution under its employment and criminal laws and views the problem as expression of wage theft and not beyond it.

This thesis proposes an alternative to Australia's employment and criminal laws through a zemiological or 'social harm' approach which states that it is possible to form a policy that attributes accountability to an offender, either individual person or a company, if they harm a vulnerable group of people even when a law that attributes such accountability is not available (Hillyard & Tombs 2004). Deducing from this concept, the thesis hypothesises that, if Australia is not yet ready to enact laws and principles that grant rights to gig workers, it is still possible to make gig companies and their algorithms accountable for harming gig workers as a vulnerable social group.

Zemiology is not the stand-alone theory in this thesis which instead draws principles from other theories to frame accountability of gig companies and algorithms. The thesis briefly looks into the notions of corporate and state-corporate crime (Tombs 2012; Tombs 2020b, p. 295), and the concept of "corporate citizenship" (Whyte 2018) to understand the powers and privileges corporations possess to harm workers, and particularly the "corporate citizenship" of gig companies. More in depth is the use zemiology which is the fundamental approach taken in the thesis and complemented by two other theories: Hall and Winlow's ultra-realism (Hall & Winlow 2015, 2018a, 2018b; Lloyd 2018a, 2018b, 2020), and Wood's (2021, 2022) technology harm.

Using zemiology, the thesis defines social harm as an *impediment to fulfilling personal needs* (Copson 2011, cited in Canning & Tombs 2021, p. 52) and explores the various harms caused by gig companies and their algorithms in the gig economy to demonstrate whether they are actually impediments to gig workers' personal needs. In second instance, the thesis looks at some principles of ultra-realism to support reasons to attribute accountability of gig companies for harming gig workers, although this is not the main framework on this thesis, which remains zemiology. In particular, it applies the notions of 'special liberty', which is the freedom or will granted by states to corporations to harm others (Hall & Winlow 2018b, p. 49; Lloyd 2018a, pp. 24-5), and 'pseudo-

pacification process', or the capacity to harm without violence but only exploiting the market (Hall & Winlow 2018b, p. 49; Wood, Anderson & Richards 2020a, p. 644) and explore the manner in which the gig companies possess the will to harm and why they do not need to exercise violence to commit harm. Further, the relationship of harm between the gig company and the worker is framed through *absence of moral responsibility* (Lloyd 2018b, pp. 256-8) *absence of stability* (Lloyd 2018a, p. 42; Lloyd 2018b, p. 251; Lloyd 2020, p. 81) and *dispossessing worker's rights to accumulate income* (Lloyd 2020, p. 89). Applying these three elements, the thesis aims to demonstrate that gig companies evade any form of responsibility towards their workers by creating an instable relationship which is damaging for gig workers but profitable for the platforms.

Based on this theoretical background, the thesis formulates the first research question to explain the reasons for accountability of gig companies:

RQ1—Through the lenses of zemiology, why are gig companies a source of 'social harm'?

The findings of the research question are applied to *Deliveroo v Franco* (2022) to highlight how the elements of zemiology can be applied to overcome the limits of the case.

The second complementary approach is the application of zemiology and Wood's (2021, 2022) technology harm to establish why algorithms can be made accountable for social harms. Differently from the zemiology supported by ultra-realism which apply to all gig companies, this approach is a further step to determine accountability of algorithms for social harm when used by gig companies to manage their workforce, like Uber. The zemiological application remains the same, exploring the capacity of algorithms to socially harm gig workers as an *impediment to fulfilling personal needs* (Copson 2011, cited in Canning & Tombs 2021, p. 52). The difference is the application of technology harm, and more specifically Wood's *stratigraphy of harm* (Wood 2021, p. 635). According to this approach, harm in technology is located in various strata and depends on the use of such technology. Through the use of apps, the thesis explores in which strata algorithms are allocated and why their use is harmful towards gig workers. Finally, using again Wood's technology harm, the thesis frames the relationship of social harm by looking at the negative effects of technological interfaces (2022). With reference to the gig economy, the thesis determines such relationship through the effects of the app's interface.

This second approach is the basis of the second research question to determine the accountability of algorithms in the gig economy:

RQ2—Through the lenses of zemiology and technology harm, why is the algorithm a source of 'social harm'?

As for RQ1, the findings are applied to *Deliveroo v Franco* (2022) to indicate how zemiology and technology harm can overcome the limits of the case, referring specifically to the role of algorithm.

There is a considerable advantage in these perspectives. By focusing on social harm, the difficulties arising from employment laws in the classification of workers can be avoided. Zemiology, coupled with ultra-realism and technology harm, examines a perspective that does not consider the legality of the worker's classification, like the relevant literature. Instead, it scrutinises whether the overall work can harm them as a social group and, on the basis of such harm, formulate an alternative to current laws until a legal reform is made.

The structure of the thesis

The thesis is divided into the abstract, an introduction, seven chapters and a conclusion.

Chapter One provides background information about the gig economy. It explores an appropriate definition and then describes the main features of the Australian gig economy, including its importance for temporary migrants and women as common vulnerable categories of workers. The chapter provides an explanation of the three main elements of the gig economy—autonomy, flexibility and algorithmic control—and the benefits and controversies that exist in this form of labour.

Chapter Two contains the literature review on harm in the Australian gig economy and identifies the key foundations for the RQs. Chapter Two explores the misclassification of gig workers as the core cause of harm and describes the forms of control that gig companies use to manage the workforce. These forms of control are expressed in 32 types of harm collected from the literature. The chapter compares the issue of financial harm and wage theft to explain how Australia's approach, evident in its laws and cases, is limited to monetary aspects of exploitation and, to a lesser degree, physical and psychological aspects, and lists nearly all legal disputes regarding gig companies holding that gig workers are independent contractors.

Chapter Three presents the theoretical framework of the thesis. It commences by explaining the process of analysis from the principles of state and corporate crime that underpin criminal activities of corporations more generally. It then moves to explore zemiology and focuses on how it is used to examine the gig economy. The chapter describes the main principles of zemiology, the supporting principles of ultra-realism, and technology harm that will be applied in the gig economy and differentiates the ramifications of a social harm approach that pertain to gig companies and to algorithms. In particular, the chapter shows which principles in zemiology can attribute accountability to gig companies and how zemiology and technology harm can attribute accountability for social harm to algorithms. It also critiques zemiology and outlines the reasons why it was chosen as the theoretical framework of the thesis.

Chapter Four describes the methodology of the thesis. The chapter starts by listing the issues of collecting data during the COVID-19 pandemic and how this affected data collection. It frames the research on gig workers' experiences as an exploratory case study to discover the harms affecting this cohort. The thesis aims to obtain sensitive data. Therefore, this chapter discusses the ethical considerations for each method used and triangulated in the thesis. Three methods were used and triangulated in this thesis: netnographic analysis of Facebook posts of harmed gig workers, an online survey and online semistructured interviews with gig workers and the TWU. These methods formed a dataset of social harms suffered by gig workers. The chapter also explains the details of the information kit provided to participants, how participants were recruited, how data will be analysed in themes and some data on the demographics of the participants in this study.

Chapter Five presents the results of the study, divided into direct control of the gig company and indirect control of the algorithms. Each form of control contains various types of harms in the gig economy, which are developed in the discussion chapters. Harms caused by direct control are the absence of compensation for damages and training, exposure to assault from intoxicated clients, lack of support and isolation, exposure to COVID-19, sexual and verbal abuse and legal harm from a breach of visa clauses. Harms caused by indirect control include the 'theory of job allocation', prevention and account deactivation and how technology harm can trigger financial, physical or psychological harm. The chapter concludes with data on the responses to the two forms of control, the presence of governmental responsibility, any social reaction to harm and specifically against the algorithm.

Chapter Six is the first discussion chapter and answers RQ1 on the reasons why gig companies are accountable for social harm towards their gig workers. It presents the answer in three main parts. First, this chapter establishes if the harms caused by gig companies are social harms, as impediments to workers' autonomy, if they are proximate and serious, and if they affect powerless workers. Second, it establishes if gig companies are truly sources of social harm by exercising the special liberty given by the Australian legal system in the process of pseudo-pacification. Finally, it explains the relations between the gig company and the harmed gig worker beyond the employment and independent contractor dichotomy, questioning whether gig companies are absent of moral responsibility towards gig workers. It examines whether gig companies deny contractual stability and dispossess worker rights while accumulating income. The chapter concludes with an analysis of the case *Deliveroo v Franco* (2022) to highlight the limitations of the Australian legal system and explain the appropriateness of *zemiology* to attribute accountability on gig companies for social harm.

Chapter Seven is the second and last discussion chapter. It answers RQ2 about the accountability of algorithms as a 'tool of harm' when gig companies adopt algorithms to manage their workforce and deny any direct responsibility for harm. Few but popular gig companies like Uber Eats use algorithms, which often reject any claims of harm and stating that any task allocation, or account

deactivation are managed by the algorithm. The structure of Chapter Seven mirrors Chapter Six. First, the chapter questions if the algorithms' harms are social harms in zemiology. It examines the nature of job allocation and account deactivation, and financial, physical and psychological as a consequence of job allocation and account deactivation. Second, it evaluates if such harms are serious and proximate and, finally, if they affect systemically powerless workers. It then determines why algorithms are the source of social harm using Wood's *stratigraphy of harm* and whether interactions between the gig workers and the algorithms are harms caused by the interface of each platform, called *interface harm*. Finally, the chapter applies zemiology and technology harm to *Deliveroo v Franco* (2022) to highlight the limitations of the Australian legal system and explain the appropriateness of the approach used.

The conclusion of the thesis provides a summary of each RQ. For each RQ, the conclusion indicates whether the company and the algorithm are to be made accountable for social harm, the gaps and limitations of the research that constituted the basis for the question and the contribution to knowledge. Regarding RQ1, the thesis, through zemiology, offers an alternative solution to determine accountability of gig companies in absence of a clear protective regulatory framework in support of harmed gig workers. Such approach is also novel and, to my knowledge, not tested in the context of the Australian gig economy. In relations to RQ2, zemiology and technology harm identify what types of social harm are caused by the algorithms.

The conclusion poses a series of limitations in research, particularly with the data collected, and lists areas in which future studies should invest through this thesis. It provides final remarks that explain the development of the studies engaged in this thesis from its infancy and the future directions the gig economy in Australia may take.

CHAPTER ONE: BACKGROUND INFORMATION ON THE AUSTRALIAN GIG ECONOMY

Chapter introduction

This chapter explains the elements of the gig economy crucial for the development of further parts of this study. The chapter defines the gig economy. It acknowledges that a universally accepted definition is not available in the literature but refers to Stewart & Stanford (2017) and Unions NSW (2020) as commonly cited definitions in Australia. This chapter also defines a gig company and how it can be structured according to the parties involved in gig work. These definitions are complex and technical but necessary to frame the key concepts for the study.

After defining *what* the gig economy is and the platforms involved, this chapter examines *which* are the main ones in the Australian market. The chapter begins with the idea of a 'digital economy' and why it is praised by the Australian Government. This chapter moves through four major steps to illustrate some of the major characteristics of the Australian gig economy. Due to the lack of consistent data about the gig economy in Australia, these steps are chosen to narrow down the scope of the thesis. They identify the major gig companies and sectors, the most profitable ones, their location and the individual traits of gig workers. Among the various categories, this chapter focuses more on temporary migrants and women as they are frequent beneficiaries of the gig economy.

This chapter also presents three crucial features of the gig economy: autonomy (the capacity to manage tasks), flexibility (organising the order of completion of the tasks) and algorithmic control (the technological tool that manages the allocation of tasks to gig workers and account deactivation).

Finally, this chapter lists the benefits and controversies in the gig economy.

1.1 Defining the gig economy

The aim of this chapter is to understand the relevant elements of the Australian gig economy that will drive the entirety of the thesis, commencing with three typical examples: (1) a person through an app calls Uber or Ola for a driver to conduct the person from point A to point B, (2) a client orders food from a restaurant and is delivered home through Deliveroo or Uber Eats riders, and (3) a client negotiates with a removalist on Airtasker to remove a mirror from a house. These are only a few instances of gig work in Australia. These examples are all considered part of the gig economy.

The task of defining the 'gig economy' is complex. The expression comes from 'gigs', or tasks, to indicate short-term work (Minter 2017, p. 440; The State of Victoria 2020, p. 11). Gig economy work is often referred to as 'virtual work', 'peer production', 'playbour', 'crowdwork', 'microwork' and 'gig work' in an 'on-demand', 'sharing' or 'platform' economy (Gussek & Wiesche 2022). Hence, a unique definition of the gig economy is contested in the literature (Commonwealth Senate 2021, p. 1[1.1]-[1.2]; The State of Victoria 2020, p. 11).

The Commonwealth Senate attempts to clarify the terminology by defining 'on-demand work' as any broad work that includes gig work, casual work, labour hire, fixed-term contracts and independent contractors. 'Gig work' is considered a subset of on-demand work. 'Platform work' is any on-demand job that uses an online platform or app (Commonwealth Senate 2021, p. 2[1.10]).

Even workers in the gig economy are not able to define it, but they know which kind of jobs or sectors are contained in the gig economy (upcover 2020b, p. 3). For example, workers identify common gig companies, like Uber, Deliveroo or Airtasker, as part of the gig economy but struggle to define the elements of the gig economy.

This difficulty is present because the gig economy is a catch-all term used to indicate diverse companies and industries that often do not share structures or functionalities. For instance, Uber is part of the ridesharing industry, Deliveroo focuses on food delivery and Airtasker focuses on broader professional services.

In Australia, the most commonly cited definition of the gig economy is that of Stewart and Stanford (Barratt, Goods & Veen 2020a, p. 2; Commonwealth Senate 2018, p. 73; Stewart & Stanford 2017, p. 421; Veen et al. 2020). They define four basic characteristics that all companies in the gig economy possess: (1) workers do not have schedules because work is driven by customer demand, (2) workers provide nearly the entirety of the capital required to complete the 'gig', (3) gigs are assigned by a digital platform, and (4) gigs are paid at a piece rate.

However, Unions NSW expands this definition (Commonwealth Senate 2018, pp. 73-4; Dosen & Graham 2018, p. 2; Minter 2017, p. 440; Unions NSW 2020, p. 18). It defines the gig economy with the following characteristics: (a) work is divided into tasks and assigned to workers on a noncontinuous basis, (b) work is performed by the individual worker but requested by either another individual or business, (c) workers are independent contractors and are not guaranteed any employment entitlement, and (d) the platform mediates between the worker and the client and charges for allowing them to use its service. In the gig economy, prices are set by the digital platform or customer, collected by the digital platform, and then accredited to the worker.

Even with a developed scholarly definition, further elements still need to be defined. The examples mention clients, restaurants, riders, workers and apps. The first few components are human beings

(clients, riders, workers) and corporations (restaurants). The final component is a technological tool that manages gig work. In the gig economy, a food order, a call for transportation or a task negotiation are all managed by a 'digital platform'. A 'digital platform' is an intermediary or provider that connects or hires people seeking a job and businesses or other individuals to complete tasks remotely or in person (McDonald et al. 2019, p. 14; World Economic Forum 2020, p. 2). From a corporate and technological perspective, a digital platform is also called a 'platform company', which is a business model that uses a two-sided application programming interface (API) and the internet to manage 'gigs' (Athreya 2020, pp. 83-4).

The major difference between these companies concerns their structures. Some include three parties (worker-client-platform), like in Uber or Airtasker, or four parties (worker-client-restaurant-platform), like in Uber Eats or Deliveroo (Barratt, Goods & Veen 2020a, p. 5). All parties are bound to a series of agreements. In triangular agreements (Stewart & Stanford 2017, pp. 424-5), such as Airtasker, the relationships between parties are based on a *double-contract relationship*. The worker has a contract with both platform and the client. These are not employment-type contracts. According to Airtasker's CEO, the platform only arranges the contracts for services between the client and the worker, while the worker negotiates the task with the client. The contract for services may include terms to indicate it is not an employment relationship and that tools and equipment must be supplied by the worker. The contract can even contain terms that allow the worker discretion to freely choose how to complete the task and even allow them to work for competitors (The State of Victoria 2020, p. 108). In quadrangular agreements, like those of Deliveroo and Uber Eats, the platform offers its services to workers available and proximate to clients and restaurants, who all agree on the platforms' terms and conditions. Again, with reference to the worker, these are not employment-type contracts.

Although the examples above seem different, such as a ride with Uber, a food order with Deliveroo or mirror removal through Airtasker, they all fall under the broader concept of 'gig work'. In all cases, the work is driven by a customer requesting service when needed through an app that assigns the gig to the worker or is assigned by a customer with the platform acting as a mediator. The worker, who is an independent contractor, only provides a personal asset like a car, a bike or any tool to complete the gig and receives payment upon completion of the task.

1.2 The gig economy in Australia: an overview of the main characteristics

After providing the definition of 'gig economy' and 'gig work', this study investigates the context and the importance of the gig economy in Australia. The importance of the gig economy is exemplified in a quote from the Australian Department of Home Affairs (DHA) on the 'digital economy', which the

gig economy is part of: 'The digital economy is the future of Australia's economy' (Department of Home Affairs 2020a, p. 7). This quote provides the general context to this thesis and shows Australia's desire for the digitalisation of its economy. However, the DHA did not outline the intended meaning of a 'digital economy'. An earlier discussion paper from the Australian Law Reform Commission published in 2013 defined the digital economy as 'a global network of social and economic activities supported by information and communication technologies, like the internet, mobile networks, and sensor networks' (Australian Law Reform Commission 2013, p. 37). In its desire to digitalise the economy, Australia is pushing towards a network of activities and employment governed by information and communication technologies or, put simply, in a *market managed by data* which the gig economy is one representative.

Australia's openness to the gig economy comes from its 'fair go all around' approach to work as long as it benefits its residents (Rideshare Drivers Association of Australia 2020, p. 3). Two motivations seem to drive Australia towards the digital economy: the long-standing idea in Australia to look forward to new technologies for the benefit of the country in the broader market context of the so-called 'Industry 4.0' or 'Fourth Industrial Revolution' (The McKell Institute 2020, p. 17),¹ and the devastating social, economic and labour effects of the COVID-19 pandemic (Actuaries Institute 2020). The relationship between the gig economy and the COVID-19 pandemic should not be a surprise. The existence of the gig economy itself depends on economic recessions. In fact, the gig economy emerged in the United States (US) because of the 2008 Global Financial Crisis, when multiple workers lost their full-time jobs and commenced seeking short-term 'gigs' to secure an income (Minter 2017, p. 440; The State of Victoria 2020, p. 11). It was not a sudden appearance but it exploited technological advancement, fast internet and smartphones to impose itself (Deloitte Access Economics 2015, p. 38). From these, gig companies like Uber, Airbnb, and Deliveroo progressively emerged in the global markets (Jamil & Noiseux 2018, p. 4).²

Quantifying statistical data on the Australian gig economy to evaluate its scale is difficult. While the Commonwealth Senate, citing a 2020 study conducted by the Actuaries Institute, indicates a workforce of 250,000 gig workers, Australian data available is often patchy or limited and mostly a raw representation of the reality due to the lack of an agreed definition of the gig economy, making it hard to quantify which sectors and businesses are part of the gig economy. Most data available

¹ On the contrary, Alison Pennington in The Japan Institute for Labour Policy and Training (2021) argued the decrease of governmental investment in technology in the context of industrial relations and disagrees with the idea of Australia being welcoming to technological advancement for its economy

² Studies on the global effects of the gig economy are numerous and ongoing. Selected publications include countries like India (Joo & Shaul 2021; Pal 2021), Malaysia (Rahim et al. 2021; Renganathan & Jaidi 2021), Europe (Česnuitytė et al. 2022; Klimczuk, Česnuitytė & Avram 2021; Newlands 2022), Canada (Cherry & Aloisi 2017) and the US (Buckley 2021; Moreno 2021).

are limited or poorly updated annual reports that gig companies publish (Commonwealth Senate 2021, pp. 17-8; Deloitte Access Economics 2015, p. 13; Deloitte Access Economics 2017, p. 5).³

To compensate for the lack of data, this study identifies a series of publications to frame the features of the Australian gig economy. Although these are not comprehensive, they still provide a snapshot of the Australian gig economy and indicate the most common businesses in the Australian gig economy, the effect of the gig economy on the Australian market, the geographical location of gig workers in Australia, and the individual traits of this cohort. For purposes of this thesis, such features not only provide a broader understanding of the Australian gig economy but also are able to predict the demographics of participants in this thesis, presented in Chapter Four.

The first feature are the relevant businesses and sectors in Australia that are part of the gig economy. Quite confidently, the TWU identifies three 'waves' of the gig economy: the introduction of transport services in 2011, the commencement of the food delivery industry in 2015 and the parcel delivery sector through Amazon Flex in 2020 (Transport Workers Union 2020, p. 18).⁴ According to Business.gov.au, the Australian Government website for businesses, three broad sectors and several gig companies operate in Australia: ride sharing services for a fare (Uber, SheSafe, Shebah, GoCatch, Ola and Taxify), delivery services for a fee (Deliveroo, Uber Eats, Zoom2u and Sendle), and personal services, including creative or professional services like graphic design, or odd jobs (Airtasker, Expert360, Freelancer, Upwork, Sidekicker, Helpling, Hipages, Mad Paws, Mynder and Wipehero) (business.gov.au 2020).

There is no precise number of gig companies in Australia. However, upcover, an insurance company for gig workers, suggests there are around 71 companies, with possible growth in the future (upcover 2020b, p. 3). Among these, the most successful sector is the food delivery services that include gig companies like Uber Eats or Deliveroo because there are nearly no entry requirements, very limited skills are desired, and cheap assets are required to work (Goods, Veen & Barratt 2019, p. 505). This was confirmed by a National Survey in 2020 on the gig economy in Australia, where 7.1% of gig workers preferred to work for delivery services (Smith et al. 2021, p. 2; upcover 2020b, p. 4).

Transportation services are at the forefront of the gig economy in Australia. Around 54% of taxi users are now using ridesharing, with 28% moved indefinitely to ridesharing, predicting an increase of 14.4% by 2023 (Ola Australia Pty Ltd 2020, p. 15). Platforms match riders and drivers based on their geographical location, and at the end of the ride, they assess each other through the rating system

³ In interesting Polish study used Big Data from smartphones to measure the gig economy in the European country (Beręsewicz et al. 2021). A similar tool of measurement has not been adopted in Australia.

⁴ Emerging in the gig economy is the caring sector, which is not explored in the thesis. See, for example, Macdonald (2021).

(Deloitte Access Economics 2015, p. 16).⁵ In Australia, the first to enter the market was Uber through UberBlack in 2012, followed by UberTaxi in 2013 and UberX in 2014.⁶

Before the gig economy entered the market in Australia, food delivery services were offered by outlets either employing or outsourcing delivery drivers as independent contractors, like pizza delivery services (The State of Victoria 2020, p. 80). With technological advancement, businesses commenced moving to online means, firstly with solely online orders, like Menulog in 2006 (The State of Victoria 2020, p. 80). Progressively, Deliveroo (in 2014), Foodora (in 2015) and Uber Eats (in 2016) changed the face of delivery services and combined ordering and delivery through their platforms (The State of Victoria 2020, p. 80).

The easiness with which gig economy companies became influential and important in Australia was strongly related to its regulations. Food delivery platforms took advantage of the desire of workers to be independent from the range of provisions in Australian employment laws and to become capable of expressing agency, and the inaction of the regulators which support 'entrepreneurial agency', in line with neoliberalism in the country (Barratt, Goods & Veen 2020a, p. 15).

Some data from Deliveroo helps understand its popularity. According to Deliveroo, it accounts for over 3000 delivery drivers and works with over 4,000 restaurants in all capital cities of Australia (Deliveroo Australia 2020a, p. 1). A study from Capital Economics found that, as an independent economic firm, Deliveroo has increased its sales and has created jobs (Deliveroo Australia 2020a, p. 1). Deliveroo has helped restaurants increase their markets by over a third, while 17% have expanded their operations, and 10% have increased their on-demand workers by at least two. Deliveroo expects to create 8,500 jobs by the end of 2020 (Deliveroo Australia 2020a, p. 1). However, Deliveroo announced it would exit the Australian market in 2023 (Taylor 2022a).

There are practical reasons that justify the popularity of food delivery services. To enter the food delivery market, workers must download the relevant app, create an online account and ensure they are equipped to work, like a bike or a food bag from the gig company. Deliveroo has a selection process, and new entrants are waitlisted, while Uber Eats has fewer entry barriers (Veen, Barratt & Goods 2019, pp. 7-8). The rider logs into the app to indicate their availability to work. Once a customer makes an order, the rider receives a notification on the app and either accepts or declines it. Riders are notified only of the pickup address and do not know where the location is. Once accepted, they go to the restaurant, pick up the food and indicate on the app they received it. Then, the app notifies the delivery address, which is the 'gig' or task that is actually paid. Through the app

⁵ Details are explained in the following chapters.

⁶ Other platforms present in the Australian market are Shareurride, Catchalift, Coseats, Hitch-A-Ride and Ingogo. More recent entrants in the ridesharing market are GoCar (in 2016), Go Buggy (which operates where Uber is not present in NSW) and its 'Go Girl' options for women only drivers and clients, My Country Taxi (in 2016) and Liftango for students and staff to reach and leave the University of Newcastle (Deloitte Access Economics 2015, pp. 16-7; Deloitte Access Economics 2017, pp. 7-8).

and the navigation software, the driver delivers the order and notifies the company (Goods, Veen & Barratt 2019, p. 505).

Another popular sector is freelancing through Airtasker. Airtasker is an Australian gig company founded in 2012 as a marketplace to hire flexible staff online or via the app. It is one of Australia's biggest gig companies, with 1.2 million users and AU\$75 million paid tasks through its platform (Minter 2017, p. 443). In the site and app, the client posts a task with details and payment of the task, and individual workers bid for it. Payment is for a task completed, not on an hourly basis (Minter 2017, p. 443). Bids are 'blind', so only the client can see what each worker is bidding for, creating a competitive environment and a race to the bottom, charging even below legal minimum standards. The client can then choose based on the price or the ratings the workers have received for previous tasks completed (Minter 2017, p. 444). There are clear restrictions on what tasks can be posted. Clients are not allowed to post anything related to illegal activities, escort services, or completion of school or university assignments (Minter 2017, p. 444).

The major categories of jobs posted are 'home and garden (29.6%), delivery and removals (22.4%), trades work (16.5%) and market research (16.4%)' (Fung 2016, cited in Minter 2017, p. 444). Other tasks include events and photography, IT and computing, business and administration, and fun and quirky activities like entertainers or food delivery (Deloitte Access Economics 2015, p. 43). According to the Australian Industry Group (AiG), web, mobile and software development are the largest category of freelancers (44%). Other categories are design and creative (14%), customer and admin support (13%), sales and marketing (10%) and writing (85%). The same group stated that, in 2014–15, around 32% of the workforce or 4.1 million in Australia had worked in freelancing to some extent (Australian Industry Group 2016, p. 4).

The second feature is the gig companies' revenue which is useful to evaluate the effect of the gig economy on the Australian market. Although exact figures are absent, the effect of the gig economy in Australia is still noticeable. In New South Wales, the Fair Work Commission (FWC) stated that the gig economy created a state revenue of AU\$504 million in the financial year 2013–14, up to AU\$2.6 billion in 2016, with 45,000 people working for Uber, Airtasker, Freelance, or Deliveroo (Commonwealth Senate 2018, p. 74; Deloitte Access Economics 2015, p. 15; Deloitte Access Economics 2017, p. 4; Minter 2017, p. 441). In 2018, Deliveroo claimed that it contributed AU\$452 million to the revenue of the Australian economy (The State of Victoria 2020, p. 80). Among restaurants, some have increased their markets by over a third through Deliveroo, 17% expanded their operations and 10% increased their on-demand workers by at least two (Deliveroo Australia 2020a, p. 1). Data provided by Uber, instead, has shown a significant increase in revenue and profits during the COVID-19 pandemic. According to its reports, in 2019 Uber's revenue amounted to AU\$906 millions, which increased in 2020 to more than AU\$1 billion and in 2021 to AU\$2 billion. In

profits, Uber went from AU\$1.6 million in 2019 to AU\$7 million in 2020 and finally AU\$9 million in 2021(Foote 2022; Khadem 2021).

The lack of national data or comparable state data that includes the entirety of the gig economy does constitute a limitation. However, the snapshot provided is sufficient to indicate the influence and importance of the gig economy, particularly in New South Wales, one of the richest states in Australia.

The third feature are the geographic locations of gig workers. The Australian gig economy has a clear 'urbanised' character, similar to the US (Davies et al. 2017, p. 220). The capital cities are the hub of the gig economy, although skilled online work can be conducted in regional areas (upcover 2020b, pp. 3-4). The major concentration of gig workers in Australia is in New South Wales (Barratt et al. 2020).

A fourth and final feature are the individual traits of gig workers. There are three main groups in Australia (The Feed SBS 2017): (1) *full-timers*, who are dependent on the gig economy; (2) *moonlighters*, who only work for extra cash and in the gig economy along with their current employment; and (3) *students* and *home parents*, who seek simply flexible work to juggle with their commitments.⁷ However, there are other categories of gig workers like temporary migrants in Australia and women who are particularly affected by gig work..

An important trait of the Australian gig economy is the social status of gig workers. In the popular food delivery services like Uber Eats, the majority of gig workers are temporary migrants, mostly international students and working holiday-makers from different Asian, European and South American countries who find gig work extremely convenient while residing in Australia (Barratt, Goods & Veen 2020a, pp. 11-2). There are many reasons for this convenience. Migrants in Australia who are not native English speakers face significant challenges when seeking employment, including poor language proficiency, discrimination or racism, issues with recognition of skills and qualifications, inadequate networks and limited understanding of Australian labour laws (Commonwealth Senate 2018, p. 23). The Federation of Ethnic Communities' Council of Australia (FECCA) noted that around one-third of migrants in Australia struggle to find their first jobs, while the Centre for Multicultural Youth indicated a strong link between ethnic background and being unable to enter the Australian market (Commonwealth Senate 2018, p. 23).

This inability to enter the workforce is confirmed in most literature. Gig workers are mostly isolated people and unaware of their rights as workers (Stewart & Stanford 2017, p. 428) and simply try to fit in Australia through the cultural norms of their home country. Some may be aware of the laws but fear reporting to public officials because of their own dreadful personal experiences with police forces

⁷ While these terms are used generically here, the thesis refers to international students and women as part of the third category.

or because they may be in breach of their visa conditions. Finally, they accept being exploited because they cannot find better jobs, or they prefer being underpaid because they do not have to declare as much tax to the Australian Taxation Office (The State of Victoria 2020, p. 44; Unions NSW 2020, p. 56). Migrants may associate their living conditions with those in their home country. Workers may tolerate being harmed in the workplace because the living conditions in Australia are more tolerable compared with those of their home countries (Barratt, Goods & Veen 2020a, p. 14).

The temporary visa restrictions limit migrants' labour market power. Migrants often have poor English language skills and qualifications that are not recognised in Australia, which makes them perfect workers for gig companies (The State of Victoria 2020, p. 45). Gig work can better 'fit' their individual circumstances. In addition, gig work is not a job an Australian would do (Churchill & Craig 2019, p. 747; Goods, Veen & Barratt 2019, p. 516).⁹ At the same time, migrants would consider it only a temporary job while living in Australia or until they complete their studies and later obtain a sponsor or return to their home countries, which could see future workers replacing them. This, for platforms, is an advantage because there would always be an available workforce (Barratt, Goods & Veen 2020a, p. 12). This 'fitness' discourages gig workers from engaging in collective forms of agency in favour of resilience and reworking as expressions of individual and entrepreneurial agency (Barratt, Goods & Veen 2020a, p. 14).

According to the literature (Barratt et al. 2020; Barratt, Goods & Veen 2020a, 2020b, 2023; Goods, Veen & Barratt 2019; Smith et al. 2021; The State of Victoria 2020; Veen, Barratt & Goods 2019; Veen et al. 2020), the majority of gig workers in Australia are temporary migrants under the working holiday program or are international students. While it is not the scope of the thesis to provide an in-depth discussion of migration patterns to Australia, it is important to address the visas and their applicability to temporary migrants in the gig economy. Temporary visas are classified into a number of classes and subclasses, but the thesis focuses on two specific subclasses: the working holiday visas (subclasses 417 and 462, both part of Australia's working holiday program) and the student visa (subclass 500) (Department of Home Affairs 2020b). These visa subclasses constitute the majority of workers in the Australian gig economy (Goods, Veen & Barratt 2019, pp. 509-10).

The working holiday program was created in 1975 to promote cultural exchange between Australia and limited countries around the world. Today, it is a de facto working program aimed at increasing low-skilled labour in Australia (Howe, Stewart & Owens 2018, p. 203; Wright & Clibborn 2020, pp. 44-5). There are two subclasses in the working holiday program: a working holiday visa (subclass 417) and a work and holiday visa (subclass 462). These two visas are very similar but apply to different nationalities and have varying requirements.

⁹ Although mostly true, this literature was published prior the COVID-19 pandemic, which pushed a number of Australians to consider the gig economy as their source of income when a great number of business were forced to shut down. Nevertheless, the gig economy still is a market for temporary migrants.

The working holiday visa (subclass 417) is an extended holiday with the opportunity for temporary migrants to work in Australia for one year. It can be renewed twice if the holder works in a specified type of work in regional Australia. Applicants must not be accompanied by dependent children. They must be between 18 and 35 years old inclusive, must apply only offshore if it is their first working holiday visa, must not have entered Australia previously with a subclass 417 visa, must be of good health and character, must have at least AU\$5,000 when they arrive, and they must sign the Australian Values Statement. It is uncapped and available to only certain nationalities (Department of Home Affairs 2019, p. 5; Department of Home Affairs 2022b).¹⁰

The work and holiday visa (subclass 462) follows the same rules, except that the age limit is up to 30 years old inclusive, is capped, is available to certain nationalities,¹¹ and has further requirements, such as possessing certain degrees or qualifications, possessing functional English proved by a degree or a recognised English language test like the International English Language Testing System (IELTS) and a letter of support from the migrant's government (Department of Home Affairs 2022a).

The student visa authorises migrants to study in Australia and work for a maximum of 40 hours every two weeks during teaching periods. Due to the pandemic, this limitation was waived in 2022 and 2023. The length of the visa is five years or equal to the duration of the course. The applicant must apply for a new student visa or any other visa upon expiry, provided the eligibility requirements are met. The visa can include family members but not children over 18 years old, who must apply for their own visas. Each applicant and family member can apply either in or outside Australia, but, like the other visas, they must fulfil character, health and financial requirements and sign the Australian Values Statement (Department of Home Affairs 2020c).

After clarifying the importance of temporary migrants and the visas under which gig workers complete their gig work, the second category mentioned here are women in the gig economy. There are not many Australian studies in this area, but we know that the gig economy impacts men and women differently. According to Churchill and Craig (2019, p. 751), in Australia men are more involved in driving and food delivery services, while women prefer cleaning, caring and creative tasks like design or photography. Even their motivations are different. While income needs drive both men

¹⁰ Currently, as of 1 July 2022, the applicant must hold one of the following passports: Belgium, Canada, Republic of Cyprus, Denmark, Estonia, Finland, France, Germany, Hong Kong Special Administrative Region of the People's Republic of China (including British National Overseas passport holders), Republic of Ireland, Italy, Japan, Republic of Korea, Malta, Netherlands, Norway, Sweden, Taiwan (other than an official or diplomatic passport) and the UK.

¹¹ Currently, as of 1 July 2022, the applicant must hold one of the following passports: Argentina, Austria, Brazil, Chile, People's Republic of China, Czech Republic, Ecuador, Greece, Hungary, Indonesia, Israel, Luxembourg, Malaysia, Mongolia, Peru, Poland, Portugal, San Marino, Singapore, Slovak Republic, Slovenia, Spain, Switzerland, Thailand, Turkey, Uruguay, the US and Vietnam.

and women, women also are compelled by other commitments (caring duties) or simply because they cannot find another job (Churchill & Craig 2019, p. 757; Commonwealth Senate 2018, p. 28).

Similar findings have been reported internationally but are more visible in typical patriarchal societies. In India, the effect of COVID-19 significantly expanded its gig economy, with more women participating in new forms of work using their traditional skills. Women employed in domestic work, care, beauty, and wellness were able to move from traditional work to the gig economy and were able to use flexible arrangements and take care of family. This work, in particular, was considered appropriate for safety reasons and for the country's gender norms (Chaudhary 2021, pp. 52-3; Kelkar 2022, pp. 7-9, 12-5; Tripathi 2021, p. 98). In Africa, the gig economy is considered a favourable way to reduce the gender wage gap between men and women and provide new job opportunities of flexible for women (Shah, Maina & Kipkoech 2021, p. 90). In Russia, women are not only aware of the opportunities the gig economy can offer but also are responsible for the earnings from the gig economy in their households (Zaloznaya 2021).

These four features frame the elements of the Australian gig economy market and the broader elements the thesis intends to investigate, driving the study towards common ridesharing, food delivery and professional services like Uber, Deliveroo and Airtasker, not only for being more popular but also more profitable than others. The Australian gig economy also has an urbanised character. Therefore, the effect of the gig economy can be examined in the capital cities of Australia and rich states like New South Wales, while being mindful of differences that can emerge.¹² Many gig workers, including students and parents, are classified as full-time and moonlighters due to how they use the gig economy although this thesis will give more attention to temporary migrants and women as they are often portrayed in the literature above as two of the most vulnerable categories of workers.

1.3 The components of the gig work: autonomy, flexibility and algorithmic control

There are three main components of gig work: autonomy, flexibility and algorithmic control. These are not arbitrarily chosen but stem from the literature and catchphrases in gig companies' advertisements. For purposes of the thesis, autonomy and algorithmic control are the core of the discussions of harm that the study will unpack in the following chapters.

Gig companies like Uber praise the opportunity to choose when and where to work. For example, Uber Eats' tagline is 'Deliver when you want, make what you need. Earn on your own schedule' (Uber 2022a). These features, which represent autonomy and flexibility of gig work, are offered to

¹² More details on the Australian gig economy are contained in Commonwealth Senate (2021).

workers as incentives to partner with gig companies. Workers are allowed to choose their schedules, how long they intend to work, and in what way they want to complete a task.

Nevertheless, both Uber and other gig companies manage orders through their apps. The apps assign orders through algorithms, called algorithmic management or algorithmic control. This is not an exclusive feature of all gig companies but, as we will see, it is one of the most controversial.

1.3.1 Autonomy: choosing the task and how to complete it

The first element is *autonomy* of the gig worker, which is one of the main reasons workers choose the gig economy over traditional 9 to 5 work (Açıkgöz & Latham 2022). Autonomy is the main element in the study, together with algorithmic control. As we will see in the following chapters, the discussions surrounding harm in the gig economy depend on the level of autonomy possessed by the gig worker. Autonomy means ‘determining the order, method, and the time to carry out a task generally after it is allocated to the worker or chosen’ (Kilhoffer et al. 2020, pp. 56-7, 220). Gig workers often call this self-management, or being their ‘own boss’, freeing them from the traditional working hours and management hierarchies to earn an income (Jamil & Noiseux 2018, p. 18). For example, in the food delivery sector, autonomy refers to the riders choosing working hours, routes, acceptance or rejection of orders and cancelling them if issues arise. Working hours are praised by gig workers who feel they do not have a boss that controls them and can easily administrate their work schedule (Goods, Veen & Barratt 2019, p. 512) as long as a task is allocated to them.

Tasks are allocated to workers depending on the type of platform or industry. Allocation can be by the platform, the client and the worker. Allocation *by platform* is present mostly in low-skilled work like food delivery services or transportation of people, where the task is assigned by the algorithm. Allocation *by client* allows the client to choose who will carry out a task. A client may give a task to a worker by looking at the worker’s profile. An example of allocation by client is Airtasker. Allocation *by worker* is the highest expression of autonomy. A client posts a task, and the worker selects the preferred one (Kilhoffer et al. 2020, p. 56). Among the three types of allocation, allocation by platform represents the strongest limitation to autonomy as the task is assigned by the algorithm, while it increases in the other two. However, workers perceive it differently depending on the design of the platform and the industry (Goods, Veen & Barratt 2019, p. 512; Kilhoffer et al. 2020, p. 57).

1.3.2 Flexibility: the freedom to choose when to work

Flexibility is one of the core principles of the Good Platform Work Charter (World Economic Forum 2020, p. 2). Flexibility indicates ‘the freedom of gig workers to choose when, where and how to work without incurring in any penalty’ (Uber 2018b, p. 11). While initial literature saw flexibility as a freedom from constraints, the idea of flexibility has recently become the *capacity to manage time* (Lehdonvirta 2018, p. 16).

The capacity to manage different working tasks and personal needs is called *temporal flexibility* (Churchill & Craig 2019, p. 746; McDonald et al. 2019, p. 22; Mosseri, Cooper & Foley 2020, p. 5). This is often a characteristic of women in the gig economy, who juggle between their gig work and looking after family (Churchill & Craig 2019, p. 757; Commonwealth Senate 2018, p. 28). It can also indicate the time spent working on a platform to earn a decent income and can include many hours in one day or multiple days or working particularly unsocial times as opposed to *spatial flexibility* as discretion over the place to work (Kilhoffer et al. 2020, p. 75; Wood et al. 2019, pp. 66-7). Hourly schedules differ depending on the kind of gig worker. Online workers may work until they earn a certain amount, while on-location working hours are determined by customer demand (Jamil & Noiseux 2018, p. 15; Kilhoffer et al. 2020, p. 76; Rideshare Drivers Association of Australia 2020, p. 3).

There is also another type of flexibility, which the thesis calls 'competitive flexibility'. Deliveroo, Uber and Uber Eats allow gig workers to perform work for different competitors at the same time to maximise earnings (The State of Victoria 2020, p. 110). This is generally referred to as 'multi-apping' (Barratt, Goods & Veen 2020a, p. 9; Unions NSW 2020, p. 31[99]; Veen et al. 2020).

Gig companies claim that these forms of flexibility are beneficial for different categories of people like mature aged workers who want to transition to retirement, students that have to balance study with work, those who are bound to work from home, or workers who cannot find a permanent job and social minorities like refugees (Australian Industry Group 2020, p. 2; De Stefano 2016, p. 5; Deliveroo Australia 2020a, p. 6; Ola Australia Pty Ltd 2020, p. 10; The State of Victoria 2020, p. 110; Uber 2018a, p. 7; Veen et al. 2020). It also allows gig companies through technology to recruit only workers for specific projects and satisfy the desire of young workers for more flexible working hours as opposed to pre-establish traditional 9 to 5 working times (Australian Industry Group 2016, pp. 5, 12, 7-8; Kilhoffer et al. 2020, p. 75; Uber 2018b, p. 10; Veen et al. 2020).

1.3.3 Algorithmic control: management of gig workforce

The final element of the gig economy is the algorithm. It is the technological feature that connects clients and workers through tasks assignment (Commonwealth Senate 2018, p. 73). Algorithms are the most controversial and debated element that affects the autonomy of gig workers. Such debates emerge from the vagueness of the functionalities of gig companies' algorithms, which the thesis aims to clarify by looking for a definition of algorithm and algorithmic control.

Gilbert & Thomas (2021, p. 9) define an algorithm as 'a process or a set of rules to be followed by calculations or other problem-solving calculations'. Algorithmic control is workforce management through algorithms that make fully autonomous decisions or define how human decisions should be made. A more technical definition is provided by McDonnell et al. (2021, p. 4003), defining algorithmic control as self-learning algorithms that manage labour decisions at the expense of human control, and a tool to restrict, recommend, rate and discipline workers' behaviour.

Not all gig companies use algorithms. The algorithms are designed differently for each platform. Nevertheless, they all have the same function: to collect different type and quantity of data and elaborate it to manage the workforce or control it, exercising a certain degree of surveillance on workers to optimise labour (Athreya 2020, p. 95; Kaine & Josserand 2019, p. 493; Kilhoffer et al. 2020, p. 262; Walker, Fleming & Berti 2021, p. 29).

Surveillance is exercised through three tools: the *app* used by the platform, the *reputational rating systems* (from here 'rating system' or 'ratings'), which are the 'currency of the gig economy' that attach metrics and data to workers, and thirdly through *gamification* of the apps that collect productivity data (McDonald et al. 2019, pp. 16-7), which means incorporating fun activities like games in a nongaming activity the in the gig economy are scores, rewards and competition pushed by gig companies to induce their workers to increase their productivity (Vasudevan & Chan 2022, pp. 867-8). However, this is particularly true for gig companies like Uber Eats or Deliveroo, which strongly rely on algorithms to manage orders. Other platforms like Airtasker do not have such an algorithmic design but surveillance is conducted by overseeing negotiations between a client and a worker (Wood et al. 2019, pp. 64-5).

1.4 Benefits and controversies in the gig economy

As in all workplaces, the gig economy attracts benefits and controversies which affect workers for gig companies. Although this thesis is mostly concerned with controversies, it first clarifies the benefits of the gig economy and recognises the significant potential for the future of modern workplaces and its beneficial role.

Digital platforms generate opportunities and markets through digital spaces and new economic prospects for people and businesses (Mills & Jan 2018, p. 15). Freelance gig workers, like professionals on Airtasker, are skilled workers creating a pool of clients or seeking new ones. Possibly, satisfied clients of a professional will want to maintain relationships with workers even after completing the task and prevent them from working with competitors (Australian Industry Group 2016, pp. 5, 13).

In food delivery services, the opportunities praised by riders are different. As mentioned above, a common trait of gig workers in Australia was their foreign origin with limited English knowledge and being bound to visa restrictions. These traits limit their options to work in Australia, with employers often requiring citizenship or permanent residency, Australian qualifications, and proven work experience. These requirements are not necessary to work for gig companies like Uber Eats or

Deliveroo, which have low entry levels and (apparently) do not strictly impose work limitations.¹³ For these migrants, the gig economy is then a 'good labour market fit' compared to traditional work like hospitality jobs, which is not only restrictive but also considered more exploitative (Churchill & Craig 2019, p. 747; Goods, Veen & Barratt 2019, pp. 516-7). In addition, they enjoy the flexibility to balance their schedule between work and other commitments, like social activities and education (The State of Victoria 2020, p. 49).

At a community level, the gig company Ola mentioned Deloitte's support for ridesharing that reduces parking and environmental disasters through personal car use, saving 800,000 hours of pollution emissions and decreasing incidents caused by drink-driving. Ridesharing also increases patronage in restaurants, clubs, and festivals (Ola Australia Pty Ltd 2020, p. 16). Further community activities include Uber's activism, such as supporting areas of Queensland and New South Wales affected by floods in 2022 (Uber 2022d). Uber broadly calls this global citizenship to indicate its commitment to better and safer cities and environments (Uber 2022b).

More importantly, the gig economy had global importance during the COVID-19 pandemic. The pandemic was a push factor towards the digitalisation of the Australian economy. For businesses, gig work was necessary to remain in the market, particularly in the hospitality industry when restaurants, bars and cafes, when they were unable to offer dining services, and partnered with Uber Eats or Deliveroo to keep their activities open. Conversely, in support of restaurants, Uber Eats and Deliveroo waived or reduced activation fees for new restaurants partnering with them. Uber and Deliveroo also provided limited financial support to workers diagnosed with COVID-19 and forced into quarantine (The State of Victoria 2020, p. 85).

The main controversy in the gig economy is the classification of gig workers as independent contractors¹⁴ which forces them to fully carry the burden of all costs related to their work (e.g., maintenance of bikes or cars for ridesharing or food delivery or working tools for home repairs), and deny them any labour protections (Barratt, Goods & Veen 2020a, p. 6). Workers find themselves in poorly regulated, insecure, and non-standard work in a 'job centrifugation' dynamic towards this 'peripheral' market of digital work away from its core, the employment relationship, which modern states protect with national laws (Jamil & Noiseux 2018, p. 7). The 'job centrifugation' dynamic is the core issue in the gig economy because it pushes gig workers in a context of precarious work. The

¹³ There is some uncertainty about the application of visa restrictions on gig workers. Generally, working holiday-makers cannot work for the same employer for more than six months, while international students cannot work more than 20 hours a week or 40 hours a fortnight. For 'traditional' employers in Australia, these are disincentives, as they seek a more stable workforce, but for gig companies this seems not to apply as strictly.

¹⁴ Another argument is the risk of job displacement due to the digitalisation of workplaces (Centre for Future Work 2020, p. 6; Peetz 2020, p. 23; The McKell Institute 2020, p. 18), but this argument is disproved by different bodies, stating that the gig economy does not have the capacity to challenge traditional employment (Commonwealth Senate 2018, pp. 36, 9). This does not indicate that the influence of technology and the gig economy is underestimated or irrelevant. Instead, it carries a series of challenges beyond unemployment (The McKell Institute 2020, p. 18).

debate on the classification of gig workers is ongoing among scholars and is developed in Chapter Two as part of the literature review.

Chapter conclusion

Chapter One described the main elements of the Australian gig economy relevant to the thesis as its main scope. It explained how the gig economy suffers from a definitional vagueness. However, in Australia, the definitions provided by Stewart and Stanford and Unions NSW unpacked the characteristic of the gig economy and gig work. It also provided the context of the thesis with reference to Australia. This was done in four major steps: identification of the major gig sectors, the revenue of the gig economy, its urbanised character concentrated in New South Wales and the type of workers, which focused more on temporary migrants and women as major beneficiaries of gig work but also, as we will see, two of the major categories that suffer harm.

After defining the gig economy and the context, the chapter described the three main elements of the gig economy: autonomy (the capacity or skill of the gig worker to manage the task), flexibility (the manner of deciding the order of completion of a series of tasks) and algorithmic control (the technological tool that assigns tasks to gig workers in gig companies that rely on algorithms to manage their workforce).

Finally, the chapter concluded with an overview of the benefits and controversies in the gig economy, introducing the issue of classification of gig workers as independent contractors and forming the basis for the literature review for this thesis

CHAPTER TWO: LITERATURE REVIEW ON HARM IN THE AUSTRALIAN GIG ECONOMY

Chapter introduction

Chapter One focused on the main definitions and characteristics of the gig economy in Australia and those relevant to this thesis. It concluded its overview by presenting the controversies in the gig economy as part of a process of 'job centrifugation' as the core issue and referring to the concepts of autonomy and algorithmic control as antithetical features: while autonomy is an expression of worker independence, algorithmic control is used by gig companies to exercise influence over workers while claiming they are independent contractors.

Chapter Two continues this analysis as part of this thesis's literature review, which focuses on harms sustained by gig workers while completing their tasks. It begins by exploring the issue of misclassification of gig workers as independent contractors by presenting the main laws and cases in Australia that regulate labour relations and the employee and independent contractor dichotomy. This dichotomy is developed in the chapter with reference to the levels of autonomy and control gig workers and gig companies have and how gig companies possess various forms of control to manage gig workers and their effects. Such effects may cause harms to gig workers, who carry all burdens as independent contractors. The chapter lists a series of harm sustained by gig workers, giving more relevance to 'wage theft' as the main harm Australia is determined to criminalise and what this means for vulnerable groups.

The chapter then reviews the laws and cases in Australia with specific reference to those that involved gig workers and the limits and inability of these to tackle the issue of misclassification. This chapter provides a detailed description of the recent case *Deliveroo v Franco* (2022).

Finally, this chapter explains the gaps in the literature and poses two RQs that the thesis aims to answer.

2.1 Control in the gig economy: classification of gig workers as independent contractors and algorithmic control

In Chapter One, the main phenomenon that characterises current workplaces, including the gig economy, is the phenomenon of 'job centrifugation' that pushes workers towards an unregulated scheme, intended as any legal work that does not fall under a protective legal scheme, and insecure work instead of centred protective employment.

The dichotomy of legally protected and non-protected work is the essence of Australia's labour laws, which divide its workers into employees and independent contractors. The main sources of employment regulation are legislation (federal, state and territory laws), industrial instruments (any legal document that indicates employee entitlements), and the common law from judicial cases. Relevant legislation includes the *Fair Work Act 2009* (Cth), state and federal work health and safety laws, state and federal antidiscrimination laws, and the *Privacy Act 1988* (Cth). Independent contractors are regulated by the *Independent Contractors Act 2006* (Cth).

The Fair Work Ombudsman (FWO), Australia's watchdog in labour matters, has recently clarified the differences between the two categories based on High Court decisions in the cases of *Construction, Forestry, Maritime, Mining and Energy Union v Personnel Contracting Pty Ltd* [2022] HCA 1 and *ZG Operations Australia Pty Ltd v Jamsek* [2022] HCA 2. According to the FWO, independent contractors provide services to another person or business that does not employ them. Usually, they can negotiate fees and working arrangements and work for multiple clients simultaneously. They differ from employees depending on indicators such as the level of control over work, financial responsibility and risk, tool supply, the delegation of work, hours of work or any ongoing work. Such determination is not absolute. For example, a worker may possess an Australian Business Number (ABN) and still be an employee or perform the same type of work as an employee and still be a contractor. What matters are the individual circumstances (Fair Work Ombudsman 2022b).

In most countries, including Australia, labour rights such as minimum wages, compensation, insurance, and leave are a prerogative of employees but not independent contractors (Cherry & Aloisi 2017, p. 642). This division is the main issue of the gig economy. Scholars question whether gig workers are truly independent contractors or employees who are unfairly misclassified in a process of *fissurisation* of modern workplaces that reduces workplace safeguards (Aloisi & De Stefano 2020, pp. 51-2; Barratt, Goods & Veen 2020a, p. 2; Weil 2014, p. 10). The issue of independence of gig workers is found in the elements of the gig economy. On the one hand, autonomy and flexibility are expressions of their independence: gig workers have the freedom to manage their work on their own terms. Conversely, tasks are either assigned by algorithms or workers' access to platform work is allowed by the algorithm through performance evaluation and exercising control over gig workers instead of independence. Hence, autonomy and flexibility are in contrast with algorithmic control. Although equally important, this thesis gives more relevance to gig workers' autonomy and how this is impacted by algorithmic control present in the gig economy.

In allocation *by platform*, autonomy is limited by *information asymmetry* deliberately caused by the platform. Food delivery riders, for example for Uber Eats, only know the location of the restaurant where the order is being prepared but not the delivery location. Hence, they do not have the autonomy to accept an order based on its worth. If the food must be delivered in a dangerous suburb,

riders will not be aware until they pick up the order. However, even if they had this information, riders (and drivers) may face penalties like account suspensions decided by the algorithm (Kilhoffer et al. 2020, p. 55).

Allocation *by client* sees a less prominent role for the algorithm. Each worker is chosen by a client based on the reviews and feedback present on the worker's profile accessible on the platform. When task allocation is decided by a client, gig workers are then forced to bid against each other for the assignment of the task. They rely on complete and detailed online profiles that are verified with proper ID and links to social media to develop a sense of trust with possible clients. Platforms like Airtasker exercise a different level of control over task allocation and can guide clients' choices. Not all platforms impose penalties if tasks are not accepted, but workers may feel pressure to accept all work (Kilhoffer et al. 2020, pp. 55-6).

Allocation *by worker* is the highest expression of autonomy. Workers choose the preferred task to complete, work at their own pace without being strictly directed, or complete it after negotiations with a client and even decide the order of completion of each task (Wood et al. 2019, pp. 64-5). However, work is often poorly paid, and insecure income may prompt gig workers to accept all gigs, including those physically or mentally demanding, at the expense of personal autonomy (Kilhoffer et al. 2020, p. 56).

Hence, none of the types of gig work by allocation is fully autonomous work. Autonomy becomes a marginal feature of the gig economy (Wu et al. 2019, p. 590), which succumbs to other forms of control.

2.2 Forms of control in the gig economy

The last phrase is key to the discussion: if autonomy is marginal, the issue surrounding the gig economy is the lack of worker autonomy in favour of control. This should not be a surprise. Gig companies are businesses that must make profits through their workers. This thesis contends that gig companies make profits through forms of control while praising the autonomy of gig workers.

Control over workers depends on the structure and the models of the gig company and the data needed to manage the workforce. There are different mechanisms to control gig workers: (1) *normative* control that pushes for customer interaction and emotional labour, (2) *bureaucratic* control to regulate the worker's behaviour, and (3) *technical* and *computer* control to influence task completion and performance management (Veen, Barratt & Goods 2019, pp. 8-9).

It is important to note that these forms of control, although applied by the literature in the context of the gig economy, are not exclusive to it but can apply to non-peripheral work. However, the stance of the thesis is not to frame the gig economy as a unique form of work that determines these types of control, but how control in these various forms, which are drawn from the literature, in this typology of work can create harm.

2.2.1 Normative and bureaucratic control: community guidelines, contracts and socio-economic fears

Normative control pressures workers to commit to client relations rather than the platform and encourages workers to become entrepreneurs through norms that grant apparent autonomy. Bureaucratic control comes from these norms to create a sense of obedience in gig workers who then are required to adapt their behaviours according to the will of the gig company.

Gig companies adopt two forms of normative control. The first is the implementation of *Community Guidelines* which are rules that each platform lists as standards for the correct use of a service, stating what is legal or illegal to do on the platform and which actions can cause a ban or deactivation of a worker account (Connecting Safely Online 2022).¹⁵ Generally, Community Guidelines list the expectations and behaviours that workers should follow when completing a task (Rideshare Drivers Association of Australia 2020, p. 12).

Uber, for example, has a comprehensive list of rules. The scope of Uber's Guidelines in Australia is to create a safe environment for all users by requesting all members that sign up with the platform to 'treat everyone with respect', 'help keep one another safe' and 'follow the law' (Uber 2022g).

Treating everyone with respect means that Uber condemns unwanted physical contact during or after the trip, sexual assault, threats and rude behaviours, discrimination, or property damages (Uber 2022g). To keep everyone safe in the community, Uber prohibits account sharing, prohibits the use of the service for people under 18 years of age, requests updated information about vehicles and their suitability to drive and deliver, including the presence of working seatbelts and helmets, and allows the use of dashcams for safety purposes. However, Uber members must always be alert, maintain their vehicles, share the road and prevent dog bites. Interestingly, Uber will exercise full discretion in cases of 'public emergencies' like events of natural disasters, public health emergencies and public crisis situations and will block accounts if necessary (Uber 2022g).

In Uber Eats, Uber added additional guidelines about handling food and non-food and what riders are expected to do.¹⁶ In particular, delivery workers should always exercise care and ensure food is well kept during delivery. In the case of alcohol delivery, it is strictly regulated by-laws (Uber 2022g).

¹⁵ Community Guidelines are not a prerogative of gig companies but are present in other online services and social media like YouTube, Facebook, Instagram, WhatsApp, Twitter, TikTok or Snapchat.

¹⁶ There are also specific rules for merchants to follow.

Gig workers must abide by all laws and regulations concerning road transport and delivery, car regulations when travelling with infants or service animals, and assisting devices such as wheelchairs or walking frames. All workers are prohibited from working while intoxicated by alcohol or drugs, they cannot possess weapons and they cannot do street hails and off-platform pickups for cash. In terms of intellectual property laws, Uber's trademark cannot be used without permission (Uber 2022g).

A particular type of legal violation is fraud. according to Uber, fraud includes:

'intentionally falsifying information or a personal identity, deliberately increasing the time or distance of a trip or delivery for fraudulent purposes or otherwise; accepting trip, order or delivery requests without the intention to complete, including provoking riders, merchants or Uber Eats users to cancel for fraudulent purposes; creating dummy accounts for fraudulent purposes; claiming fraudulent fees or charges, like false cleaning fees; intentionally requesting, accepting or completing fraudulent or falsified trips or deliveries; claiming to complete a delivery without ever picking up the delivery item; picking up a delivery item but retaining all or a portion of the item, and not delivering the entire order; actions intended to disrupt or manipulate the normal functioning of the Uber Marketplace Platform, including manipulating the settings on a phone to prevent the proper functioning of the platform and the GPS system; abusing promotions and/or not using them for their intended purpose; disputing charges for fraudulent or illegitimate reasons; creating improper duplicate accounts; or falsifying documents, records or other data for fraudulent purposes' (Uber 2022g).

The guidelines are quite strict and can be enforced by any platform under the agreement between the gig worker and the company. Such enforcement includes their full discretion to ban the account for accessing Uber's online platform (Deliveroo Australia 2022b; Uber 2022g). However, the power gig companies possess influences the gig workers' behaviours who must abide to the rules in the Community Guidelines and adapt their mode of working to ensure their account is not banned from the platform. This is a manifestation of the bureaucratic control of gig companies over gig workers.

Although these forms of control suggest some type of employment, the agreement between the gig worker and Uber is carefully drafted as a contract for services. Uber clearly states the relationship between the gig worker and the platform is a contractual relationship and that Uber provides its 'Uber Services' to allow users to use the platform to transport or deliver services and facilitating payment for those services. However, Uber reminds the user that Uber does not provide any transportation or delivery service, which is carried out by contractors who are not employed by Uber (Uber 2022f).

The second form of normative control is *socio-economic control*, which refers particularly to Australia's unemployment rates during the COVID-19 pandemic. Currently, the unemployment rate is particularly low, with a rate of 3.4% in November 2022. However, this fear was significant during the pandemic when many businesses closed, and the unemployment rate peaked at 7.5% in July 2020 (Australian Bureau of Statistics 2022). Fearing a lack of work outside the gig economy, workers remained in the gig company and fully relied on its earnings and price surges as the sole source of income (Transport Workers Union 2020, p. 17), allowing gig companies to exercise their control

through their guidelines and their contracts. Such fear then drove their way of working, again accepting any condition imposed by the gig company and altering any behaviour as part of the bureaucratic control to have work and an income guaranteed.

2.2.2 Technical, computer and bureaucratic control: the algorithmic control

Gig companies exercise control through the algorithms: *technical or computer control* and *bureaucratic control*. Like above, bureaucratic control is not a standalone form of control but, in this case, is tied with the technological tools adopted by the gig companies to manage their workforce. In particular, these forms of control concern the data acquired by the algorithm and how it influences gig workers' choices when completing a task. Upon completing a task, the platform collects data from customers, who vote and express how the task was performed (Kaine & Josserand 2019, p. 493; Wood 2019a, pp. 112-3). In its Community Guidelines, Uber only mentions the importance of the data collected through its rating system to improve the quality and safety of its environment. Uber explains that each gig worker must maintain a minimum average rating, under which a gig worker may lose access to the platform (Uber 2022g).

Gig companies evaluate data differently. Uber Eats, for example, adopts three performance criteria: *acceptance ratings* (based on the proportion between orders accepted and declined), *cancellations ratings* (those cancelled after being accepted) and *customer satisfaction ratings* (ratings given by clients once a delivery is completed) (Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9). The metrics used by Deliveroo differ from those of Uber Eats. Deliveroo claims that performance is managed by assessing time to accept orders, travel time to restaurants and customers, orders not assigned and cancellation of shifts. The algorithm will codify the data and notify the rider if the platform's standards are not met. Deliveroo's algorithm does not consider customer ratings but only the efficiency of the delivery or the 'dispatch algorithm' (Deliveroo Australia 2020a, p. 7; Veen, Barratt & Goods 2019, p. 10). Data collection can also depend on workers' behaviour, like movements through GPS location, speed, aggregated income or breaks, or any other data that comes from the exercise of 'bureaucratic control' that regulates workers' behaviour (Kilhoffer et al. 2020, p. 262; Veen, Barratt & Goods 2019, pp. 8-9). Deliveroo states that its algorithm also collects data on the manner orders are completed in case of traffic or weather hazards (The State of Victoria 2020, p. 69).

However, the algorithms not only acquire data from gig workers' performance but also evaluate it and influence gig workers' manner of working. Such influence results from what Muldoon & Raekstad (2022) call 'algorithmic domination'. Based on the idea of domination as being subject to uncontrolled power (Muldoon & Raekstad 2022, p. 5), they define 'algorithmic domination' as the individual directly subject to the power of the algorithm which imposes instructions without a human intermediate (Muldoon & Raekstad 2022, p. 7). According to Muldoon & Raekstad (2022, p. 9), 'algorithmic domination' manifests through the allocation of tasks, information asymmetry and arbitrarily awarding

or punishing gig workers. Similarly, for Weber, Remus & Pregonzer (2022), there are three dimensions of algorithmic control: allocation of tasks, formalisation or ‘codification’ of data and adaptiveness to a desired behaviour. These elements all explain the role of the algorithm in gig companies that make significant use of it, like Uber or Uber Eats.

Allocation refers mostly to the algorithmic allocation of tasks and bonuses. The *allocation of task* is present in transport and food delivery services, but how it works is unknown. Uber clarified its own algorithm and stated that it had certain principles to increase access, reliability of deliveries, choices and needs and prices, like assigning tasks to drivers heading in the same direction of the order that has been requested (The State of Victoria 2020, pp. 67-8). *Allocation of bonuses* is one of the strategies for companies to control the workforce and retain sufficient labour but at a low cost (Wu et al. 2019, p. 591). Delivery and transport service gig companies that need workers offer income bonuses or ‘nudges’ as work incentives. These can include notifications of areas where there is greater demand or charts for drivers to show their earnings (Kilhoffer et al. 2020, p. 262). This is a common strategy in companies like Uber, called ‘gamification-from-above’ (Woodcock and Johnson 2018, cited in Veen, Barratt & Goods 2019, p. 8), to suggest remuneration and boosts from the algorithms as an enjoyable feature of gig work (Vasudevan & Chan 2022, pp. 867-8; Veen, Barratt & Goods 2019, p. 13; Veen et al. 2020).

The way bonuses are effectively assigned to drivers and riders is unknown. Gig workers understand that high scores and good achievements are vital to receiving bonuses but cannot explain under which criteria they are awarded, so they accept as many tasks as possible, hoping to receive a bonus income (Veen, Barratt & Goods 2019, pp. 11-2). According to Uber, bonuses in the form of price surges are embedded in the algorithm that will recommend them only for areas where the demand is high. Once the demand decreases, the rates reduce (The State of Victoria 2020, p. 69).¹⁷

Uber, in its guidelines, states that its workers are free to reject orders and simply need to go offline. If they constantly reject them, they will temporarily be logged out of the system without any penalty (Uber 2022g). In reality, the platform withholds certain information on restaurant or passenger address, distance and order details and sets a time penalty (Weber, Remus & Pregonzer 2022, p. 11). Through this *information asymmetry*, the level of control is centralised towards the platform, which has true decisional power. To be decentralised, gig workers must be able to self-schedule all jobs depending on their circumstances and freely reject tasks. In reality, gig workers are bound to

¹⁷ In China, Uber evaluates past customer ratings as a precondition for peak hour bonuses. To maintain high ratings, one of the strategies of the drivers is to work on the personal skills to entertain customers, even at their own expenses, like providing water, Wi-Fi, chargers, being sociable with them, air conditioner, music. Some even explain the consequences of harsh ratings, working on their emotional labour. Always in Uber China, drivers’ scores are based on the last 500 rides, so they would work extra to increase their ratings and eliminate the low scored ones to obtain more and better calls (Wu et al. 2019, pp. 587-8).

calculate whether an order is worth accepting, how much it will cost them or if that order is profitable (Weber, Remus & Pregoner 2022, p. 11).

The final characteristic of 'algorithmic domination' is *punishment towards low-performing workers* in the form of account deactivation (temporarily or permanently) based on data collected by the algorithm. Criteria used to deactivate workers' accounts are very cryptic (Goods, Veen & Barratt 2019, pp. 505-6; International Transport Workers' Federation 2020, pp. 16-7; The State of Victoria 2020, pp. 68, 111). There are certain criteria used to deactivate accounts. The first criterion was 'order acceptance'. Delivery companies deny harsh consequences for not accepting an order. For example, Deliveroo may prevent priority access without any other consequences, while Uber may suspend accounts but only after multiple rejections (The State of Victoria 2020, p. 112). For Uber, the driver must keep an 85% acceptance rate or higher not to be locked out of the app. The driver has 10 to 15 seconds to accept or reject the task, but Uber has an automated acceptance function (Goods, Veen & Barratt 2019, p. 513).

The second criterion is 'rating decrease'. After receiving a service, customers evaluate the gig worker's performance and can attribute either a positive or negative score based on their experience. Workers obtain different levels depending on the feedback they receive on a scale from one to five stars. Those who are at the highest levels will receive more advantages at work. Because ratings are not transferrable to other platforms, they are workers' capital and depend only on that specific platform (Wu et al. 2019, p. 587). However, the truthfulness of their feedback is questionable. For example, in food delivery services, the bad performance of the gig worker may depend on restaurants that prepare cold food or provide the wrong delivery address (Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 10). In these cases, customers blame riders for these delivery mistakes and give poor rating scores. It reduces their overall rating and possibly affects their future access to the platform (Goods, Veen & Barratt 2019, pp. 513-4).

In some cases, Uber may not notify complaints or negative feedback, resulting in immediate bans (Transport Workers Union 2020, p. 57). Other platforms may decrease the ratings automatically, leaving the drivers without any avenue to seek a revision of the score (Goods, Veen & Barratt 2019, p. 513).¹⁸ Some platforms allow workers to provide feedback to customers. However, workers feel this does not improve their conditions. Especially in platforms where autonomy is extremely limited, they cannot choose the customer, disregard a review or freely cancel tasks, which forces them to accept any feedback that influences their account and income (Athreya 2020, pp. 93-4).

¹⁸ In the US, workers for the gig company TaskRabbit, a platform for people seeking workers for a range of tasks, explained how they were controlled and punished by the platform for not being responsive. TaskRabbit would first issue warnings, then require them to complete online quizzes and finally, if the workers was not accepting jobs, deactivated for violation of Community Guidelines (Ravenelle 2019, pp. 275-6).

Both algorithmic allocation and deactivation remain ambiguous. A lack of transparency through information asymmetry is formalised or ‘codified’ as part of the rules of gig companies. Without a clear understanding of these elements, the gig workers can only share their experiences (called ‘collective sensemaking’) to develop some theory over the functionality of the algorithm. They are forced to believe that all decisions are relevant to the algorithm and attribute it omnipotence, and that requires them to anticipate how to behave and avoid any negative consequence (‘malevolent sensemaking’) and limiting their choices, fearing they are constantly under scrutiny (Weber, Remus & Pregoner 2022, pp. 12-3). This creates a fear of deactivation for poor performance, knowing that the algorithm will detect noncompliant behaviour and sanction them until they comply or *adapt* to the rules of the gig company (Weber, Remus & Pregoner 2022, pp. 13-4), which exercises bureaucratic control. Adaptiveness does create concerns about gig workers’ rights who are possibly unaware of disciplinary processes (Transport Workers Union 2020, p. 55; Veen et al. 2020). However, even if they knew avenues to forward complaints, gig workers complain against other proximate human beings like co-workers and customers (Walker, Fleming & Berti 2021, p. 38).¹⁹

2.3 Harm in the gig economy: industries, types and instances affecting gig workers

Previously, this thesis questioned the relevance of autonomy and algorithmic control in the gig economy, explaining how the role of the former is quite limited even if workers are misclassified as independent contractors. However, the thesis takes a different stance by moving away from the issue of misclassification, and so labour relations, and instead evaluates the role of different forms of control that manage tasks and worker behaviour and how they can trigger significant and harmful consequences.

Table 0.1 presents some of the most common instances of harm from the literature and media reports.²⁰ It includes a selection of 32 harmful events caused directly or indirectly by the gig company, the industry in which they occurred, the type of harm sustained by the gig worker , , and the relevant scholarship or media article that reports the given event. They have been conventionally called physicals harms, such as injuries and death during the completion of the task, financial harms, which includes any income loss sustained by the gig worker, and psychological harms as depression, distress, anxiety or fear from the job insecurity in the gig economy, mirroring the types of harm listed in Chapter Three.

¹⁹ In Uber China, drivers are extremely reluctant to complain against clients, believing that it may result in a lifetime ban (Wu et al. 2019, p. 588).

²⁰ Most of these are events that occurred in Australia, but as a matter of completion the table includes some international cases from the US, India, Canada and Europe.

The events were included in the table if the type of harm was either a material outcome of an event or an effect of a harm. For example, in instance n1 financial harm is a material outcome of the poor earnings of the gig economy. In instance n2, instead, seeking financial help from others is an effect of the low earnings, hence the financial harm.

Table 2.1: Common instances of harm shown in literature and media reports

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
1	Food delivery	Riders can be unable to support themselves financially with the earnings from the gig economy.	Financial	Veen et al. (2020)
2	Food delivery	Riders can be forced to seek financial help from others due to the poor earnings.	Financial	Barratt, Goods & Veen (2020a, p. 12); Veen et al. (2020)
3	Food delivery	Riders can eat food from cancelled orders if their income is insufficient to purchase food.	Financial harm Physical harm	Barratt, Goods & Veen (2020a, p. 12); Veen et al. (2020)

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
4	Food delivery	Riders can eat food from charities if their income is insufficient to purchase food.	Financial harm Physical harm	Barratt, Goods & Veen (2020a, p. 12); Veen et al. (2020)
5	Food delivery	Riders can steal food from customers if their income is insufficient to purchase food.	Financial harm Physical harm	Barratt, Goods & Veen (2020a, p. 12); Veen et al. (2020)

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
6	Food delivery	A sudden algorithmic change shifted the majority of food delivery orders to motorised delivery riders (with cars and scooters) at the expense of bike riders. A rider affected by this change saw a reduction of around 40% of its income due to fewer orders and increased work hours to make a sufficient earning. This overall caused distress for not earning the same amount.	Financial harm Physical harm Psychological harm	Chung (2020)
This scenario is quite unique and involves a particular incident with the algorithm as they main cause of harm. The material outcomes of the changes are financial, as the workers is allocated less jobs and is then earning less, but also physical since he has to work longer hours. Psychological harm is instead the fear that the limited earnings will not be sufficient to support his studies in Australia.				
7	Food delivery	Weather and traffic hazards can cause motor vehicle accidents to workers.	Physical harm	Goods, Veen & Barratt (2019, p. 505)
Physical harm is the material outcome of motor vehicle accidents.				

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
8	Food delivery Ridesharing Freight services	Excessive fatigue or other driver's road mistakes caused motor vehicle accidents, including vehicle destruction, physical impairment, or death.	Physical harm	Gildfind (2019, p. 21); Transport Workers Union (2020, pp. 37-8)
Physical harm is the material outcome of motor vehicle accidents.				
9	Food delivery	In case of injuries from accidents, riders have no access to financial compensation for missed work hours.	Financial harm	Goods, Veen & Barratt (2019, pp. 512, 8)
While financial harm is caused by the inability to work in cases of accidents which makes physical harm the material outcome, in this particular instance the material outcome to mention is financial because the worker as an independent contractor does not have access to compensation schemes.				
10	Food delivery	A rider was assaulted while completing a delivery by a burglar, and his car was stolen. While uninjured, he claimed he was significantly distressed by the event.	Psychological harm	Barnett (2021)
Psychological harm is the material outcome of a personal assault that did not result in injuries.				

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
11	Ridesharing	Drivers may be notified of a transportation task, only to discover it is a very short ride that ends with little to no earnings or even a financial loss.	Financial harm	Jamil & Noiseux (2018, p. 19); The State of Victoria (2020, p. 68)
Financial harm is the material outcome of little to no earnings from gig work.				
12	Ridesharing	Vehicle standards are imposed on drivers, forcing them to upgrade their vehicles multiple times at their own expense.	Financial harm	Jamil & Noiseux (2018, pp. 18-9)
Financial harm is the material outcome of forced upgrades of personal equipment at own expenses.				
13	Ridesharing	Intensive work caused an accident and the death of a passenger.	Physical harm (and of others)	Veen et al. (2020)
Physical harm is the material outcome of motor vehicle accidents, including others.				
14	Food delivery Ridesharing	Unpredictable working hours caused some gig workers to feel mentally distressed.	Psychological harm	Kilhoffer et al. (2020, p. 76).
Psychological harm is the material outcome of uncertain working hours.				

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
15	Multiple	Gig work that requires to be physically demanding can cause back pain to workers.	Physical harm	International Transport Workers' Federation (2020, p. 7)
Physical harm is the material outcome of physically demanding work.				
16	Food delivery Ridesharing	Gig workers can be subject to abuse, assault or robbery.	Physical harm	Caldicott (2021)
Physical harm is the material outcome of abuse, assault or robbery.				
17	Freight services	The absence of sanitation facilities force gig workers to pay or publicly urinate and defecate.	Physical harm	International Transport Workers' Federation (2020, p. 8)
Physical harm is the material outcome of absence of sanitation facilities.				
18	Freight services	Payment is in lump sums, but there are no penalty rates, leave or any other worker entitlements awarded to freight workers.	Financial harm	Transport Workers Union (2020, pp. 25-6)
Financial harm is the material outcome of insufficient payments of working entitlements.				
19	Freight services	Poor safety management can cause serious accidents.	Physical harm	Transport Workers Union (2020, pp. 26-7)

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
	Physical harm is the material outcome of motor vehicle accidents.			
20	Freight services	Accidents in freight deliveries can be caused by overloaded vehicles, poor vision obstructed by the load, heavy deliveries that would require multiple workers but are instead carried out by only one worker, with dangerous driving on the roads to speed up the delivery, or by a worker with very little training.	Physical harm	Transport Workers Union (2020, pp. 26-7)
	Physical harm is the material outcome of motor vehicle accidents caused by lack of training.			
21	Freight services	Accidents in freight deliveries can be caused by hacked vehicles that carry hazardous material (which can also cause environmental disasters).	Physical harm	International Transport Workers' Federation (2020, p. 17)
	Physical harm is the material outcome of motor vehicle accidents.			
22	Caring services	Carers are paid poor wages, lack relevant training and face health and safety issues.	Financial harm Physical harm	United Workers Union (2020, p. 53)

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
	In caring services, both financial and physical harms are material outcomes and reflect the instances above: financial harm is the material outcome of underpayment from gig work, while physical harm is the material outcome of poor safety measures.			
23	Professional services	Gig workers spend 20 hours per day checking for online tasks and eat meals in front of the computer, with very little sleep.	Physical harm	Lehdonvirta (2018, p. 21)
	Physical harm is the material outcome of lack of sleep.			
24	Multiple	Gig workers can experience stress, anxiety and depression, a sense of helplessness and powerlessness and very little control over their problems and lives.	Psychological harm	Glavin, Bierman & Schieman (2019); International Transport Workers' Federation (2020, p. 7)
	Psychological harm is the material outcome of a range of personal issues that gig workers experience.			
25	Food delivery	Riders can experience loneliness and competition against other workers, which is detrimental to their social cohesion and stability.	Psychological harm	MacDonald & Giazitzoglu (2019, p. 734)
	Psychological harm is the material outcome of isolation and lack of mutual support among gig workers.			

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
26	Food delivery	Riders can experience distress due to precariousness from poor and irregular wages.	Financial harm Psychological harm	MacDonald & Giazitzoglu (2019, p. 734)
	In this case the material outcome is financial from underpayment. However, the event triggers psychological harm in the form of personal distress.			
27	Food delivery	Riders can experience distress from the need to maximise income and drive down their labour prices to compete in the market.	Financial harm Psychological harm	MacDonald & Giazitzoglu (2019, p. 734)
	In this case the material outcome is financial from underpayment and market competition. However, the event triggers psychological harm in the form of personal distress.			
28	Food delivery	Riders can experience distress due to very little personal contact.	Psychological harm	Walker, Fleming & Berti (2021, p. 34)
	Psychological harm is the material outcome of isolation.			
29	Food delivery	Riders can experience emotional oscillation from poor communication with the platform, career uncertainty and fear of losing their job.	Psychological harm	Kaine & Josserand (2019, p. 489)

Instance of Harm Number (N)	Industry	Harmful event	Type of harm(s)	Author(s)
	Psychological harm is the material outcome of isolation and lack of support from the gig company.			
30	Food delivery Ridesharing	Gig workers can experience distress from negative ratings when they amount to bullying or when threatened with bad ratings by passengers.	Psychological harm	Rideshare Drivers Association of Australia (2020, p. 8)
	Psychological harm is the material outcome of personal threats and negative ratings.			
31	Multiple	Gig workers can experience distress from discrimination caused by customers during the recruitment process.	Psychological harm	Grimshaw (2020, p. 489)
	Psychological harm is the material outcome of racial discrimination.			
32	Multiple	Gig workers can experience distress from discrimination and be paid less if they are non-Western workers ('geographical discrimination').	Financial harm Psychological harm	Graham, Hjorth & Lehdonvirta (2017, pp. 137-8)
	In this case, gig workers face two different material outcomes from discrimination which may coexist. In one case, gig workers can face psychological harm as the material outcome of discrimination, while in the other case gig workers may suffer financial harm from being non-western labourers.			

Table 0.1 shows how the literature and the cases selected seem to give a stronger predominance of harm in food delivery, ridesharing and freight services and confirms surveys conducted by the

TWU and by the McKell Institute Queensland. The TWU reported 969 cases of harassment and assault from gig drivers, with 37% receiving threats, 10% physical assaults, and 6% sexual assaults. Further, they experienced racism, damages to their property, lack of gig company support and unfair deactivation (Transport Workers Union 2019c). The most recent report on cases of harm was published by The McKell Institute Queensland framing an even more complex picture, this time about food delivery riders. Working long hours to earn sufficiently (74%) and low pay (76%) were the biggest concerns, with many claiming they suffered a loss of income due to injury (62%). Concerning was also the level of stress, anxiety and mental health issues (52%) and the cases of sexual harassment amounted to 14%, of which the majority of these were women (26%) compared to men (12%) (The McKell Institute Queensland 2023, pp. 21-2).

While part of the events presented above record single instances, others include a multitude of harms from one single event. Among the single events, poor earnings in the gig economy, the absence of workplace entitlements, and the lack of access to monetary compensation for injuries are the most common forms of financial harm (Transport Workers Union 2020, pp. 26-7; Veen et al. 2020). These are followed by physical harm, such as injuries to riders from traffic and weather hazards (Goods, Veen & Barratt 2019, p. 505). Finally, gig workers can be psychologically harmed by negative feedback or very little social contact with other people during working hours (Rideshare Drivers Association of Australia 2020, p. 8; Walker, Fleming & Berti 2021, p. 34).

Regarding the other cases, the most emblematic instance of multiple harms from one instance caused by the algorithm is n6. In 2020, during the initial stages of the pandemic in Australia, an international student in Adelaide working as a rider for Uber Eats claimed he was earning AU\$210–250 per shift, with an average of 30 trips. Suddenly he noticed that the algorithm was notifying more order to workers on motorbikes or cars. Consequently, he lost orders because he was delivering with a bike instead. His trips were reduced from 30 to 15–17 per shift, with a total income of around AU\$140 per day. Uber Eats claimed that on its side everything was reasonable, stating that it depended on customer requests and no manual control could manipulate the task allocation. In his interview, the rider reported that he needed to work harder and longer hours for less money. Such income loss caused the rider to suffer significant mental distress, fearing he could not support himself financially (Chung 2020). Although carefully followed by the TWU, the case has not received a favourable outcome at the time of writing.

The algorithmic change caused three types of harm: a loss of income from the allocation of orders to motorised riders (*financial harm*), longer working hours and increased fatigue (*physical harm*) and distress from the loss of income (*psychological harm*). In all harmful circumstances, the loss of autonomy is clear. The rider strongly depends on the algorithm and accepts this change and any consequence as a condition to keep working.

The connection between physical and financial harm is very common, again in conjunction with algorithmic control. While drivers and riders have some autonomy in the choice of safer roads or shortcuts, if they are too slow or have taken an incorrect road, they are notified by the platform's algorithm that imposes speed and routes (Veen, Barratt & Goods 2019, pp. 9-10), arguably more convenient for the platform than the rider. Such dependence on the algorithm then requires committing to that speed or route to avoid any penalty on the worker's account. This may force them to take safety risks on the road to complete the task to maintain such performance standards. Some algorithms use performance benchmarks set by certain workers to force the entire gig workforce to satisfy that benchmark in the form of 'algorithmic kaizen' (Veen et al. 2020). These force gig workers to work harder and increase the risk of harm from road accidents. According to the TWU, around 50% of delivery drivers in New South Wales have been injured during working hours and, in 2019, three were killed (Gildfind 2019, p. 21). Other deaths occurred in 2020, including one worker with Uber Eats and another with Hungry Panda, prompting the TWU to urge the New South Wales Government to guarantee compensation measures for gig workers involved in motor vehicle accidents and their families (Transport Workers Union 2020, pp. 37-8). More recently, The Guardian Australia reported that riders were 13 times more likely to end up in emergency services in Sydney compared to recreational riders (those who ride to keep fit or for leisure), according to a study from Macquarie University (Australian Associated Press 2022).

Accidents on roads can result in vehicle destruction or physical impairment. Consequently, gig workers cannot work and earn money without a vehicle or in case of impairment. To cover their income loss, at their own expense, they must seek insurance coverage against gig work injuries since they are independent contractors who are not covered by work, health and safety laws (Goods, Veen & Barratt 2019, pp. 512, 8).²¹

While not commonly reported, there are cases of psychological harm emerging from financial harm. Poor income and irregular wages cause negative emotions, including helplessness, powerlessness, stress, anxiety, depression, insecurity of work, the uncertainty of income, exploitation, self-exploitation and very little control over problems and lives (Glavin, Bierman & Schieman 2019; International Transport Workers' Federation 2020, p. 7; Kaine & Josserand 2019, p. 489; MacDonald & Giazitzoglu 2019, p. 734). Psychological harm is also caused by financial instability and job uncertainty, a lack of autonomy, career path uncertainty, work transience and physical and relational separation (Kerényi 2021, p. 156). The psychological control over gig workers is frequently affected by ratings and feedback mechanisms implemented by platforms. Fearing that they may be

²¹ Not all harms affecting gig workers can fall under the viewpoint of the thesis although there can be some analogies. In 2021, in the southern suburbs of Adelaide, a Menulog driver was pointed at with a knife and had his car stolen after completing an order. Fortunately, no physical injuries were sustained, and the car was found after arresting the aggressor. However, the driver felt mentally distressed (Barnett 2021). Also in Adelaide, an Uber driver was hijacked from his car but luckily was not injured (Caldicott 2021). Although the cases mention risks of physical harm and psychological harm, they were caused by an external person and not by the gig company.

deactivated by the algorithm in some way, they consent to exploitative and unsafe work (Athreya 2020, p. 92).

Similar consent to exploitation and abuse can also come from customers in the form of bullying. Drivers may receive poor ratings for no reason or be threatened with bad ratings by passengers. Because pleasing the client is crucial, some inexperienced drivers will take this too seriously and allow customers to abuse them (Rideshare Drivers Association of Australia 2020, p. 8). Sadly, the rating system indirectly encourages workers not to speak out in case of violations of law (Athreya 2020, p. 93).²²

The role of platforms tied with psychological harm is evident in other circumstances. The sense of helplessness and powerlessness are often observed in cases of gig workers prevented from seeking a solution to their problems through the gig companies. With platforms shifting risks and responsibilities, they avoid workers raising any issues because they purposely act uselessly (Walker, Fleming & Berti 2021, pp. 34-5). This is noted in the case of the student in Adelaide that did not find support from Uber Eats when reporting the algorithmic change (Chung 2020). The cases of psychological harm indicate very low levels of autonomy, exacerbated by strong feelings of loneliness among gig workers. With the exception of a few WhatsApp groups, in Australia, gig workers have very limited personal contact (Walker, Fleming & Berti 2021, p. 34).

Personal contacts are not always a positive factor, particularly if the gig workers attempt to express their autonomy through complaints to other workers. Expressing dissatisfaction does not always find support in other drivers, who instead have sympathy for gig companies like Uber and act as ambassadors who give false hope to others (Walker, Fleming & Berti 2021, pp. 36-7). This is a halt to autonomy as the creation of social contacts, when possible, can render more tolerable gig workers' emotions and create stable relationships (Kaine & Josserand 2019, p. 489).²³ However, as Barratt, Goods & Veen (2020a, p. 14) argue, their 'fitness' as personal conditions in the gig economy prevents them from expressing a collective voice.

Gig workers are deluded by their working conditions. They now accept low pay and are reluctant to group together in collective actions, believing it may not ameliorate their circumstances (Walker, Fleming & Berti 2021, p. 33). However, in some geographically confined cases, there are associations of gig workers, with the most common examples in the food delivery sector (Bessa et al. 2021, p. 2; Wray 2022), who have even promoted strikes through WhatsApp as a form of

²² Online workers may face 'geographical discrimination', where non-Western workers are paid less than others (Graham, Hjorth & Lehdonvirta 2017, pp. 137-8). This has been acknowledged by the Australian Human Rights Commission, which has proposed to include automated decisions of algorithm under discrimination law (The Australia Institute's Centre for Responsible Technology 2020).

²³ As we will see in the methodology presented in Chapter Four, Facebook groups and online forums specific to gig workers are also online spaces where gig workers discuss their lives and issues related to the gig economy.

‘backstage activism’ (Popan 2021, pp. 8-10). In Australia, the Delivery Rider Alliance, together with the TWU, is the most active association of gig workers campaigning for stronger protection for riders. It is through collective action that gig workers can express their autonomy. Nonetheless, the role and influence of these associations are constrained by Australia’s laws, cases and policies that remain insufficient to tackle harm among gig workers.²⁴

At the time of writing, an international investigation is being conducted by The Guardian and The International Consortium of Investigative Journalists, which released leaked data from Uber provided by Mark MacGann, Uber’s former chief lobbyist in Europe. Such data reveals that between 2013 and 2017, Uber commenced an aggressive campaign in Europe to expand its business. Among the different tactics, the gig company sought ‘powerful friends’ in 29 countries, including French President Macron, who was at the time the economic minister of France and favoured Uber at the expense of taxi drivers (Davies et al. 2022; Freedberg et al. 2022).

The investigation is ongoing and complex, and there is no current reference to Australia. However, for purposes of the thesis, it shows how Uber is strong and capable of entering markets and exploiting systems through political connections and influences for personal gain at the expense of other categories.

2.4 From ‘wage theft’ to gig economy harm against vulnerable categories: cases from temporary migrants and women

The previous paragraphs analysed the core of harms in the gig economy in Australia, identifying the lack of autonomy and the different mechanisms of control of the causes of harm to gig workers. Meanwhile, the trend in Australia still is to regulate traditional employment rather than these novel non-standard forms of work managed by online platforms. However, even in traditional employment, Australia struggles to ensure compliance with labour regulations.

In the context of employment regulations, it is important to understand that the issue of the gig economy in Australia does not only lie in the misclassification of gig workers, but a reform alone to make them employees may not be enough. Australia is attempting to regulate and enforce wage theft laws across the country. This problem shares a number of elements with harm in the gig economy but still with limited effects.

²⁴ Struggle for a collective voice is not only an Australian issue. In Italy, dependence on the algorithm and harm during the pandemic triggered strikes against delivery services and Amazon Italy (Keane 2021). Generally, gig workers are excluded from expressing their collective interests according to a court in Florence (Recchia 2021).

Australia openly condemns any instance of employers that refuses the payment of employment entitlements, often referred to as 'wage theft', which is a form of financial harm. Wage theft is not a new concept but has been researched extensively in the United States and the United Kingdom (Fussell 2011; Ram et al. 2017; Waren 2014; Weil 2018). Recently, it has become an evident issue in Australia (Clibborn & Wright 2018). Australia was one of the first countries to adopt a national minimum wage for all workers, currently in line with the International Labour Organisation (ILO) *Minimum Wage Fixing Convention* (1970) annually revised by an Expert Panel in the FWC (*Fair Work Act 2009*, s 282), imposing specific minimum wages and conditions for each industry in modern awards (*Fair Work Act 2009*, s 139) and overseeing the lawfulness of Enterprise Agreements between specific businesses and employees (*Fair Work Act 2009*, s 172).

Wage theft has many forms beyond not paying proper wages, some of which are common to both employees and gig workers. These common forms are the following: (1) deprivation of workers' entitlements, like superannuation funds, any form of leave or break prescribed by employment legislation (The McKell Institute 2019, p. 9); (2) misuse of ABNs to disguise employees as independent contractors; (Australian Council of Trade Unions 2018; The Construction Forestry Maritime Mining and Energy Union 2019, pp. 2-3 [4.a]); (3) 'sham contracting', where employees are disguised as contractors by employers to escape from any payment obligation (National Union of Workers 2019, p. 5; The Construction Forestry Maritime Mining and Energy Union 2019, pp. 2-3 [4.a]; Young Workers Legal Service 2019, p. 13 [49]); (4) misclassification in breach of modern awards, which are the documents that set out the minimum terms of conditions of employment in a given industry (Multicultural Youth South Australia 2019, pp. 2-3; The McKell Institute Victoria 2019, p. 14).²⁵

While in most jurisdictions in Australia being accountable for wage theft amounts only to a fine, in Victoria and Queensland it has been criminalised (Criminal Code and Other Legislation (Wage Theft) Amendment Bill 2020 (Qld); *Wage Theft Act 2020* (Vic)).²⁶ Nationally, the Commonwealth is considering reviewing and simplifying the *Criminal Code 1995* (Cth) to impose criminal liability on corporations, including any failure to comply with their duty to protect the health and safety of employees under the *Work Health and Safety Act 2011* (Cth). Unfortunately, wage theft laws are poorly enforced in Australia, allowing employers to freely exploit their employees where possible,

²⁵ There are other forms of wage theft in Australia that do not directly apply to gig workers. These are the following: subsidising wages to make a job look like a lawful vocational placement (e.g., a traineeship or an internship) (Young Workers Legal Service 2019, p. 13 [51]-[52]); 'cashback scams', when employees have to pay back monies to their employer, which is very common with migrants and vulnerable people (Shop Distributive & Allied Employees' Association SA Branch 2019, pp. 6-7); and 'illegal phoenixing activities', when a new company (e.g., a trust) is created after a business voluntarily liquidates assets to avoid paying any employee entitlements (Australasian Meat Industry Employees Union South and Western Australian Branch 2019, pp. 9-10 [50]; The Construction Forestry Maritime Mining and Energy Union 2019, p. 3 [4.b]; Young Workers Legal Service 2019, p. 12 [46]).

²⁶ At the time of writing, the Commonwealth and the State of South Australia are also developing reforms to criminalise wage theft according to their jurisdictional competence.

and are impacting the most vulnerable cohorts of workers in Australia, particularly temporary migrant workers from non-English backgrounds,²⁷ younger workers under 25 years old, and women (The McKell Institute Victoria 2019, pp. 20-2).

To understand the impact of wage theft, it is useful to illustrate the most important wage theft scandal in Australia involving the convenience store chain 7-Eleven, which exploited its employees, mostly international students. This was discovered in 2015 by the popular Australian television show *Four Corners*, produced by the Australian Broadcasting Corporation (Howe, Stewart & Owens 2018). Students were treated as trainees and not employees, requiring them to work full-time but with fewer wages, or were recorded as half-timers ('half pay scam'), or were paid regularly but required to return part of their wage ('cash back scam'), and, finally, their wages were paid into 7-Eleven franchisees bank accounts, to control wages and their distribution to the students (Berg & Farbenblum 2018, pp. 1042-3). Further claims against 7-Eleven were unpaid superannuation and workplace injuries, poor working conditions, the obligation to compensate the franchise with their own wage if a customer shoplifted or drove off without paying for petrol and charging them AU\$30,000 to AU\$70,000 to act as a sponsor (Berg & Farbenblum 2018, p. 1043). The case does not involve gig workers but shows how widespread the issues of wage theft are in Australia.

The exploitation of temporary migrants in Australian workplaces is often caused by their visa status (Armillei & Mascitelli 2016, p. 26; Davis 2017, p. 39; Ricatti 2018, p. 45). Grigoletti & Pianelli (2016, pp. 179-86) reported cases of temporary Italian migrants as international students exploited in the hospitality industry due to their poor English language skills and their desire to remain in Australia in any possible way. Again, like in the 7-Eleven scandal, exploitation of temporary migrants is not confined to the gig economy, but is present in any industry.

Wage theft also affects migrants working on farms under the working holiday visas (Grigoletti & Casarotto 2019, pp. 170-4, 289-304). One of the first reports about exploited Italian migrants on farms came from the Australian tv program *Four Corners* which was even aired in Italy. The program reported physical, psychological and sexual abuse. Hard working conditions, weather hazards, underpayment, poor housing hygiene and threats are only a few of the harms Italian migrants face while working on farms. Unfortunately, very few Italian report their mistreatments (Bellis 2018; Benedetti 2015; Mascitelli & Armillei 2016). Campbell et al. (2019, pp. 100, 10–2) noted that they are reluctant to complain because they fear employer reprisals or because their underpayment was not considered serious.

While these issues may also overlap with those of women, the The McKell Institute Victoria (2019) indicated two specific reasons why women are exposed to 'wage theft'. One is casual employment

²⁷ As in the gig economy, they are also the most affected by wage theft in Australia in traditional employment (Howe, Stewart & Owens 2018, pp. 200-3).

and, consequently, insecure work. The other is the employment in jobs traditionally considered 'women's jobs', such as disability support or retail, which are notably underpaid sectors (p. 22).

2.4.1 Harm against temporary migrants and women in the gig economy

The literature on wage theft and the gig economy, although raising concerning points against the laws in Australia, does not fully cover the issue. Firstly, it only seems to concern financial harm²⁸ and disregards physical and psychological harm that originate from wage theft, and secondly, the trend in Australia is to criminalise wage theft based on the established legal framework that protects employees exclusively. What is more worrying is that the wage theft practices are the same, but in traditional employment, it is a clear legal violation, while in the gig economy it is perfectly legitimate and creates an 'underclass' category of workers in Australia (Goods, Veen & Barratt 2019, p. 518) who possibly do not know their legal rights (Stewart & Stanford 2017, p. 428).

Regarding temporary migrants and women, such a limited focus is confirmed. Instances of harm have been mentioned on YouTube. A temporary migrant claimed he was working underpaid by Foodora (The Feed SBS 2017). Meanwhile, another rider had his bike and a battery stolen from him and even injured himself (upcover 2020a). A final interview on YouTube between migrants covered the steps to becoming a Uber driver in Sydney, but harmful events were not mentioned, although the Italian migrant was warned to be careful before becoming a gig worker (Atlas migration experts 2021).

In Australia, men earn and work more than women, who instead face stronger precariousness (Churchill & Craig 2019, p. 758; Mosseri, Cooper & Foley 2020, p. 6). Apart from the gender pay gap, women's harm in the gig economy has received more attention internationally. Four forms of harm have been reported: the gender pay gap, intersectionality and discrimination, algorithmic bias and safety and harassment.

Other than Australia, the gender wage gap has been reported in countries like the US, Europe and India (Chaudhary 2021, p. 54; Kelkar 2022, p. 10; Tripathi 2021). The issue of the gender pay gap comes from the flexible work that generally attracts women in the gig economy and allows them to balance work and family duties. The reality is that women carry the burden of working and caring for the family at home, but this means accepting gig work which is precarious (Vyas 2021, p. 46). Earnings are uncertain, family care is unpaid, and as gig workers, they do not enjoy non-wage benefits, do not possess bargaining power and are not able to associate freely, particularly if they belong to patriarchal countries (Chaudhary 2021, pp. 54-5; Kelkar 2022, pp. 10-2).

There are specific ways in which the gender pay gap manifests in the gig economy. In ridesharing companies like Uber, there are three main factors: (1) location and time, (2) driving strategies and

²⁸ For a summary of the financial concerns, see Commonwealth Senate (2021, pp. 64-71).

(3) driving habits. Women earn less than men because they avoid areas with high levels of criminality and drinking accidents, refuse orders, work more during the day when there are less income boosts and drive less or are slower, hence completing fewer tasks. In online freelancing, there are more factors (Lin & Fang 2022, p. 911; Shah, Maina & Kipkoech 2021, p. 96). Often, men are preferred and given tasks over women in certain roles, while women may not be willing to negotiate prices (Vyas 2021, pp. 48-9), are forced to bid less compared to a male for the same job (Ko 2021), or, like in ridesharing, work less in the evening possibly to take care of their families (Dokuka et al. 2022).

Freelancing not only presents examples of the gender pay gap but is also a form of discrimination. This concept can be explored under the dynamics of intersectionality between African-American or Asian-American women, compared to white and privileged males or even females, who suffer more episodes of sexism, racism and xenophobia (Lin & Fang 2022, p. 912). Interestingly, discrimination is not a human-to-human dynamic solely. In the gig economy, algorithm-to-human discrimination has been identified as 'algorithmic bias'. Such discrimination exists in a pattern of past data of gender and ethnicity collected by a machine that may affect, or even exclude, women from having a task assigned. The algorithm, depending on its design, collects data on customer ratings, stated job preferences and times for work, past browsing history, speed of driving, rate of sales, or other data and produces new data based on a predicted pattern. In male-dominated sectors like ridesharing, this prediction may likely assign a task to men drivers rather than women because the data received comes mostly from males and their performance patterns or a societal 'preference' for males, creating digital discrimination against women (Vyas 2021, pp. 41-2).

Finally, women may be abused while completing gig work, either in public spaces (Kelkar 2022, p. 10) during ridesharing at night (Shah, Maina & Kipkoech 2021, p. 96) or in clients' private homes (Chaudhary 2021, p. 55). While there is some reluctance of women to report abuse or sexual harassment (Kelkar 2022, p. 12), Uber has released information about women's safety on its platform in the US. According to its reports, Uber received nearly 6,000 reports of assaults in the years 2017–2018, the majority from women (Lin & Fang 2022, p. 912). During 2019–2020, the number dropped to around 2,000 reports. Subcategories considered were non-consensual kissing of a non-sexual body part, attempted non-consensual sexual penetration, non-consensual touching of a sexual body part, non-consensual kissing of a sexual body part, and non-consensual sexual penetration (Uber 2022h, pp. 56-7).

In Australia, the same level of transparency has been absent, prompting the New South Wales Point to Point Transport Commission to fine Uber around AU\$200,000 for not disclosing serious accidents involving Uber drivers. According to two separate audits conducted firstly by the New South Wales Point to Point Transport Commission and then Uber, over 500 incidents occurred in the state in a period of 18 months since 2020. The Commission noted the presence of 'notifiable occurrences' that were not reported, including alleged sexual assaults (Bonyhady 2021b).

One particular case reported saw an Uber driver sexually approached by a drunk passenger who entered the driver's car and started touching them with his legs. Although the driver insisted on stopping, he sat in the front seat at the end of the trip and refused to exit the car. Finally, after removing the drunk passenger from the car, the driver forwarded the complaint to Uber, which deactivated the passenger's account and only required the passenger to read the terms and conditions of the platform to be allowed back on Uber (Bonyhady 2021a).

2.5 'Ignoring' the issues of harm in the gig economy: laws and judicial cases in Australia

Although the forms of wage theft seem applicable to the gig economy, platforms take advantage of technology to create digital marketplaces to distort the division between employment, independent contracting and enterprise by relying on the information asymmetries in the contracts to prevent workers from complaining (Barratt, Goods & Veen 2020a, p. 3; The State of Victoria 2020, p. 69). Consequently, they can engage workers without any obligation to pay their minimum entitlements (Barratt et al. 2020; Smith et al. 2021, p. 2), an expression of neoliberal deregulation of policies that encourage avoidance of regulations, or Weil's *fissurisation* of the workplaces, through digitalisation or platformisation (Aloisi & De Stefano 2020, pp. 51-2; Barratt, Goods & Veen 2020a, p. 2; Weil 2014, p. 10).

At the time of writing, no laws regulate and protect gig workers in Australia. Independent contractors' activities are regulated by commercial laws (*Independent Contractors Act 2006* (Cth); Commonwealth Senate 2018, p. 74). Currently, only the governments of Victoria, New South Wales, Queensland, and the Commonwealth of Australia have commenced enquiring on how to regulate the gig economy (Commonwealth Senate 2018, 2020, 2021; Parliament of New South Wales 2020; The State of Victoria 2020, pp. 5-10). The New South Wales Point to Point Transport Commission has made a further move, forcing Uber to take measures to improve safety on its platform to prevent driver fatigue or regulate incident management, driver training and reporting of notifiable occurrences to the Commissioner (NSW Point to Point Transport Commissioner 2021) but the body only ensures compliance with the point to point transport law. Hence, it has very limited application.

Conversely, judicial cases that deal with gig economy matters have yet to form a consistent view and, in most cases, have handed down their judgements with reference to wage theft in the form of misclassification of gig workers as independent contractors instead of employees. In *Klooger v Foodora Australia Pty Ltd* [2018] FWC 6836 (from here '*Klooger*') the FWC found that Mr Klooger was working as an employee and not an independent contractor for the food delivery gig company Foodora (*Klooger v Foodora* [2018]; The State of Victoria 2020, p. 152).

Other cases following *Klooger*, most of them claiming unfair dismissal from arbitrary deactivation off the platform, were all unsuccessful. Differently from *Klooger*, gig workers did not convince the courts they were employees because there was no work-wages bargaining. They did not have any obligation to work nor face the consequences for refusing to work. This implied they had significant control over their work. Consequently, the FWC was not able to apply unfair dismissal (*Kaseris v Rasier Pacific* [2017]; *Pallage v Rasier Pacific* [2018]; *Suliman v Rasier Pacific* [2019]; *Gupta v Portier Pacific* [2020]; *Deliveroo v Franco* (2022); The State of Victoria 2020, pp. 152-3).

The destiny of the gig economy in Australia was kept on edge until 2022 with the case *Deliveroo v Franco* (2022). Mr Franco, who worked with Deliveroo from 2017 to 2020, was flagged for being late and, in breach of the Agreement with Deliveroo, was prevented from accessing the app to work [5].

The case was an appeal against a previous decision of the FWC in 2021 that established that Mr Franco, a delivery rider for Deliveroo, was an employee who was unfairly dismissed under the terms of s 382 of the *Fair Work Act 2009* [1]. However, in the appeal, the Full Bench of the FWC quashed the previous decision and held that Mr Franco was not an employee of Deliveroo [56] and not protected by unfair dismissal, although the Commission found Deliveroo's treatment 'unfair' [57]. The Commission, in fact, held that Deliveroo did not exercise control over Mr Franco's manner for completing the tasks and that he had control over the best route to deliver on time, defining it as a 'performance standard rather than a right of control' [46]–[47]. Mr Franco's only obligations were to deliver safely [46], to provide his own vehicle [48], to pay a delegate who has the required skills if needed [49], and to pay the administrative fee of 4% to access the platform [50].

Even if the cases were resolved differently, alone they are not sufficient to frame employment in the gig economy which requires legislative change (Flamingh & Casey 2021, p. 81). In fact, all judicial cases in Australia concerning employment relationships and the gig economy are based on the multifactorial test from *Hollis v Vabu Pty Ltd* (2001) 207 CLR 21 (from here *Hollis v Vabu* (2001)), balancing a series of indicia to establish the type of contract between a worker and a platform. However, the FWC noted that framing the employment relationship in the gig economy through the multifactorial test on the indicia balance may not always produce the same outcome, even if the facts are the same (The State of Victoria 2020, p. 109).

A recent and interesting case concerned the death of a Hungry Panda delivery rider in Sydney in 2020. The Personal Injury Commission of New South Wales found the rider's family to be compensated with over AU\$834,000 under the New South Wales workers' compensation scheme as they were dependent on the worker at the date of his death. The Commission noted that the rider was now considered an employee for Hungry Panda and compensation was then available in accordance with s 25 of the *Workers Compensation Act 1987* (NSW) (Taylor 2022b). Nevertheless, it is unsure how this decision will be considered by courts and tribunals across Australia.

2.6 Gaps and RQs

The previous paragraphs highlighted the limited influence of Australian laws and cases in the context of the gig economy and, more importantly for this thesis, the poor analysis of harm occurring to gig workers, portrayed predominantly as wage theft in one of its many typologies.³⁰ Interestingly, the Commonwealth Senate has approached the multiple issues of harm in the gig economy. In summary, it recognises that the process of ‘Uberisation of work’ and the ‘Amazon effect’ of freight transport has increased flexibility but simultaneously reduced income and workplace rights while resulting in unsafe work, lower job security, impacts on vulnerable individuals like job satisfaction, negative health, financial instability, isolation and, finally, broader economic impacts like underemployment or loss of tax revenue (Commonwealth Senate 2021, pp. 59-100; Commonwealth Senate 2022, pp. 133-60). However, these findings are mostly tied to wages and employment conditions and do not consider harm beyond the financial implications in the gig economy

In the setting of the thesis, Australia’s position remains anchored to the idea of framing harm as wage theft, according to common law principles and criminalising it in line with state laws.³¹ Notwithstanding Australia’s ‘frozen’ status, scholarly literature is proposing a reclassification of gig workers as employees to include them under the current legal protections (Cherry & Aloisi 2017; Commonwealth Senate 2018, 2021, 2022; Goods, Veen & Barratt 2019; Nossar 2020; Rawling & Munton 2021; Stewart & Stanford 2017). Conversely, Uber Australia has recently called for standard pay for all gig workers but still allows them to maintain their flexibility without classifying them as employees (Thompson 2022).

This thesis challenges Australia’s current stance based on a series of limitations these arguments have. First, the role of harm is limited to financial aspects of the gig economy (income, leave, wages) and how legal cases of unfair dismissal financially affect gig workers, forgetting other harmful consequences that dismissal can have on gig workers. Second, Australia’s push towards coercive labour law through the criminalisation of wage theft not only leaves gig workers out of the laws of each state that made its reforms but does not reflect at all any harm outside financial harm. Third, Australian laws and cases do not suggest the algorithm as the tool that causes harm and rely on pre-established legal principles in common law and criminal law that question the existence of an employment relationship and whether the workers have been denied any payment by the gig company. In fact, in *Deliveroo v Franco* (2022), the algorithm’s function was to assign the task to the

³⁰ Contrary to Australia, a novel criminological study on victimisation and fear of crime of gig workers has been published in the UK (Walcott 2020).

³¹ From an international perspective, Australia mirrors the US on the issues of misclassification of gig workers as independent contractors sparking intense litigation but currently no legal changes (Cherry & Aloisi 2017, p. 642). In Europe, attempts to regulate the gig economy is more active, either through court rulings or reports on legislative change. See, for example, *Uber BV and others (Appellants) v Aslam and others (Respondents)* (2021) (UK); Kilhoffer et al. (2020), Klimczuk, Česnuityté & Avram (2021) (EU).

delivery rider who could complete the task more efficiently [4] and, according to Mr Franco, had control over the order [25]. The Full Bench of the FWC did not consider the role of the algorithm in their holding [46]–[50].

This is where the thesis moves away from employment and criminal laws to search for an alternative. The laws and cases remain in part detached from the issues of the gig workers who suffer a range of harms beyond underpayment of entitlements (wage theft) and are still anchored to the principles of *Hollis v Vabu* (2001) and focusing on control, which has different features in the gig economy. For example, in the reasoning of the common law, there is little space for discussion regarding normative, technical and computer and bureaucratic control over gig workers and how these affect their autonomy in completing tasks to avoid harmful events.

Laws and cases contain limitations. Therefore, an alternative solution should be found not in whether the gig company is accountable for breaching the laws but if it is truly responsible for any harmful event that affected the gig worker during task allocation or completion and, additionally, if the algorithm as a series of neutral data is capable of determining one of the more harmful events like in the case of the delivery rider in Adelaide.

Harm is then the central problem of the gig economy intended a social issue that affects gig workers as a specific class of vulnerable people working in Australia. The societal nature of the harms will then be explored by adopting zemiology, or the study of social harm, as the theoretical basis of the thesis to evaluate why gig companies and their algorithms harm gig workers.

However, establishing harms in the gig economy as an issue in society does not directly attribute any accountability for social harm to gig companies or their algorithms. Consequently, zemiology requires further theoretical frameworks to understand the capability of the gig company and the algorithm to be sources of social harm. The thesis identifies two further theories within zemiology to explore the reason for accountability in the gig economy and support the zemiological analysis of harm: *ultra-realism* concerning the gig companies and *technology harm* regarding the algorithm. These are discussed in Chapter Three.

This thesis aims to answer the following RQs:

RQ1—Through the lens of zemiology, why are gig companies a source of ‘social harm’?

RQ2—Through the lens of zemiology and technology harm, why is the algorithm a source of ‘social harm’?

Chapter conclusion

Chapter Two presented and reviewed the most relevant literature on harm in the Australian gig economy. Departing from the issue of misclassification of gig workers as independent contractors, commonly debated in the literature, it indicated connections between autonomy and algorithmic control.

The level of autonomy, although variable depending on the gig company and the sector, remains marginal, according to the literature. Instead, literature believes that gig workers are controlled by the platform and the algorithm when present or by forms of 'soft control' like Community Guidelines and contracts, and algorithms that impose working rules or by clients. These forms of control affect the worker's autonomous choices to complete tasks in the manner they prefer or, more seriously, affect their capacity to avoid financial, physical or psychological harm.

The chapter reviewed Australia's regulation concerning the protection of gig workers. Currently, Australia does not have a legislative basis to protect gig workers from any harmful consequences during their work and lacks consistent judgements in favour of gig workers and the accountability of gig companies and their algorithms. This was explained with reference to the case *Deliveroo v Franco* (2022), where the Full Bench of the FWC did not recognise employment of the gig worker but rather features of independence and autonomy.

Further, Australia overall maintains a stronger interest towards criminalisation of wage theft against employers that exploit employees, ignoring the need to regulate gig workers. The focus of current laws that criminalise wage theft is on financial deprivation, with minimal or no reference to physical and psychological harm.

Finally, while the algorithm is significant in causing harm to gig workers, an approach to make the tool accountable for harm has not been fully addressed.

Australia's limited interest in harms in the gig economy was identified in the chapter as a research gap, which the thesis aims to cover through the adoption of a 'social harm approach' or 'zemiology' with ultra-realism and technology harm to test its adaptiveness to attribute accountability for harm on the algorithms and the gig companies and formulate the RQs for this thesis.

Chapter Three will analyse the main features of zemiology as the theoretical basis of the thesis and its application to the gig economy.

CHAPTER THREE: THEORETICAL BACKGROUND

Chapter introduction

In the previous chapters, the main concepts of the gig economy and the relevant literature were discussed to frame the issue of the misclassification of gig workers as independent contractors and the reasons why they constitute a particularly vulnerable group of workers in Australia. However, the solutions proposed by the literature aim to reclassify gig workers but not tackle the nature of control that causes various events of harm beyond wage theft to make gig companies and their algorithms accountable. The thesis abandons strict legal arguments from employment and criminal laws and focuses on the origin of harm through zemiology.

The chapter commences with the presentation of the theoretical basis looking at corporate and state-corporate crime. It then depicts the issue of misclassification as a legal problem as the driving problem for zemiology to resolve by presenting an overview of the major concepts and classifications of zemiology that will be used in the thesis. These definitions are supplemented by presenting broadly Tombs' analysis of *workplace harms* (Tombs 2004, 2018a) and then two perspectives in support of the zemiological framework: Lloyd's *ultra-realist perspective* (Lloyd 2018a, 2018b, 2020) and Wood's exploration of *technological-based harms* (Wood 2021; Wood 2022). Each of these perspectives provides a series of principles deemed necessary to answer the RQs.

Finally, the chapter illustrates a series of critiques and advantages that zemiology has with reference to the gig economy over laws and criminology, which are not aimed to disprove other approaches to the issue but constitute an alternative.

3.1 Theoretical basis of the thesis: from corporate and state-corporate harm to zemiology

3.1.1 Corporate and state-corporate harm

In Chapters One and Two, the issues of the gig company were framed as a problem of misclassification of workers who were paid very little and at risk of being unfairly dismissed. Chapter Two, however, explained that gig workers were not only underpaid or being dismissed, but were also confronted by physical and psychological problems tied with the gig economy that were not appropriately scrutinised by the laws and cases in Australia. Further, the scrutiny did not fully acknowledge the complex nature of algorithmic control. Consequently, the thesis argues that, at this stage, a resolution of the problems related to the gig economy under employment and criminal laws is insufficient.

The intersection between the gig economy and poor regulations necessarily attracts some discussions on the roles of gig companies as corporations and the freedoms granted by the Commonwealth. In principle, criminal intersections between governments and corporations are referred as state-corporate crimes (Tombs 2012; Tombs 2020b, p. 295) or any “illegal or socially injurious actions that occur when one or more institutions of political governance pursue a goal in direct co-operation with one or more institutions of economic production and distribution” (Michalowski and Kramer 2006, in Bernat & Whyte 2019, p. 130).

The states not only are believed to facilitate corporations in committing harm, but they may create the social conditions for them to perpetrate damaging practices. States, in fact, allow corporations to produce economic and human capital, frame labour markets, decide the type of contracts with their workers and employees, define what is their ownership, the rules of their liability, and any applicable taxation laws (Bernat & Whyte 2017, p. 77; Bernat & Whyte 2019, p. 135), constructing a ‘corporate citizenship’ with rights and privileges that ordinary citizens do not possess (Whyte 2018). Such ‘corporate citizenship’ determines the freedom of gig companies to impose contractual terms on their workers under the independent contracting model and, without clear regulations, allows these companies to pursue their business goals at the expense of their workers, substituting regulations that supposedly had to protect consumers from harm were substituted with contractual power that protects private companies from law enforcement (Tombs 2021). In light of harms affecting workers, states turn a blind eye not to criminalise corporate harms and maintain corporate power (Tombs 2020a, p. 122).

In the Australian gig economy, gig companies enjoy their ‘corporate citizenship’ to the extent they can freely classify their workers as independent contractors under the *Independent Contractors Act 2006* (Cth), exercise forms of control over their performance (Veen, Barratt & Goods 2019, pp. 8-9), and finally avoid accountability for any harmful event suffered by gig workers, while the Australian Government remains reluctant to firmly regulate platform work and criminalise gig companies’ inaction to protect gig workers.

We can draw an analogy with the 2017 the Grenfell Tower tragedy in the UK. In 2015, the Grenfell Action Group (GAG) and the Unite Community Membership reported threats from the main contractor to access the Tower, the lack of consultation with residents, and safety hazard concerns, in what Tombs calls a ‘process of de-democratisation’ (Tombs 2021, pp. 11-2). Such requests for attention were unheard. Due to poor maintenance of equipment in the building, in 2017 a fire caused by a Whirlpool fridge killed 72 residents. No charges were laid as the ‘better regulation’ strategy

present in the UK at the time was a business-friendly regulation that diminished law enforcement to reduce costs and decriminalise corporate harm (Tombs 2016).³²

Harms in the gig economy are very close to the ‘crimes against workers’ to include underpayment, absence of work health and safety measures, sexual and racial discrimination and more broadly human rights (Tombs & Whyte 2015, pp. 45-7; Tombs & Whyte 2020, p. 19). The nature is likely the same, with companies exploiting businesses-oriented policies and laws to reduce any costs associated with regulating the safety of workers and maximising their profits, while harming workers who are mostly vulnerable due to their social status (e.g., migrants), gender, ethnicity, age, or depending on low level of union representativity, and even failures of management to provide warnings about health and safety in the name of the market or the industry that imposes what is acceptable, specific demands, speed and cost-cutting (Tombs 2007).

Unfortunately, most harms may not be a breach of the laws, nor reported or investigated, nor even seen as crimes (Tombs & Whyte 2015, p. 52). In Tombs’ analysis of workplace harm, in health and work safety laws only certain harms are defined as crimes such as cancer, injuries, and death, and make individuals or corporations accountable for them (Tombs 2004, p. 156), but others exist only in the form of harms without the same level of legal protection, like unrecognised financial, psychological, and social issues (Tombs 2004, p. 159; Tombs 2018a, p. 25). This division results from the undermining of corporate laws and the failure of criminal laws to prevent harm and their inability to protect workers’ safety (Lloyd 2018a, p. 17)., Harm goes beyond physical accidents to workers and often includes loss of income, mental health problems, or unemployment (Tombs 2018a, p. 27).

These protections, however, are not absolute but result from a compromise between states and corporations to allow the latter to continue its business as usual and accumulate profits (Tombs 2023; Tombs & Whyte 2015, p. 156). Tombs (2023) exemplified this in relation to the exposure to COVID-19 in the UK as a form of regulation to the aim of which is not to control corporate harms, but a strategy to maintain social order and to preserve economic production, distribution and consumption. In this specific case, Tombs argued that regulation was generating ‘acceptable deaths’ by imposing some categories to stay home under lockdown laws but allowing certain categories to work regularly and be exposed to illness and normalising death from the virus (2023). In earlier articles, Tombs et al. made a critique against UK’s Corporate Manslaughter and Corporate Homicide laws on their ineffectiveness in prosecuting corporate killing by portraying safety crimes as unlucky fatalities, or using the narrative of “corporate crime is not real crime” because businesses are generally benevolent and responsible social actors, and that companies under a free market take the risk of harming workers because if companies benefit societies then any accidents are purely

³² At the time of writing, charges remain at consideration until an ongoing Inquiry report on the matter between 2023 and 2024. More information is accessible at <https://www.grenfelltowerinquiry.org.uk/>.

unfortunate and unavoidable. The laws will then protect the companies from accountability if entrepreneurship is negatively affected (Hébert, Bittle & Tombs 2019; Tombs 2018b).³³

States seems then to justify forms of 'corporate violence', either structural or institutional. 'Structural violence' are the harms that prevent people meeting their basic needs. These include poverty, sexism, white supremacy, or any other violence that is rooted in social practices that are indirect and do not involve obvious protagonists (Cooper & Whyte 2022, p. 210). With reference to the gig economy, Chapter Two indicated a range of harms caused by the gig companies' will to classify them as independent contractors and, more indirectly, by algorithmic control where present, which are the not obvious protagonists.

'Institutional violence' is, instead, the production of violence in time and accountability of the institutions who designed and made decisions to implement that violence under the political and cultural context of the environment in which it emerges (Cooper & Whyte 2022, pp. 211-2). The COVID-19 pandemic possibly made such violence become more visible and prompted to question the decisions of the Australian Government to delay any regulation of the gig economy and maintaining gig workers vulnerable status quo.

3.1.2 Zemiology as the theoretical perspective for gig company and algorithm accountability for corporate harm.

Quite radically, Tombs and Whyte argue that the solution against corporate violence is the abolition of the corporation in terms of its privileges granted by legal systems compared to common citizens (Tombs 2017; Tombs & Whyte 2015). The thesis, however, looks for a different alternative.

The change in perspective relates to the nature of the issue. Explained in Chapter Two, the problem in the gig economy is the lack of a legal framework that criminalises illegal gig company activities and their algorithms when used. Without a law, gig companies and algorithms do not commit a 'crime' and, even if they did, in Australia it would be likely in the form of wage theft which does not capture the entirety of harms gig workers face while working. Nevertheless, corporate and state-corporate crime, at least in principle, indicates the existence of a criminogenic nature of gig companies who enjoy their 'corporate citizenship' and can exercise their violence on gig workers.

The lack of a clear legal framework that criminalises gig companies' illegal activities and their algorithm requires an alternative to crimes faced by gig workers. The common denominator of the events in Chapter Two was the presence of different types of harm suffered by gig workers as a vulnerable group of workers. As said, these harms originate or are caused by the gig company and the algorithm. Nevertheless, it is not clear how can the gig company and any algorithm be the source of harm to gig workers, especially if they are independent contractors, so other than looking at legal

³³ While these events relate to crimes and laws in the UK, at least in principle these can be applied to the Australian gig economy.

constructs and terms, this thesis draws its analysis from the study of harm through zemiology. The use of zemiology as a theoretical framework in the gig economy has not yet been fully scrutinised, although it was mentioned as a social harm issue but broadly in the context of the 'service economy' in the UK (Davies, Leighton & Wyatt 2021, pp. 66-7, 240).³⁵

Derived from the Greek work *zemia*, zemiology is an emerging perspective drawn from critical criminology that studies social harm, framed in 2004 by Hillyard et al. in *Beyond Criminology: Taking Harm Seriously* (Canning & Tombs 2021, pp. 23-4; Copson 2021, pp. 169-90; Tombs 2018a, p. 12). The core argument of the book invited scholars to focus their attention on harm instead of crime to respond to social issues and to form critiques to criminology, and particularly to critical criminology, as a response to harm (Copson 2021, p. 170).

To apply zemiology to the gig economy, it is important to understand the *definition* of harm and subsequently apply it to the harmful events arising from gig work. In zemiology, harm does not have a universal definition, and scholars have provided their own conceptualisations (Canning & Tombs 2021, pp. 51-2; Gibney & Wyatt 2020, p. 103; Kotzé 2018, pp. 89-90; Ward 2004, pp. 84-5). For purposes of this thesis, following Copson (2011, cited in Canning and Tombs 2021), harm is an impediment caused by individuals or society to people in fulfilling their needs (p. 52). For harm to occur, it must be *proximate* and *serious* in time and space and depends on the nature of the relationship between a victim and an offender: the more proximate the relationship is, the more evident a harmful event, although the perception of the seriousness and the actual type of harm may change (Canning & Tombs 2021, pp. 90-3). The proximity of the relationship is crucial in the gig economy. As observed in Chapter Two, gig workers and platforms are bound by a contractual and not an employment relationship. Such relationships vary in seriousness according to the industry and company, the type and cause of harm, and how gig workers perceive that harm.

To be considered a 'social harm', an individual or a company must *systemically harm specific social groups*, including minorities or marginalised and powerless cohorts (Canning & Tombs 2021, pp. 55-6). In the gig economy, gig workers are identified as the social group of reference, but further scrutiny should be made to subgroups within gig workers. Chapters One and Two identified temporary migrants and women as two initial vulnerable subgroups.

Less debated is the *classification* of harms in zemiology, which are easily identifiable because harm is present in human lives, although they are not ranked on order of seriousness (Canning & Tombs 2021, p. 53). The types of harm reported in gig economy literature in Chapter Two are the following:³⁶

³⁵ Service economy includes activities in financial services, hospitality, retail, health, human services, information technology and education.

³⁶ Another category of harm that can applied in the gig economy is autonomy harm. Autonomy can be defined as either the freedom to decide or plain without incurring a penalty or, if self-actualisation is not undermined, through the development of appropriate cognitive skills (Canning & Tombs 2021, p. 79). If autonomy and skill

- *Physical harms*, such as injuries and death from avoidable social, and preventable harms, like workplace harm from unregulated issues (Canning & Tombs 2021, pp. 67-8). Pemberton adds long-term physical health problems, mental issues, little or no access to a healthy diet, little opportunity to exercise, and poor access to health care (Canning & Tombs 2021, p. 71; Naughton 2007, p. 165).
- *Psychological harms* from traumatic events. These are more difficult to identify and measure if the cause of that harm is socially silenced. Common examples of emotional harm are depression, anxiety, self-suicidality or post-traumatic stress disorder symptoms. These can be caused by the poor quality of life, loneliness, isolation, subjection to abuse or violence, insecurity, homelessness, poverty, or poor and exploitative working conditions (Canning & Tombs 2021, pp. 71-2; Naughton 2007, p. 171).
- *Financial harms*. Financial harm is a monetary loss that can be temporary, like theft, fraud, or sudden income loss from unemployment, or long-term, such as no access to employment or excessive costs to access education or health care. There is a second type in this category referred as 'economic harm' which affects wider communities, states, and nations and can include charges for primary health care, reductions in trades or decrease in wealth entitlements. Both financial and economic harms can overlap with other harms. For example, a monetary loss can lead to physical, emotional and psychological harm and even death (Canning & Tombs 2021, p. 73). For purposes of this thesis, financial harm is used as the catch-all term to include all instances of harm affecting the gig workers.

Defining the harms that occur in the gig economy as social harms and classifying them depending on their nature is not enough to answer the RQs but is only the first step to applying zemiology. Zemiological principles must also demonstrate that gig companies and their algorithms are the true sources of social harm and attribute accountability. Hence, this chapter presents three main perspectives that will constitute the essence of the zemiological framework of the thesis: Tombs' analysis of *workplace harms* (Tombs 2004, 2018a), Lloyd's *ultra-realist perspective* (Lloyd 2018a, 2018b, 2020) and Wood's exploration of *technological-based harms* (Wood 2021; Wood 2022, Forthcoming). These are not alternatives but are part of a sequence of principles applicable in the gig economy to identify harms to the autonomy and attribute accountability for harm to the gig companies and their algorithms.

development are prevented, the individual will suffer autonomy harm, affecting personal development or emotional wellbeing. Examples are absolute poverty, lack of access to education, employment or training or precarious work. These examples overlap with other types of harm (Canning & Tombs 2021, pp. 79-80). For purposes of consistency with the thesis, given the overlap this type of harm is not discussed elsewhere.

3.2 Zemiology and gig economy in the context of workplace practices and technology

3.2.1 Zemiology in the workplace

With the expansion of neoliberalism and the ideas of the free market, states are taking minimal roles in regulating labour matters. Their function is mostly to oversee how the market is progressing and avoid, where possible, imposition of burdens on businesses to allow them to pursue self-interest and competition at the expense of labour rights and protections (Raymen & Smith 2019, p. 120; Tombs & Hillyard 2004, pp. 38-9).

The thesis has already referred to Tombs' critique to workplaces harm with reference to health and work safety laws in the context of corporate and state-corporate crime. It is worth reminding, however, that he argues that legal systems define only certain physical harms as crimes (Tombs 2004, p. 156) while in reality harm is a broader problem that includes poverty or mental distress caused in the workplace context (Tombs 2018a, p. 27). Hence, by applying zemiology to the gig economy in Australia where there are no protective laws for gig workers, this thesis questions the possibility of expanding the range of protections that currently exist and mostly considers wage theft laws or personal safety through work, health, and safety laws for employees, and disregard, for example, psychological issues and possibly other harms.

However, while Tombs introduced the role of harm and zemiology in workplaces, the exact principles that can apply to accountability for harm are drawn from Lloyd's ultra-realist perspective in support of the framework of this thesis. While the principles of ultra-realism are discussed in the Chapter, rather than a separate framework from zemiology, they are adopted to refine harmful the relationship between gig workers the gig company

Ultra-realism is a recent framework developed by Hall and Winlow in *Revitalizing Criminological Theory: Towards a New Ultra-Realism* (published in 2015) and in Hall's *Theorizing Crime and Deviance* (published in 2012) (Wood 2019b, p. 96). Ultra-realism questions why some individuals or groups are more likely to harm others to pursue their instrumental and expressive interests (Hall & Winlow 2018b, p. 43).³⁷

³⁷ There are debates over the validity of ultra-realism as a criminological current particularly with reference to *pseudo-pacification processes* and *special liberty*, two of the core points of this stream (Wood 2019b; Wood, Anderson & Richards 2020a, 2020b). These critiques are being counter-argued (Raymen & Kuldova 2020). It is not within the scope of the thesis to test the validity the arguments on any side, but to the test the application of principles of ultra-realism deemed appropriate to analyse the relationships in the gig economy in the zemiological analysis.

The perspective defines ‘social harm’ as a *willingness* to inflict harm on others because some *people benefit from it*.³⁸ These may include individuals, corporations or even states. The *willingness to act* is the object of the social harm analysis, motivated by a *special liberty* that entitles a person to inflict harm for self-interest (Hall & Winlow 2018b, p. 49; Lloyd 2018a, pp. 24-5). Such harms are caused by political and market structures independent of human intervention (Raymen & Smith 2019, p. 121). The structures shift harm from physical violence to pacified socioeconomic competition created by the market, or *pseudo-pacification process* (Hall & Winlow 2018b, p. 49; Wood, Anderson & Richards 2020a, p. 644).

Through these principles, this thesis aims to explore whether such willingness can be attributed to gig companies and what may constitute the features and special liberty of such companies and the pseudo-pacification process in the gig economy. While the principles of zemiology and workplace harms are presented here to frame harms in the gig economy as ‘social harm’, willingness to inflict harm using the special liberty and pseudo-pacification process theorises the gig company as the source of social harm. However, the final step is to determine the relationship between the harmful gig company and the harmed gig worker

Lloyd (2018b, pp. 247-8) applies ultra-realism in the context of the service economy (e.g., call centres) to investigate the relationship between individuals, workplaces and these structures. He argues that harm will occur if the economy has an *absence*. Lloyd identifies at least two absences. One is the *absence of moral responsibility* connected with the *special liberty* of and within companies to maximise profits and willingly inflict harm on others. Workers, for example, are pushed to compete against each other while managers, instead, exercise authority and emotional or physical harm over employees in the interest of the business, knowing they do not know their working rights. In a winner-takes-it-all environment, any ethical obligation towards workers is naïve (Lloyd 2018b, pp. 256-8).

³⁸ The exact nature of social harm is debated. The details of the debate go beyond the scope of this research. Pemberton, for example, makes a clear distinction between ‘social harm as the study of socially mediated harm’ and ‘zemiology as the study of harm’ (Canning & Tombs 2021, p. 52; Tombs 2018a, pp. 18-9), and argues that social harm is based on the *theory of human need*. Any type of harm, whether physical, psychological or autonomy harm, is intended as an impediment that affects human flourishing. For Naughton, it is the lack of autonomy, development, growth and access to cultural and intellectual resources that a society provides to individuals (Naughton 2007, p. 165). Yar adopts Honneth’s and the Frankfurt School’s *theory of recognition*. He argues that harm is a lack of recognition (or a struggle for recognition) of basic needs or rights, or a disrespect (Canning & Tombs 2021, p. 103; Copson 2018, p. 40; Hall & Winlow 2018a, p. 111; Lloyd 2018a, p. 22). Like Yar, Soliman (2021) argues for a flexible approach to recognise harm although she defines zemiology as a complementary discipline to criminology (Canning & Tombs 2021, pp. 104-5). Finally, Rayman and Smith (2019) tie social harm with *deviant leisure*, activities per se are not illegal (like gambling) but push individuals to harm others to pursue personal satisfaction, competition and status under market principles, individuals are prone to harmful behaviour at the expense of universal ethics, moral responsibility and good (Lloyd 2018a, pp. 22-3; Raymen & Smith 2019, p. 117), and *theory of the good* a derivation of Pemberton’s human flourishing disrupted by harm that prevent the individual to live a *good life* (Canning & Tombs 2021, pp. 105-6; Raymen & Smith 2019, p. 121).

The second is the *absence of stability*. Neoliberalism has radically influenced employment conditions, with flexible arrangements proliferating in modern workforces such as part-time, casual work, fixed-term contracts, on-demand and cash-in-hand work. Major social consequences are rising precariousness, low payment, and exploited workers through reducing protective working rights (Lloyd 2018a, p. 42; Lloyd 2020, p. 81). Employers can supply staff under temporary arrangements to avoid most working obligations, creating equally a profit for the company at the expense of the workers' job stability and security. These are often legal arrangements (Lloyd 2018b, p. 251; Lloyd 2020, p. 81).

The final concept proposed by Lloyd (2020, p. 80) is *accumulation by dispossession*. Social harm in the workplace spans from illegal to legal activities altogether. Liberalising employment legislation allows employers to circumvent employment obligations and employ 'illegal' labourers, often legal and illegal migrants (Lloyd 2020, pp. 78-9). While illegal labour is often referred to as smuggling and trafficking of illegal migrants, Lloyd also includes migrants who are restricted in the type of work they can seek by their visa conditions, threatened by penalties and immigration policies (Lloyd 2020, p. 79). In other words, employing an illegal immigrant or denying an employment entitlement is dispossessing a worker of something to accumulate capital (Lloyd 2020, p. 89).

Consequently, this thesis must ultimately prove that the relationship of social harm between gig companies and gig workers is absent of moral responsibility and stability, while using legislative gaps in Australia to their advantage to accumulate income and dispossess working rights to then motivate the ratio for accountability of gig companies. However, while these principles are framed in this chapter to explore an alternative to criminal and employment liability of any gig company, ultra-realism does not suggest the same level of accountability of algorithms used by certain platforms. It is unclear, in fact, how can a set of data and codes express willingness to harm for a personal benefit. The thesis adopts Wood's *stratigraphy of harm* in technology-based contexts to resolve this gap in the next paragraph.

3.2.2 Technological-based harm and zemiology

While ultra-realism offers a basis to theorise gig companies as direct actors of social harm, a further step is needed for those gig companies that heavily rely on algorithms to manage their workforce that connects zemiology and technology. An interesting approach to zemiology and technology has been recently formulated by Malik et al. (2022), who explored how algorithms frame social harm by creating systematic bias and inequality through automation, accelerating harm production and circulation, and spreading awareness of social harms. While their approach does not consider the gig economy algorithms, the article has the merit of framing current links between technologies and harm for the purposes of this thesis. Current perspectives include studies on the relevance of social harm in digital criminology, computer and cybercrimes, and Wood's studies on technology harm (Malik et al. 2022, pp. 3-4).

Among these perspectives, this thesis embraces Wood's approach to the micro-level analyses of human–technology interactions through the formulation of what he calls *stratigraphy of harm* (p. 4; Wood 2021, p. 635). Applying critical realism, Wood analyses the different layers of human–technology and technology harm and asserts that in the context of technology, harm is not located in one single stratum (Wood 2021, p. 635). Each technology has causal latent powers or capacities that activate ('emerge') only when individuals interact with that technology (Wood 2021, p. 637). While, arguably, designers of technology can embed values, it is not always feasible as technologies rarely mirror their designers' intentions. Instead, these are displaced by the emergent properties and uses of the technology. Hence, there are *intended effects* and *unintended effects* resulting from technology beyond the creator's will or values (Wood 2021, p. 638).

The thesis considers the *stratigraphy of harm* to understand where harm in the gig economy is located and emerges when there is human interaction compared to the values of gig companies and the harmful effects created by the algorithm, defined in this thesis as a 'tool of harm'. Harms depend then on the utility and technicity of the technology. 'Utility' of the technology is its relation with humans' needs and create the *intended effects*, while 'technicity' is the efficacy of a technology beyond the creators' intention and produces the *unintended effects* (Wood 2021, p. 638).

Utility and technicity can be instrumental or generative of harm. Instrumental harms are determined specifically by the design of the technology, while generative harms depend on what individuals, collectives or environments do with technology (Wood 2021, p. 639).

Instrumental utility harms depend on the user's intention and technological design. In this case, the intention of the designer is aligned with the (harmful) values of the technology. This may include malware and consumer spyware. *Generative utility harms* are actions, behaviours, means or ends generated by changes in technology, like glitches and bugs (Wood 2021, p. 639). *Instrumental technicity harms* are unintentional uses, needs, ends, functions and mechanisms created by technologies but beyond the designer's intentions. *Generative technicity harms* are not part of the design nor intended but are still allowed by the technology (Wood 2021, p. 638).

As the gig economy has not yet been tested under this theoretical approach, it is unclear where the algorithm lies among these categories. This thesis aims to locate where the algorithmic 'tool of harm' is positioned and finally attribute accountability for social harm. Similar to ultra-realism, the *stratigraphy of harm* approach indicates the manner to attribute responsibility for social harm to the algorithm but does not define specifically the relation between the user and the technology or, in the gig economy, between the gig worker and the algorithm itself.

However, Wood (2022) provides a further perspective that defines six generative technology harm relations and categorises them into *use harms* and *non-use harms*, whether the user has entered a

relationship with the technology and performs an action.³⁹ Among them, the thesis questions the applicability of *interface harms* (a form of use harms), relying on the importance of app interfaces when a task is notified to a gig worker. In interface harms, technology is intentionally used, but harm, which can be immediate or long-term, physical or psychological, is not an intended consequence (Wood 2022, Forthcoming).⁴⁰ Hence, the relationship between the gig worker and the algorithm needs to be based on the connection between intentionality and social harm sustained by the gig worker, which the thesis aims to uncover.

3.2.3 Critiques and advantages of using zemiology

Choosing zemiology was not a clear-cut process but required attention to a series of possibilities and critiques towards the use of zemiology over corporate and state-corporate crime, and critical criminology.

Corporate and state-corporate presented above crime did form the basis to recognise the criminogenic nature of gig platforms but the application of these was hindered by the object of some critiques. When referring to the UK's COVID-19 regulation in response to the pandemic (Tombs 2023) or UK's Corporate Manslaughter and Corporate Homicide laws (Hébert, Bittle & Tombs 2019; Tombs 2018b), corporate and state-corporate crime concerned specific laws that allowed companies to conduct their businesses at the expense of their employees. When referring to Australia and the gig economy, there is no law to form a similar critique since gig workers fall under the *Independent Contractors Act 2006* (Cth). Possibly, gig workers could fall under state wage theft laws but that requires a reclassification in employees. Hence, the principles of corporate and state-corporate crime are important for the thesis but not enough. In this context, zemiology is a rather better alternative because it does not critique any laws but looks at the social issues surrounding the gig economy, namely the forms of social harm.

Against critical criminology, one of the main critiques zemiologists made is the dependence on the definition of crime as framed by the laws and being unable to expand the study of harm beyond that definition (Tombs 2018a, p. 20). For Canning and Tombs, critical criminology simply encapsulates and criminalises a range of harms (Canning & Tombs 2021, pp. 46-7; Naughton 2007, p. 162),

³⁹ Five relationships, which will not be applied to the thesis, are *ambient harms* (non-use harms: technologies that directly harm people, non-humans and the environment, but are not used and arise from unintended effects of that technology. A common example is the inhalation of asbestos), *alterity harms* (non-use harms: technology is the proximate cause of harm. Some harms are trivial, such as hitting a toe on the corner of a furniture, or a more serious digital tech glitch.), *exclusion harms* (use harms: designed to exclude certain groups of people from using it. Common example is a technology that cannot be used by individuals with a physical or intellectual disability, like the presence of stairs only in a building that prevents people on wheelchairs to move between levels, or a software not tailored for those who have a vision disability), *harm translation* (both use and non-use harms: a technology invites individuals to commit harm by translating/transforming an object to achieve that harmful end.) and *zemiosis* (both use- and non-use harms: the technology allows the individual to achieve a new harmful end without knowing that technology before).

⁴⁰ Examples are the use of unergonomic workstations that cause musculoskeletal problems, screens that provoke eye strain, or prolonged social media use that causes sadness, unsettledness and distraction.

whereas they should rather be more concerned about social inquiries or public drawings (Naughton 2007, p. 162). Zemiology, instead, is capable of identifying the causes of preventable harms and reduce them through a government policy (McGregor 2021).⁴¹

In the context of the gig economy, we can see the limitations of criminology from the definitions of wage theft when it is associated with financial, social harm, as mentioned in Chapter Two. In the *Wage Theft Act* (2020) of Victoria, section 1(a) defines wage theft as a criminal offence of ‘theft of employee entitlements’, while in section (3)(1), ‘employee entitlements’ are any amounts to be paid to an employee by an employer, intended as a ‘natural person, body corporate, partnership, unincorporated association or other entity’, and include ‘wages or salary, allowances and gratuities and the attribution of annual leave, long service leave, meal breaks and superannuation’.

While it is obvious that an application of the Act requires a legal reclassification of gig workers as employees, the problem actually goes further. The notion of ‘entitlements’ in the framing of the Act discusses monetary amounts and lists wages, allowances, leave and superannuation, which, intuitively, are forms of financial harm. In a criminological sense, zemiologists fear a study may terminate with the wording of the Act (Tombs 2018a, p. 20) and only in relation to certain harms (Canning & Tombs 2021, pp. 46-7; Naughton 2007, p. 162).

Using critical criminology reduces harm to gig workers in financial harm as denial of wages, leave or superannuation and denial of allowances of extra payments for tools or for working in dangerous areas. There is no immediate reference to other forms of harm, like psychological harm, which are instead quite present in the gig economy. Zemiology, moving away from these legal definitions, is instead capable of recognised them because they are not anchored to meaning in wage theft laws as long as the other harms in the gig economy are social harms.

The other issue of the legal definitions is ‘employer’ as ‘body corporate’. Again, we can associate this definition with gig companies and platforms. Uber or Airtasker are surely ‘companies’, but how will this definition apply to the gig workers managed by their algorithms and not by a human being?

The idea of crime is often influenced by stereotypes (Black, Asian, refugees and marginalised groups). However, at the same time, it limits accountability of illegal activities of doctors, restaurant owners, states, corporations and political groups, who are capable of committing crimes but are not considered criminals (Canning & Tombs 2021, pp. 11, 20). If we expand this view to the gig economy, not only are gig companies considered non-accountable, but also the algorithms as a series of data can be considered incapable of committing crimes or harms.

⁴¹ For more on the critiques to critical criminology, see Canning & Tombs (2021); Hillyard et al. (2004). For critiques to zemiology, see Naughton (2007, p. 180). For the harmonisation between zemiology and critical criminology, see Copson (2018, pp. 39-40); Kotzé (2018, p. 96); Tombs (2018a, p. 21).

Zemiology can offer an alternative to this influence, including the possibility of allocating responsibility for harm in the criminal justice system to corporations that fail to address social issues (Hillyard & Tombs 2004, pp. 21-6). Without substituting the current concepts of crime, zemiology can explore an ancillary or substitutive solution to attribute accountability for harming gig workers on both gig companies and algorithms and avoiding stereotypical representation of criminals.

Nevertheless, while zemiology is capable of providing a framework of principles to resolve the issues in the gig economy, it does present clear drawbacks. Harm may not always be identified objectively. In events with strong similarities, some individuals may be more easily upset (psychological harm), hurt (physical harm), or earning below their individual needs (financial harm). Hence, harm will be more evident, even as a crime, to those who are more affected by it (Naughton 2007, p. 180). This study acknowledges these drawbacks and recognises the possibility that gig workers may describe or perceive their harms differently, depending on their social, personal and economic conditions.

Chapter conclusion

This chapter illustrated the salient elements of corporate and state-corporate crime to explain why gig companies are criminogenic, and then focused on zemiology as the principal theoretical framework for this thesis. From the definition of harm as an impediment to fulfilling personal needs (Copson 2011, cited in Canning & Tombs 2021, p. 52), the chapter indicated the principles to define social harm that will be applied in the gig economy, aiming to question if they are proximate and serious and if they systemically harm specific social groups. Harms were then conventionally classified in financial, physical, psychological, and autonomy to be aligned with the common harms that occur in the gig economy and listed in Chapter Two.

After presenting the major principles from zemiology, the chapter presented three major streams within zemiology: Tombs and *workplace harms* to indicate how current labour laws disregard crucial harms like psychological harm (Tombs 2004, 2018a), Lloyd's *ultra-realist perspective* to identify why certain groups are more prone to harm others (Lloyd 2018a, 2018b, 2020), and Wood's exploration of *technological-based harms* to link technology and harm (Wood 2021; Wood 2022, Forthcoming). This chapter reviewed ultra-realism and technology harm principles to support the zemiology framework of the thesis and form the basis to attribute accountability to gig companies and algorithms.

Finally, this chapter acknowledged the advantages and limitations of zemiology to justify the reasons for adopting this theory over corporate and state-corporate crime and critical criminology, recognising that zemiology is not the ultimate answer to the issue of misclassification and harm in the gig economy, but is an alternative solution that could be considered.

The next chapter covers the methodology used in this thesis to acquire data on the harm suffered by gig workers in Australia.

CHAPTER FOUR: METHODOLOGY

Chapter introduction

The previous chapter presented zemiology and its subcurrents, ultra-realism and technology harm as the theoretical background for this study. However, the notion of social harm not only drives the theory but is also the core concern in collecting data without creating a risk of harm from the study. With this in mind, this chapter illustrates a methodology adopted in this thesis to collect data on the harms suffered by gig workers in Australia as an explorative case study.

Chapter Four explains the issues of collecting data during the COVID-19 pandemic and how it created significant limitations in building the dataset of this thesis. The pandemic heavily influenced the strategies that this thesis adopted. Such influence required a triangulation of three methods: netnography (analysis of social media posts), an online survey and online semistructured interviews with gig workers. The interview participants were mostly of Italian origin as a matter of convenience to collect sensitive data on harm and the TWU. Each interview was conducted using an interview guide.

Each method required significant attention to ethical issues, which Chapter Four explores in detail to demonstrate the importance of the researcher's ethics towards participants and towards the study, particularly during the recruitment process. This chapter then explains how the data were collected, reported and analysed. It also provides some demographic data of participants.

4.1 Collecting data during the COVID-19 pandemic

Before explaining the details of the methodology, it is necessary to present the context in which the study was conducted. Data collection occurred between 2020 and 2021, during the peak of the COVID-19 pandemic. In Australia, significant border restrictions were in place externally towards foreign arrivals and between states (Gibson & Moran 2020). The dangers included the possibility of contracting COVID-19 and any health-related consequences and the risk of being 'locked out' and unable to return home indefinitely. Hence, online tactics were necessary during these unusual times.

With the strong uncertainty caused by the pandemic, it was believed that multiple strategies should have been put in place to overcome any limitations, used as alternatives or in parallel to obtain the necessary data for this study if sudden restrictions affecting gig workers were adopted. For example, a rider would probably work harder during lockdowns and would not have time to participate in an

interview. Conversely, we anticipated possible reluctance of gig workers who are also temporary migrants to participate caused by their fears of being reported for some breach of visa clauses.

Consequently, the study preferred looking at triangulation of online data and methods to assess the validity and credibility of the findings (Bryman 2011; Rothbauer 2012). The triangulation included a combination of qualitative and quantitative data converged using online posts collected through Facebook groups on the gig economy, an online survey and online interviews. Each method had clear limitations and ethical issues, but these were acknowledged and critically evaluated (Bryman 2011; Flick 2018).

4.2 Use of the case study approach to generalise the findings on social harm

The adoption of case studies comes from the requirement in zemiology to identify a socially vulnerable group (Canning & Tombs 2021, pp. 55-6). Case studies are also common in Australian and international gig economy literature. Barratt et al. adopted a qualitative case study design under an exploratory framework between workers in Uber Eats and Deliveroo to understand workers' experiences in the gig economy (Barratt, Goods & Veen 2020a, p. 8; Veen, Barratt & Goods 2019, p. 5). Minter (2017, pp. 442-3). analysed, instead, the negotiations between Unions NSW and Airtasker as a case study by cross-referencing a range of documents to review Airtasker's labour practices.

In the US, the gig company CloudNine was framed as a case study to demonstrate how neoliberalism increases harm towards its workers through non-standard and precarious work arrangements, classifying them as self-employed workers dependent on the terms and conditions of the business (Moisander, Groß & Eräranta 2018, pp. 381-2). Lehdonvirta (2018, p. 17) used a comparative case study between Amazon Mechanical Turk, MobileWorks and Cloud Factory to understand better how online piecework functions. In China, Wu et al. (2019, p. 579) also adopted an exploratory approach to collect qualitative data from Uber drivers and local managers.

The thesis applied Yin's (2013) major steps to develop the case study. The first step was defining and selecting the case for the study. More broadly, selecting gig workers in Australia was straightforward. In defining the boundaries of the case (Elger 2012), the unit of analysis of the thesis included gig workers in the gig economy. The literature showed higher participation of temporary migrants in the Australian gig economy (Goods, Veen & Barratt 2019, p. 510; McDonald et al. 2019, p. 5).

The study sought data from recent temporary migrants from Italy as a matter of convenience to acquire information and address the research aims (Bleijenbergh 2012; Norander & Brandhorst 2018). These participants were included if they worked or had worked in the gig economy in Australia under a temporary visa, either a working holiday or student visa, in line with the existing Australian literature outlined in Chapter One.⁴² Being myself Italian–Australian, sharing a common language and culture with the cohort enabled me to overcome language barriers when addressing questions, particularly the most sensitive ones.

However, to acquire more data and strengthen the accuracy and generalisation of the findings and address their research aims (Bleijenbergh 2012; Frey 2018; Norander & Brandhorst 2018; Xiao 2012; Yin 2013), this study also included Australian citizens, stakeholders and informants to gain a higher amount of information to generalise and apply the findings.

The type of case study was equally important in the thesis. Between descriptive, exploratory, or explanatory (Yin, cited in Bleijenbergh 2012; Streb 2012), this project adopted an exploratory case study approach to investigate the events of harm that occur to gig workers and, through their analysis coupled with the literature and the theory, define social harm in the context of the gig economy and how gig companies and algorithms harm gig workers based on the perspectives of the participants.

A critique often made to case studies and applicable to this project is the aim to generalise findings relying solely on data on a single or a small number of cases. Against this critique, the project considered the gig workers recruited in the study a form of ‘statistical generalisation’ (Maxwell & Chmiel 2013) of a larger group of gig workers, strengthened by using data collected with different methods and between gig workers and stakeholders.

Adopting this strategy had some clear advantages for this study on social harm. Temporary migrants may be reluctant to disclose their instances of financial harm. For example, international students might not want to state they worked beyond their weekly limits to overcome financial harm, fearing the information would be handed to the DHA, which could issue a deportation order. Reaching out to gig workers or stakeholders who were less fearful of the DHA, such as Australian citizens or the TWU, allows the in-depth exploration of financial harm in the gig economy as a social issue.

Further, focusing on one group of gig workers or one nationality can limit the perception of social harm. Again, temporary migrants may struggle to express the harms they face, such as those due

⁴² Italian migration waves occurred in (1) the 1800s, (2) the first half of the twentieth century until WWII (1900–1945), (3) after WWII, between the 1950s and 1960s, (4) the recent Italian migration after the 1970s, and (5) the ‘new’ wave of Italians settling in Australia since the early 2000s under temporary visas (Baldassar & Pyke 2014, pp. 129–30). The 2021 census indicated that the total population of Italians in Australia is 1,108,364 million or 4.4% of the total population. Unfortunately, in the context of the gig economy, we do not have the total data of Italians working in the gig economy.

to the language barriers or present only a limited experience. Extending to other groups provides different views and traits about their understanding of social harm.

Nevertheless, using one case study that includes all possible views may not clarify the boundaries of the case. The study, in fact, did not aim to collect data from one nationality or one stakeholder and does not make a distinction among them. If we compare temporary migrants to Australian citizens, possibly the latter will be more open to certain sensitive questions, but on the other side, they may not understand the struggles of being a temporary migrant with limited funds and no social security aid.

At the same time, between temporary migrants, the perception of what was harmful might differ based on their cultural backgrounds. A European or North American may identify financial harm more easily compared to an Asian or South American who will see the earnings of the gig economy as 'sufficient' according to their cultural views. A possible solution would require different cases for each nationality or group involved in the study. However, the context and the time available were not sufficient for such an ambitious task.

4.3 Ethical frameworks adopted prior to data collection

A key question for zemiological research asks whether the project may potentially create further harm to participants or certain groups. Canning and Tombs framed as a basic zemiological principle for ethical research the notion of *care* towards participants to avoid any increase of harm while collecting data to disrupt the powerful (Canning & Tombs 2021, pp. 122-3). In general ethics theory, Gilligan and Noddings (cited in Preissle 2012) frame this 'ethics of care' as the researcher's support towards participants in the study and adoption of any action in their best interest.

Care was the first ethical concern when collecting data. In Chapter Two, the review of the instances of harm saw in what ways gig workers were exposed to dreadful instances and referred particularly to temporary migrants and women as two among the most vulnerable categories. So the first assumption was the level of vulnerability of these categories, compared stakeholders, but also other gig workers potentially less vulnerable, like Australian citizens or white males.

With particular reference to temporary migrants, a further issue was the English language, potentially problematic for communicating and/or expressing harm in the gig economy. This is where it was more convenient to recruit recent Italian migrants for the online survey and the interviews because our common background and the use of Italian was a better choice to frame questions and to capture better the meaning of their answers about harm.

Caring for participants as a plain principle alone was insufficient. Therefore, ethical doctrines were then embedded in this study (Preissle 2012). These doctrines were the following:

- *Justice-based ethics*. Based on a codification of ethical principles of individual human rights and fairness, they included the right to liberty to decline an invitation to participate in the study, the right to privacy to protect confidential data, and the right to justice or stating the risks and benefits from the research. For this research, the relevant codified principles are from the *National Statement on Ethical Conduct in Human Research* (2007) and *Regulation 2016/679 (General Data Protection Regulation)* (2016). This legislation was part of the study as a compulsory requirement if participants were in the European Union. The study was open to migrants from Italy who may have relocated again to Italy either upon the expiry of their visa or due to the effects of the pandemic on Australian socio-economic life.
- *Duty-based or deontological ethics*. The principles applied in the study included the obligations to respect the participants' autonomy to participate or refuse in the data collection, provide correct information and meet all obligations consistently. Consideration of this doctrine was fundamental due to the sensible questions on harm to which gig workers may not want to provide a response.
- *Utilitarian ethics*. It is the obligation to balance the benefits and risks of participation and anticipate any possible harm to them from occurring to participants.
- *Virtue-based ethics*. Based on Aristotle, humans (including researchers) must act with virtue, honesty and integrity, respectfulness, wisdom, justice and compassion. These principles were crucial to follow to avoid discomfort when participants narrate their harms.

The risk of privacy violations or breaches of confidentiality (Ogden 2012j) was considered from the perspective of gig workers, particularly temporary migrants. For temporary migrants, such violations were a significant concern if a breach of their visa conditions was disclosed to the DHA, with the risk of being reported and deported from Australia. Such concern, however, does not constitute a problem for these type of data collections, since only crimes may be revealed (Duffy 2012), and a breach of visa conditions is not a crime and can still be kept confidential under legal privileges.

While these doctrines were crucial for the study, further ethical questions needed to be addressed. Referred as *meta-ethics*, or the individual assumptions individuals make about ethical decisions, they include (Preissle 2012) the application and interpretation of the ethical frameworks according to individual's cultural patterns, the social responsibility of researchers intended as rights and responsibilities that individuals have towards a community (Gilman 2011), and the justification of any ethical decision, through rational arguments, or affection, intuition, and emotion or a combination of

all of these. For these purposes, zemiology suggested care in using a language that included any illegal behaviour while maintaining empathy towards participants (Canning & Tombs 2021, pp. 117-9).

In framing the meta-ethical issues, the worry in the study was any discomfort in discussing harm among gig workers and even influencing data dissemination. Hence, not only was confidentiality guaranteed but also a reflection of how to pose the sensitive questions considering any cultural factors (Ogden 2012k; Preissle 2012).

4.4 The online methods of data collection and triangulation

After considering the limitations posed by the COVID-19 pandemic, the use of the case study approach and the broad ethical issues that were concerning participants, this study explains the three online methods of data collection which were triangulated to form one dataset: (1) netnography, (2) an online survey and (3) online interviews. This triangulation of online methods was determined by the enormous geographical distances in Australia and overseas and the disruptions caused by the COVID-19 pandemic, and consequently obligatory. Each method was carefully tailored to acquire relevant data on harms, evaluate the presence of social harm and answer the RQs to form one set of data.

4.4.1 Triangulation of methods and data

The scope of triangulation in this study was to assess the validity and credibility of the findings (Bryman 2011; Rothbauer 2012) and for two main reasons:

- to ensure data quality and its analysis. This was also the main scope of the EU Report on gig workers which triangulated data from policymakers, academic and legal experts, platform representatives and social partners, labour inspectorates in occupational safety and health authorities, and business associations (Kilhoffer et al. 2020, p. 32).
- to reach gig workers and stakeholders, fearing a low participation rate. When the Australian Government announced border closures due to the pandemic, it invited temporary migrants to return home (Gibson & Moran 2020).

Triangulation was developed in the 1970s by Denzin and was later redeveloped to include various forms of triangulation (Bryman 2011; Flick 2018).⁴³ Among the different forms of triangulation, this

⁴³ Triangulation has been often described in different phases: triangulation 1.0 includes investigator triangulation, theoretical triangulation, and methodological triangulation; triangulation 2.0 is an approach to explore in detail an issue and increase the validity of its interpretations through identification of discrepancies

thesis uses triangulation of methods and triangulation of data. Triangulation of methods is subdivided into two categories: *between method triangulation* (using two or more different research methods) and *within method triangulation* (using the same method with different variables). Triangulation of data can also include a combination of qualitative and quantitative data (Bryman 2011; Flick 2018). These forms of triangulation were also questioned and critically evaluated (Flick 2018).

In the thesis, the *triangulation between method* was anticipated above when presenting netnography, the online survey and the online interviews. In the process of the data acquisition online or netnography, the most common spaces to collect online data from gig workers were Facebook groups, YouTube and the Special Broadcasting Service (SBS). Exploring the information gig workers share online about the gig economy was then the first online method for data collection. Although useful, it was not sufficient for the purposes of the study. There was no control over the information users posted online. Relying solely on this method would be a significant limit to the study. Hence, more tailored online methods were needed to directly recruit migrants from Italy and ask specific questions about harm.

To satisfy the need for new data on harm, two further methods were designed: an online survey and online semistructured interviews. The online survey adopted a mixed-method approach with quantitative data and an open-ended qualitative question for participants to provide quick responses regardless of their location or device. The semistructured interview was purely for qualitative data beyond the content of the online survey. However, the interviews were not limited to gig workers. As shown in Kilhoffer et al. (2020), the interview was open to other stakeholders to add new knowledge on the gig economy in Australia that gig workers may not have and tailoring the questions differently to reflect a less degree of vulnerability that stakeholders possessed compared to temporary migrants. This was the *triangulation between method*. Each method followed strong ethical protocols to ensure that participants' rights were protected to maintain integrity in the research (Flick 2019c).

The second strategy concerned how to *triangulate the data* collected. All methods above had qualitative and quantitative information to be collected and organised for analysis. Data were collected in parallel to speed up this process, recording any online conversation and recruiting participants to complete the online survey and the interview (Flick 2019c). All data were converged under one set of information, although divided into themes as the collection progressed.

4.4.2 Netnography

The first source of data was online interactions between gig workers about the gig economy in popular Facebook groups on the gig economy or discussed issues concerning the gig economy. This method is commonly referred to as netnography (Kozinets 2013). Gig workers were observed

and contradictions; triangulation 3.0 is theoretical triangulation, methodological triangulation, and data triangulation; and triangulation 4.0 questions and critically evaluates the limits of each dataset or method (Bryman 2011; Flick 2018). The thesis has embraced the final two forms.

online and the popular themes and needs of gig workers in Australia were noted to produce data exclusively from their online observation.

The use of netnography was inspired by the use of WhatsApp groups among gig workers to communicate (Walker, Fleming & Berti 2021, p. 34) or organise strikes ('backstage activism') (Popan 2021, pp. 8-10). However, while Walker, Fleming & Berti (2021, p. 34) argued that outside WhatsApp, gig workers had very limited social contact, so the use of netnography questions was an interesting opportunity offered by social media to tackle that sense of isolation that the authors identified in their paper.

Netnography uses computers to observe and collect data from an online field. Similar to traditional ethnography, netnography aims to understand cultural phenomena through new technologies as present in Jamil & Noiseux (2018, p. 3). The major differences with ethnography are the fields of research (online in netnography and in-person in ethnography) and ethical issues posed by the use of online tools (Kozinets 2013).

With reference to the fields of research, the major differences between netnography and ethnography are as follows (Kozinets 2013):

- *Alteration on the mode of communication.* In netnography, users have more control over the information they post online and are often dictated by codes or emoticons that require careful interpretation of their meanings. When analysing online posts, the initial post and the comments that followed needed to be carefully evaluated to understand not only what content the gig workers were willing to disclose, but also the emotions emerging from the words and emojis, when present. Literal word interpretation allowed the identification of the events and types of harm, but codes and emojis were also indication of the level of distress and frustration from that harmful event.
- *Anonymity.* Users can present themselves as they wish, either being open about their identity or avoiding disclosing personal information from their online profile to maintain anonymity. While ethically safe to protect participants from harm, it becomes questionable who the person is beyond that profile (Roberts 2014). In ethnography, such anonymity is hard to achieve. When collecting data, it is quite common of Facebook to read posts of users who do not share their profile picture with a personal photo or use a random image available online or use a fake name or hide their personal details. This made collection of data not fully representative of the demographics of the participants.
- *Accessibility.* Online worlds in forums or social media groups are often very accessible to different communities, but it is common for certain nationalities or members with common interests to gather in more fragmented online spaces, which may limit the access to other

members who do not share the same commonalities. In collecting data, the study noted that Italian gig workers were mostly present in Italian-Australian Facebook groups and significantly less in specific groups created by gig workers and for gig workers to discuss their experiences and issues in the gig economy.

.Another limitation is the different computing skills or devices that change the readability of social media posts, education, and racial or ethnic differences that may prevent a user from accessing social media (Roberts 2014). An example was the presence of males speaking for female gig workers on social media about the harm she sustained, a sort of gendered barrier in the thesis.

- *Archiving*. Observing interactions on posts allows researchers to copy and analyse users' behaviours online. Different from ethnography, online observation grants an extensive record of information readily available.

However, both netnography and ethnography share similar steps in the research process. These include the definition of the RQs and topics, community observation, ethical approval and collection, analysis and report of data (Kozinets 2013).

In the context of the gig economy, netnography was used by Jamil and Noiseux to explore the working conditions of Uber drivers in Montreal. Their study differed from this thesis in the manner online data was collected and observed. While Jamil and Noiseux requested Uber drivers to provide screenshots from the apps about their daily or weekly income, price surging, promotions, ratings, and fare cancellations (Jamil & Noiseux 2018, p. 3), this project studied online interactions that occurred exclusively on social media between gig workers as a 'community online' (Kozinets 2013). Nevertheless, Jamil and Noiseux indicate the importance of the app's interface, which, under a zemiological and technological perspective adopted in this thesis, suggests in principle the importance of *interface harms* (use harms) (Wood 2022).

Regarding data collection through Facebook, Ditchfield and Meredith (2018) listed a series of elements that should be considered. Two of these were relevant for this study: (1) access to Facebook data without recruiting participants and not restricted by privacy settings and (2) the necessary sample.

Regarding *access to data through Facebook*, the platform is to be considered a private space with information not readily available for research (Ditchfield & Meredith 2018; Vitak 2016). However, each page, group or profile has a range of privacy settings that may influence the definition of privacy on social media. Hence, this is a grey area of research and does not have a clear-cut rule (Ogden 2012h). Generally, if data is publicly available and cannot be linked to an identifiable person, privacy matters do not arise (Flowers 2011b). Ditchfield and Meredith (2018) encourage taking particular care when information is sensitive. They suggest altering personal information to maintain

confidentiality and anonymity (Ditchfield & Meredith 2018). Flowers (2011b) also suggests securely storing data to uphold the right to privacy. Davis (Davis 2017, pp. 123, 5) did not gain consent from members when she collected data from posts but to uphold the ethics of her study by de-identifying all Facebook groups and omitting all names in posts to avoid them being found.

In terms of the *necessary sample*, even if using Facebook is cost-free and a convenient way to reach communities and information beyond geographical limitations and a useful sampling for exploratory research, there are some issues. First, it may not be a representative sample and may not be sufficient to generalise findings (Buttha cited in Roberts 2014; Vitak 2016). As this creates validity concerns, data from Facebook required triangulation from other sources and methods (Vitak 2016).

Netnography enabled the collection of a significant amount of information, even if that information was often repetitive. With this method, this thesis explored the presence of harms among gig workers, how the harmful event occurred, how it was or could be managed, avoided, or minimised and finally, how they perceived the algorithms in relation to that harm. Such information reflects gig workers' shared experience or 'collective sensemaking' (Weber, Remus & Pregonzer 2022, pp. 12-3).

However, if the opportunities offered by netnography seemed endless, the method did have some drawbacks. One of these was the lack of detailed information about the gig workers as individuals. It was not always possible to understand their gender, nationality, age or visa status. The other drawback was the difficulty of having the full picture of the event. Gig workers on Facebook only disclosed what they found relevant to their harm. For example, they would disclose how much they earned (financial harm) but not how that affected their lives nor if earnings impacted their mental health (psychological harm).

4.4.3 The online survey

Netnographic data provided a range of harms that affected gig workers, but its limitations explained above were clear from the early stages of the research. Hence, in parallel with netnography, an online survey was designed and disseminated through social media to recruit participants. As stated above, these were shared in Italian-Australian Facebook groups to reach recent Italian temporary migrants.

The online survey was able to minimise the risk of harm through anonymity and protection of disclosed data. Anonymity was maintained by avoiding any identifying questions in the survey. Only the participant would know the responses given (Kennedy 2011a).

The advantage of anonymous responses was linked to the confidential information disclosure level. In general, full disclosure of a participant's identity is prohibited if it increases the risk of harm to the person's financial status, employment, or reputation (Flowers 2011a). The study then ensured a high

level of confidentiality protection in the survey by promising that all questions and data collected would neither contain personal information that identified the participant nor that the data published would somehow identify the person (Kennedy 2011b).

Upholding anonymity and avoiding identifying questions in the online survey did pose some important limitations. These were exclusions from the sample, such as those not part of Italian–Australian Facebook groups or including participants who were not part of the required sample (Kennedy 2011a), and triangulated data that inadvertently identified a participant (Flowers 2011a). Unwanted exclusion or inclusion of participants could not be avoided due to the high level of anonymity granted by the online survey, but careful monitoring of responses was put in place as far as practicable. Instead, the same measures were beneficial to prevent any identification of the participants.

The design of the online survey required attentive implementation of some core points (Kaczmirek 2017). The design in mind was seeking free options, data management on reliable servers and a well-presented web-based interface. All potential liabilities arising from the research would be dealt with under Australian laws. Based on these considerations, the host chosen was Google through its own survey product Google Forms.

The online survey posed several ethical issues (Toepoel 2017). Being data collected through an online website, it is always possible to collect inadvertently cookies (small pieces of data that records information about user's navigation), or para-data (logs of participants), or data collected being accessed by a hacker through sniffing programs. These ethical issues were considered before choosing Google Forms to collect responses and implement its design. While the first two problems were beyond the control of this study, the final one was addressed by storing data on secured servers provided by Flinders University.

Three main sections of the online survey were created using a paging technique (Toepoel 2017). Each of them included a series of questions that were designed and administered using a framework adapted from the Inter-university Consortium for Political and Social Research (2012, cited in Kaczmirek 2017).

Section 1 provided the study details and consent information. This part included the welcome screen with details of the survey, the description of the study and ethical approval, and links to the Information Sheet and Consent Form (Toepoel 2017). These were uploaded separately to make the pages more readable. The participant would then progress to the next page by reading and accepting all conditions from the information sheet and consent form, clicking a mandatory YES response at the end. Both documents stated the commitment of the study to prevent extraneous access to their responses (Kennedy 2011b), the purposes of the study to collect experiences of gig workers in Australia, any risks and benefits and the rights of the participants (Courser 2011; Losch 2011). This

strategy aimed to obtain voluntary and informed consent prior commencement of the survey (Losch 2011). As the survey was self-administered, anonymous and without mandatory questions, no pressure was exercised on participants. They could withdraw from the survey even after accepting to participate. No provisional responses were recorded (Valerio & Mainieri 2011).

Section 2 gathered the personal details of the participant. The section requested personal details for statistical purposes. Participants were not required to disclose their identities. Details requested were gender, age range, current location and current visa. These were all in the form of radio buttons, but personalised text responses were possible (Toepoel 2017). The choice of having this data was to understand the demographics of the sample, and the characteristics of gig workers in Australia.

Section 3 contained questions about gig work in Australia and was the core of the online survey. For this part, a range of question types were used, including radio buttons, checkboxes, scales and open questions (Kaczmirek 2017; Toepoel 2017). Gig workers were asked a series of responses about the location of their gig work in Australia, which companies they worked for, and more specific questions on harm. Such questions asked for information about their wages, if they had any accidents and if they ever felt in danger while working with the gig company. Final questions included their opinion about the level of protection they perceived while working in a gig company, an evaluation of their experience, and any further comments they were free to express. These questions were drafted to obtain easy quantitative data, but the final open-ended question was to seek more qualitative responses beyond the content of the survey (Toepoel 2017). Questions in Section 3 adopted a mixed-method design, although quantitative questions are dominant (Flick 2019a, 2019d). Before submitting the responses, the participant was invited to participate in the semistructured interview if they wanted to. The survey ended with a thank you message (Toepoel 2017).

The data obtained was immediate and recorded on an automatically generated sheet, which allowed close monitoring of the response rates for each question to detect any errors or double or irrelevant responses. The data collected was stored on servers belonging to Flinders University, ready to be triangulated with other sources and answer the RQs.

While the online survey allowed to ask specific questions on harm in the gig economy, these were mostly quantitative questions with some open responses. Hence, the online survey encountered a similar but opposite issue to netnography—in the online survey, it was possible to explore details on harm relevant to the study but needed to be immediate and without the opportunity (unless the participant was willing to do so) to explore the harmful events in greater depth. On the other side, netnography did allow such detail but only to the extent of the disclosure of the worker, without posing specific questions.

4.4.4 Semistructured interviews

While the online survey was a useful tool to reach and obtain data from participants, further details required a different method that collected qualitative information specifically on harm. Hence, semistructured interviews were more appropriate for asking for direct information about harm in the gig economy.

The use of interviews in Australian gig economy studies is common. For example, (Josserand & Kaine 2019, p. 555) explored the narratives of Uber drivers to understand how they perceived their work, the employment classification and their identity. (Walker, Fleming & Berti 2021, p. 32) instead used interviews to investigate Uber drivers' behaviour in Australia.

As for the online survey, ethical issues were present in interviews and in certain instances, required stronger protections of data disclosed than in other methods. Harm towards participants was the major concern with its paramount need to minimise any risk of discomfort, embarrassment or violation of privacy and confidentiality (Ogden 2012e). Balancing these risks with the benefits of acquiring new knowledge from the study then required a series of strategies to warrant that the study was being carried out ethically, which were all contained in the information kit (Ogden 2012b).

The interviews were carried out online via Skype due to the pandemic and the vast geographical dispersion of participants. The online tool posed the following ethical issues:

- *Informed consent.* To create a trust towards the study, all information about the project and how the interview was conducted were disclosed on the website and in the information kit (Vannini 2012).
- *Participant rights.* In the information kit and the website, all rights of participants were listed in Italian and English to ensure there was full content to participate in the study. Privacy was the first right upheld in the interviews and was offered to participants as the possibility to disclose as much information as participants preferred (Ogden 2012h), refuse to respond to questions (Flowers 2011b) or disguise their identity through pseudonyms (Ogden 2012a), or offering confidentiality when they disclosed information regarding harm (Ogden 2012h), necessary to avoid embarrassment in narrating sensitive and harmful experiences and to increase its quality (Ogden 2012d).
- *Data security.* Confidentiality included using pseudonyms, removing personal data from documents and interview transcripts, and securing data from possible intruders, loss, inadvertent disclosure and modification (Ogden 2012d; Vannini 2012). As suggested by Corti (2012) and the guidelines provided by Flinders University (2021), all data in digital form was

stored on Flinders University servers that have strong network protections, while all files and papers were destroyed upon completion of the study.

Other ethical issues beyond the use of the interviews specifically concerned my self-reflection and integrity as a researcher. Such reflexivity was based on the shared Italian cultural background with migrants from Italy. The commonalities with the cohort were significant. The following two elements were addressed to avoid any influence on the integrity of the study prior to commencement:

- *Bias.* Choosing the migrants from Italy as a sample population among other nationalities in the gig economy may be considered a biased decision to reach predetermined conclusions in their favour at the end of the study and selecting certain data (Ogden 2012c). As stated, the choice of migrants from Italy was a matter of convenience to acquire the necessary trust in the project and collect more quality data on social harm. However, to avoid bias influencing the collection and analysis of data, triangulation strategies were implemented to compare the results collected in the interviews and the online survey with netnography that included other nationalities and Australian citizens and presented them in themes and not according to their nationality.
- *Conflict of interest.* Another issue was the possibility of coexisting personal interests (Israel & Hay 2012) in collecting data from migrants from Italy. Except for the benefits of acquiring new knowledge from migrants from Italy for the purposes of this thesis, I did not have any further interests that influenced the study. I had very limited personal connections with migrants from Italy and the Italian community during the period of data collection.

4.4.5 The interview guides

Before interviewing participants, interview questions were listed. As the study aimed to integrate data from gig workers who recently migrated from Italy and other stakeholders, the questions were tailored to each group. Two separate interview guides were drafted using a staged process developed and adapted from Morris (2018) and keeping in mind the areas and questions to ask participants (Ayres 2012b).

Stage 1: Before developing the interview guides

The detail of the interview guide posed a first issue to the flow of the interview, either being too short and not covering the instances of harm or too detailed and not allowing the participant to develop any response (Morris 2018). The RQ required to acquire data on harm and necessarily had to be more detailed than others. Nevertheless, starting with sensitive questions was not appropriate, so a series of broader themes were developed to include icebreakers and less confronting questions before exploring harm. Being a semistructured interview allowed a certain degree of flexibility in drafting questions and subquestions to explore in detail the instances of harm (Morris 2018).

A major consideration before developing the interview guides was the kind of participant. Gig workers could feel stronger distress and embarrassment, which meant that the questions needed to be posed with care. Stakeholders, instead, were less exposed, or their level of vulnerability was different. Having also a role in validating responses from gig workers and other sources required a different and more direct way of asking sensitive questions to obtain the best quality information on harm in the gig economy based on their direct involvement with gig workers in Australia (Schensul 2012).

Stage 2: Elements of the interview guides

Questions were written in English for both groups and Italian for gig workers who recently migrated from Italy to increase clarity and obtain correct information (Morris 2018). Questions were open-ended, some very broad and generic and others very specific but without the strong structures of the online survey (Morgan & Guevara 2012). The advantage of the interview guide was to ask questions needed and then elaborate on the responses without following any order as long as the topics of interest were covered (Ayres 2012b; Morgan & Guevara 2012).

The interview guides were developed under the following themes:⁴⁴

- greetings and icebreakers
- the study objectives, and rights and consent of the participant
- migration experiences in general (applicable only to migrants from Italy)
- labour experiences in general (applicable only to migrants from Italy)
- ‘gig work’ experiences in detail (applicable only to migrants from Italy)
- wages in the ‘gig work’
- physical accidents in the ‘gig economy’
- physical, mental, financial dangers/fear
- protections from the ‘gig companies’
- protections provided by the Australian Government and by the Australian justice system

⁴⁴ See Appendices 6 and 7.

- end of the interview.

In the various themes, the participant was asked questions about any factual knowledge about the gig economy and direct/indirect experiences of suffering from harm, and any opinions or feelings they have about the gig economy in Australia. Migrants from Italy, as temporary migrants and vulnerable category, were asked even personal background information to frame their working and living context (Morris 2018).

These also followed a clear, logical order. Earlier questions were introductory and non-threatening to build trust (themes 3 to 5), following more challenging or complex ones (themes 6 to 10) (Morris 2018; Roulston 2012). Initial themes were purely contextual and drafted to understand better how migrants from Italy felt about their lives and work in Australia and in the gig economy specifically. Once the questions about the gig economy started, the next themes looked at the range of harms that may have possibly occurred in the gig economy and, finally, if they felt that the gig companies or the Australian Government had institutionalised any protections.

The interview was recorded, and I personally transcribed the responses on the interview guide (Schensul 2012). The maximum time for each interview was one hour, chosen to consider any possible technical faults like bandwidth issues or give the participant time to feel comfortable. The actual duration of the interviews was around 30 to 40 minutes.

To ensure that the environment was relaxed, a more conversational approach was taken with participants, probing participants to elaborate on answers in the manner they preferred instead of dominating or demanding responses (Ayres 2012b; Roe 2011; Roulston 2012). A neutral stance was always maintained in case of excessively confidential data that may have impacted the analysis (Anderson-Knott 2011). This final point was important in the context of reflexivity between migrants from Italy and me to maintain objectivity in the final report of the findings. Neutrality was equally important to avoid any influence on the participant's responses, interviewer effects, and measurement error/biased data (Carter 2011; Kreuter 2011).

These were not always errors that could be corrected, but a strategy to minimise them was crosschecking responses with the online survey (Carter 2011). Although used for a different purpose, some questions mimicked the interviews to reduce any error or biased data. Probing and active listening techniques were tested to include paraphrasing information to check their correctness, reflecting on content from non-verbal channels, the capacity of summarising and transitioning to a different theme, and examining perceptions (Ayres 2012a).

4.5 The information kit: from creating trust to managing personal relationships

To appropriately collect data and attain participants' informed consent, an *information kit* that included an Information Sheet and a Consent Form was drafted based on a model provided by Flinders University. This was similar for both gig workers and other stakeholders. For recent migrants from Italy, the information kit was personally translated into Italian.

The value and importance of the research to create new knowledge were presented in the Information Sheet, explaining that the findings would be reported and disseminated through conferences and different publications (Haggerty 2012; Ogden 2012k). Further details included the tools adopted in the study, the commitment to protect their confidentiality and the risk of harm was minimal (Ogden 2012g). To protect the participant's identity, no identifying data would be used, and their identities were hidden using pseudonyms (Blumberg 2011; Ogden 2012i). Participation was voluntary, and participants could withdraw at all stages of the research. No incentives, like tokens or gifts, were promised (Hogan 2011).

The content of the study in the information kit presented two possible challenges: deception and over-rapport with migrants from Italy. Deceiving participants from the full nature of the study violates the right of informed consent (O'Neill 2012). The fear was the chance of creating distress due to the sensitive nature of the questions on harm and inducing participants to avoid disclosing or participating in the study. To overcome the issue of deception, the participants were asked to provide both positive and negative experiences about their work in the gig economy. This would include harmful instances but using care with language (Canning & Tombs 2021, pp. 117-9).

Over-rapport with the participants was the second issue. By sharing the same cultural background, it can be easy to create connections between participants and myself to the detriment of the research (Ballinger 2012) or even to induce the Ethical Board to believe there is a conflict of interest. While a strong bond with participants could allow the collection of valuable data, it would also trigger the disclosure of information that could not be reported or a gentle attitude mistaken for friendship or something more (McGinn 2012).

To maintain a distance and ongoing reflexivity of the role as an investigator and avoid any conflict of interest, the following strategies were implemented:

- On a *theoretical side*, the study would give a voice to migrants from Italy, but participants were broadly presented as gig workers and other stakeholders when describing harmful behaviours of the gig companies with a distant and respectful relationship, particularly when collecting qualitative data. In addition, there was a clear power imbalance between participants and myself through critical scholarship (McGinn 2012) and in my role was an

advocate for gig workers through a meaningful relationship to critique the issues of social harm.

- All *pre-existing relationships* were carefully tailored to ensure that migrants from Italy participated voluntarily by providing their consent without any pressure and ensuring that the information disclosed was solely for the benefit of the research and not based on a pre-existing bond (McGinn 2012).

All *data collection methods* were to be online to maintain the distance from the participants. It was also a preferred method to avoid personal contact due to the COVID-19 pandemic and the impossibility of travelling in other Australian jurisdictions and overseas.

These were all presented to the Flinders' Ethical Board Review, which provided its clearance.

4.6 Ethical approval

The method outlined above was approved by the Flinders University Ethics Committee in September 2020, and recruitment continued until August 2021. In all three methods of data collection, the ethical issues were anticipated and dealt with care, given the presence of questions of harm that could create discomfort, embarrassment or violation of privacy and confidentiality (Ogden 2012e).

4.7 Presentation and analysis of data

A thematic analysis will be the strategy adopted to present and analyse the data in the following chapter (Evers & Staa 2012).

Data collected were integrated and interpreted comparatively to discover common aspects, tendencies, and differences (Flick 2019b) to find the range of harms affecting gig workers. However, using mixed methods will require some attention when linking qualitative and quantitative data (Flick 2019a).

The data were then generalised. Triangulation was crucial for the generalisation process, particularly due to the single case approach (Flick 2019b) that was chosen to test and apply zemiological principles. Flick (2019b) recommends using the following steps to generalise the case:

- clarification of the question and level of generalisation of the single case

- use and analysis of different empirical contexts to generalise the result to be linked with the sample and the theoretical principles, which will become the strategy or conditions that apply to the phenomenon in the broadest way possible
- systemic comparisons with the material through triangulation of qualitative and quantitative data to show how knowledge can transfer from different methods.

These steps were crucial in the discussion chapters and were applied accordingly.

4.8 Recruitment of participants

The starting point of this research was to identify gig workers and relevant posts that discussed harm and recruit migrants from Italy who were working or worked in the Australian gig economy. Any other possible stakeholders to provide necessary data to identify harm instances and are willing to contribute to the study (Ogden 2012g). Gig companies were not included due to the difficulty in contacting them from the early stages of the research, a possible tactic they adopted to evade scrutiny (Canning & Tombs 2021, p. 128).

Dissemination and recruitment of participants were done via Facebook by posting the content of the study on Italian–Australian Facebook groups and recruiting migrants from Italy that were willing to respond to the online survey and the interviews.⁴⁵ The post included information about the study and links to the online survey and the semistructured interview. It also encouraged sharing the post and links as a snowball sampling strategy to reach those who did not have access to Facebook (Roberts 2014). In addition, a website was created through Google Sites to provide more information about the study. The website contained information about the study in Italian and English and links to the online survey and semistructured interview, including the information kit.⁴⁶

Snowball sampling was conducted through Facebook but was not limited to social media. Dissemination of the study occurred through SBS Italian in Melbourne, Radio Italia Uno and the Italian Consulate, both located in Adelaide, without success. More ethically complex was, instead, direct recruitment. As in all types of research, online consent was required to avoid any sense of social pressure or obligation (Ditchfield & Meredith 2018). The participants were contacted privately and provided with the information kit that included the information sheet and the consent form.⁴⁷

⁴⁵ See Appendix 9.

⁴⁶ The website was accessible here <https://sites.google.com/view/gig-economy-ita-au/home>

⁴⁷ See Appendices 1, 2, 3, 4 and 5.

The study reviewed over 300 gig workers postings between original posts and gig workers' comments to the posts from a range of Facebook groups of gig workers in Australia. Among these, 245 original posts and their comments were included in the study as they presented experiences of harm sustained by gig workers and altered the identity of the authors, indicating a post number and the gender of who posted and who commented on that post. Wordings were paraphrased to represent the issue without linking the post to the original person.

The content was analysed based on the facts reported by the gig worker who initially published the post on the Facebook group to identify if the person was suffering any type of harm. The analysis then continued with the comments to the original post and investigate if others were confirming to have sustained a harm, which could be physical, financial or psychological based on the categories described in Chapters Two and Three, or even offering a solution to that harm.

These posts constituted a strong pool of gig workers recruitable for this study. Participants for the online survey and the interviews were recruited via Facebook by posting the content of the study or directly through private messaging and providing them with the information kit.

Italian migrants were recruited for the study if they fulfilled the following criteria:

- They had a job of any kind in the gig economy. This included any gig company in food delivery services (Uber Eats, Deliveroo, etc.), transport services (Uber, Ola, DiDi, etc.) or personal services (Airtasker, Mable, etc.).
- They were in Australia on a temporary visa, particularly a working holiday or student visa, when they worked in the gig economy.

Stakeholders included unions, political bodies and other businesses that challenged gig companies and defended gig workers from harm. Regarding the stakeholders, a list was drawn from the range of submissions to the governments of Victoria, New South Wales and the Commonwealth (Commonwealth Senate 2020; Parliament of New South Wales 2020; The State of Victoria 2020). Seeking information from stakeholders aimed to gain different but in-depth information and perspectives (Ogden 2012f).

No guidelines were developed in determining these inclusion criteria (Eide 2012). The decision was made based on information available in the existing literature that indicated that most gig workers are temporary migrants, mostly on working holiday and student visas, and the companies they were working for (e.g. Goods, Veen & Barratt 2019; The State of Victoria 2020). Stakeholders were all contacted via email, but only the TWU accepted the invite to participate.

4.9 Demographics of participants

For the netnography approach, the 245 posts were recorded in an Excel file to quantify and qualify the information they were sharing about the gig economy. The Excel file contained a sheet with the following elements in its cells: number of post, author of post (name, visa status, gender, and age), post (year, content and URL), author of comment to the post (name, visa status, gender, age), comment (content and URL), gig company mentioned, social media group where the post was published, major themes, and any further notes.

The first cells reported some demographics about the author of the post, including disclosed name, visa status, age and gender. These were followed by those who commented. Unfortunately, it was not always possible to collect exactly the demographic data of each user due to the lack of disclosure of given information from their profiles. For example, some did not use their real name or a real profile picture, so the data presented some limitations. Other details, such as the group of belonging, are omitted here to protect the privacy of each gig worker.

The date and year of the post were crucial to evaluate the kind of queries pre-pandemic and during the COVID-19 pandemic, as the gig economy in Australia surged significantly when states and territories imposed their lockdown measures.

The content of the posts and comments constituted the core of their queries and the elements of netnographic observation and analysis to evaluate the incidence of harm among gig workers in Australia. Each post and comment had hyperlinks copied into the sheet for future reference. The content of posts and comments were integrated with the relevant gig company and the location. This provided the information to identify which company was involved in the harm and in which city of Australia.

The major themes were finally evaluated with some further notes. Within each post, one or more themes emerged from the circumstances in which harm occurred and the intersection with autonomy. These themes were grouped into broader categories of harm, which often intersected and included various harms in one instance. Each of these broad categories includes a series of instances of harm or risk of harm and how gig workers express their autonomy to minimise the consequences of the outcomes.

Netnographic data was paraphrased and presented as an image, as shown in post n33.



Post N033, Male
2020 · 🌐

UberEats: what is a rider? And what means of transport should you use?

Uber Eats is the food delivery platform owned by Uber, currently the market leader in Australia together with Deliveroo (with the difference, compared to the latter, that it does not require the aspiring rider to have an ABN).

In order to deliver with Uber Eats, you can choose between a bicycle - normal or electric at your discretion - a scooter / motorbike or a car. In this guide we will focus on the first option: for reasons of speed, especially if you live near the beaches with many hills, we recommend an e-bike. Usually these are rented by private individuals or specialised shops for a price that varies between 70 and 90 dollars per week.

Another option could be its purchase, but you will need to have a decent budget to invest (moreover in this case any breakdown of the bicycle will be at your expense).



Like



Comment



Share



Write a comment...



The data was aggregated with the online survey and interviews with migrants from Italy who worked in the gig economy at some stage (see

Table 0.1). More than 130 gig workers were privately contacted on Facebook and invited to participate. Unfortunately, notwithstanding multiple attempts, only 14 participated in the study. The reasons were unclear. Overall, there was a strong reluctance to share their experiences in the gig economy. Such reluctance could have been related to gig work in breach of some visa conditions.⁴⁸

Among the total number of participants, 11 participated in the online survey and three in the interviews, for an aggregated result of 14 respondents. It is not clear whether those who were interviewed also participated in the survey. In addition, one representative of the TWU was interviewed as a stakeholder. Other unions like We Are Union, the Australian Services Union (ASU), UnionsNSW, the Australian Council of Trade Unions (ACTU), insurance company Hustle by Coverhero, and Italian migration agency as Atlas Migration were all contacted via email as stakeholders. They were chosen based on their involvement with the gig economy. Unfortunately, none of them replied to the email.

⁴⁸ During direct recruitment, one person stated, 'I will complete the survey but not the interview', while another simply said, 'All I will say is that [the gig economy] is not worth it'.

Table 4.1: Survey responses

Respondent number (N)	Gender	Age range	Current visa	Working period	Location of gig work	Name of gig company	Data collection method
1	M	31–40	Sponsor	Between 2016 and 2020	NSW	Uber Eats Deliveroo Airtasker	Online survey
2	N/A	20–30	N/A	January to February 2018	NSW	Uber Eats Deliveroo	Online survey
3	M	31–40	Sponsor (short term)	N/A	NSW	Uber Eats Deliveroo Airtasker	Online survey
4	M	20–30	Student visa	2019 to 2020	NSW	Uber Eats Deliveroo	Online survey
5	M	20–30	N/A	2018	QLD	Uber Eats	Online survey
6	F	31–40	Student visa	The past few years until 2020	QLD	Uber Eats DoorDash	Online survey
7	M	20–30	Working Holiday visa	2020	VIC	Deliveroo	Online survey
8	F	31–40	Student visa	March 2020	QLD	Uber Eats	Online survey
9	M	20–30	Working holiday visa	January to May 2021	QLD	Uber Eats	Online survey
10	F	20–30	Working holiday visa	N/A	NSW	Deliveroo	Online survey

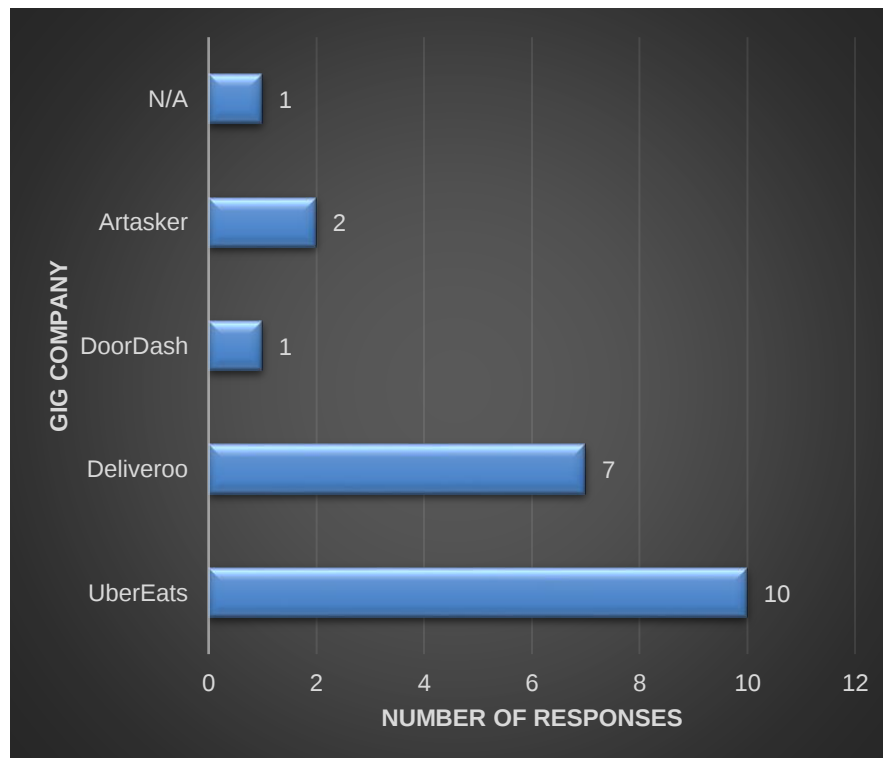
Respondent number (N)	Gender	Age range	Current visa	Working period	Location of gig work	Name of gig company	Data collection method
11	F	20–30	Working holiday visa	October 2020 to July 2021	QLD	Uber Eats	Online survey
12	M	20–30	Working holiday visa	N/A	VIC	N/A	Interview
13	M	20–30	Postgraduate visa	N/A	QLD	Uber Eats	Interview
14	M	31–40	Partner visa	2017–2019	NSW	Deliveroo	Interview
15 (TWU)	N/A	N/A	N/A	N/A	N/A	N/A	Interview

The online survey and the interviews indicated a higher participation rate of men ($n = 9$ or 64%) compared to women ($n = 4$ or 29%), while one respondent did not disclose their gender (7%). The highest age range was the 20–30 years range ($n = 9$ or 64%), followed by the 31–40 years range ($n = 5$ or 36%). Among the respondents, the majority were on a WHV ($n = 5$ or 36%), followed by a student visa ($n = 3$ or 25%). Four respondents (29%) were on sponsorships, partner visas or postgraduate visas. Two respondents (14%) did not disclose their visa status. Respondents worked in the gig economy for a period commencing from 2016 to 2021, with only two working at the time this study was conducted. The majority were gig workers in 2020. The states in which they work for gig companies were New South Wales ($n = 6$ or 43%), Queensland ($n = 6$ or 43%) and Victoria ($n = 2$ or 14%). No other states or territories were reported.

Among respondents to the online survey, there was a stronger interest towards food delivery services, confirming the Australian National Survey on the gig economy commissioned and published in 2020 (Smith et al. 2021, p. 2; upcover 2020b, p. 4). Thanks to multi-apping, gig workers were able to work for one or more gig companies (see

Figure 0.1). Most of them worked for Uber Eats ($n = 10$), followed by Deliveroo ($n = 7$) and Airtasker ($n = 2$). One respondent worked for DoorDash, while another did not indicate any.

Figure 4.1: Gig companies that employed gig workers



Some barriers existed when deciding to work with Uber, and this may be one of the reasons why there seemed to be a preference for delivery services.

-  **Post N004, Male** To be an Uber driver you must have a Victorian driver's licence for at least one year
[Like](#) · [Reply](#) ·
-  **Post N010, Male** Passport, car insurance, police check, and driver's history
[Like](#) · [Reply](#) ·
-  **Post N070, Male** I went to their office. The car must be 4 doors and not older than 10 years. But the problem is the driving licence... that is, you have to convert it into an Australian driving license, about \$80 and after 1 year that you have the Australian driving licence you can start
[Like](#) · [Reply](#) ·

Uber requires specific car requirements, while Victoria legally prevents any worker from becoming a driver if they have not converted their foreign driver's licence into an Australian licence and must possess an Australian driver's licence for at least one year.

Chapter conclusion

The chapter illustrated the methodology for collecting data in this study. This resulted from the disruptions caused by several months of restrictions imposed during the early stages of the COVID-19 pandemic and Australia's vast geographical distances.

To minimise the problems that arose, triangulation of netnography, an online survey and interviews into a substantive dataset was adopted to build a case study of harm among gig workers in Australia. All methods were chosen to minimise any risk of harm and were approved by Flinders University. They were tailored carefully and explained in detail in the chapter, devoting parts of it to the ethical appropriateness of the methodological triangulation.

This chapter provided the process of recruitment of participants and some demographic data to present the context of the results, which are illustrated in the next chapter as one consistent dataset on harm sustained by gig workers.

CHAPTER FIVE: RESULTS

Chapter introduction

Chapter Four illustrated the methodology used by this thesis to collect data, which was triangulation of netnography, an online survey and semistructured interviews. Data collected, including quantitative and qualitative responses, is reported in this chapter and presented in two major themes: *direct control* of the gig company and *indirect control* of the algorithm. These are derived from the empirical results from the triangulation of the data collected that this Chapter will illustrate and not from the elements of the gig economy (autonomy, flexibility and algorithmic control) which are rooted in the literature presented in Chapter One. This change follows the scope of the thesis to provide contribute to the existing body of knowledge by presenting novel thematic findings on harm or expanding those that already exist.

These two major themes are divided into subthemes that emerged in the process of analysis of harm that were sustained by gig workers during the acceptance, completion and termination of their tasks. A final theme concerns the responses to harms provided by participants and what solution they suggested based on their experiences.

Harms reported in this chapter present the graphic representation of relevant Facebook posts and comments as a visual representation of their conversations on harm. This chapter also includes relevant charts and graphics for the relevant harm. Although the number of participants is very small to represent their responses with percentages, it still offers a visual representation of the trends that the empirical data has identified.

5.1 Direct and indirect control in the gig economy

According to the TWU, the source of harm depends on the way control is expressed:

“There are two ways to think of *control*:

- Direct control, which is done unilaterally by setting terms and conditions: when, where, how to work, setting performance standards and metrics;
- Indirect control, through the algorithm.

Gig companies say they do not have control over the workers by they really decide the rules of the game”.

(TWU)

The types of control find their origin in the gig company, which, according to the TWU, directly controls through the contracts and indirectly through the algorithm.

One respondent specifically explained direct control through their personal experience with a gig company and its contractual terms. First, it seemed that human operators were not even located in Australia:

“I emailed to ask if we have to sign the contract, if we don’t have to sign it, and the answers were always standard - who knows where these people were, because they hardly spoke English...”

(Respondent n14)

Direct control was evident in the manner contracts were unilaterally drafted, forcing gig workers to sign them if they wanted to continue to work:

“They forced you to sign the contract and accept the terms. They sent an email with the new contract and said, ‘if you accept, continue working otherwise bye’.”

(Respondent n14)

"[The contracts were] mainly one-sided. And then they sent it to you by e-mail and you had to sign it. The third contract I signed they took away the guarantee. So, at that point they paid \$9 for delivery if you were on the bike (I did it on a bike) and that's it. If you complete the order, you will get \$9 otherwise you would not earn. So, I started doing it at lunch and dinner because it was peak time where money was made."

(Respondent n14)

In addition, contracts were regularly changed to negatively affect gig workers:

"Every time they changed the contract, obviously always for the worse with less pay until at some point with the third contract I signed. And when I say contract, it's not that they offered you the contract, either you agreed to it, or you didn't work."

(Respondent n14)

Respondent n14 signed four unilateral contracts during his work in the gig economy. He stated the most current contract for delivery workers at the time of the interview. Such terms introduced a complex mechanism of distant-based fares:

"They imposed different contracts, their fourth contract paid you even less, they started to implement this system which was 'distance-based'. If the distance was close, they paid you \$7-\$7.20. They pay you per km + one order, a very complicated thing that you didn't understand: when you took an order, you didn't understand how much you were earning. And they forced people to sign this contract, and it is this contract that most people are with now that is this distance-based: if it's 5km you get more, if it's 1km you get less."

(Respondent n14)

Contractual clauses were always disadvantageous to gig workers, with control standards and metrics clearly established by the gig company. This was confirmed by respondent n14, who also exemplified how indirect control was manifested through algorithmic deactivation of the accounts:

“Ah, yes, there were things like, I don’t know, that you had to deliver on time, that you couldn’t refuse a number of orders, if you were too slow, they would send you messages, if they sent you too many messages that you were slow, or you lost your food, or an accident, anything as they say, they could deactivate your account and deactivate it overnight.

They send an email and say, ‘in 7 days we will deactivate your account’. And this was what has happened.

There was no possibility of discussion, of arguments, they did not provide evidence whether you were slow or fast, the algorithm was all secret, the data secret, they didn’t tell you anything, but only ‘You were slow in our opinion’. Stop.”

(Respondent n14)

Such a decrease was particularly harmful to gig workers, who depended on the income of the gig economy:

“The gig companies argue that income is not important to the workers – that is their position. Workers depend on it. [...] They may choose to log on and off, but they still may stay on at certain times if they wish to work. Otherwise, their choice is to accept or not a job, but likely they will. Workers do not have any bargaining power and they are effectively controlled.”

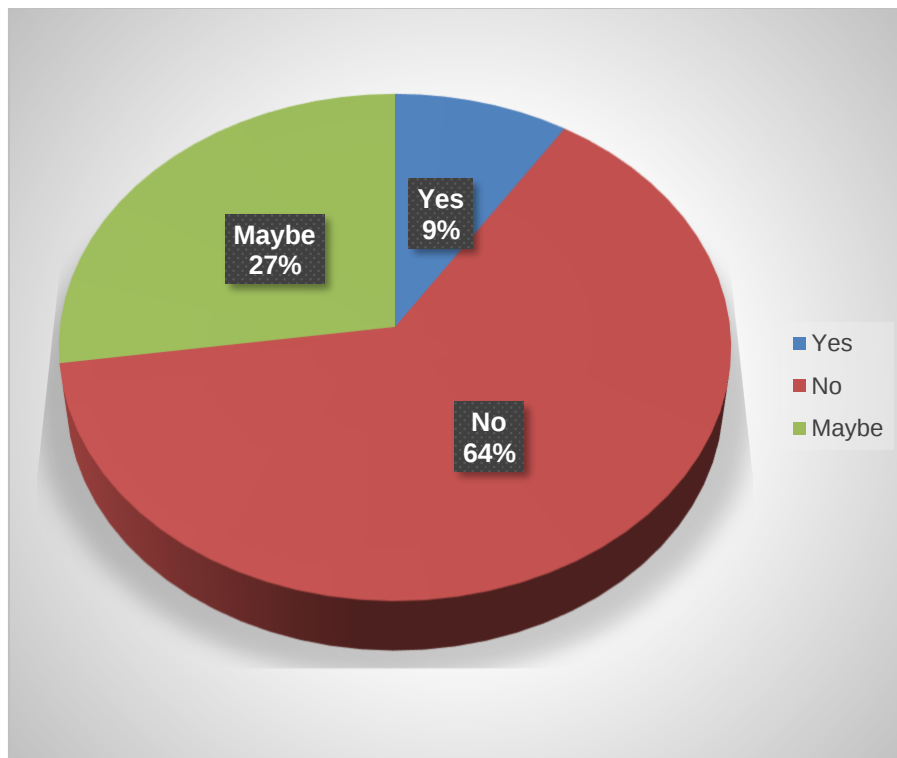
(TWU)

“You are bound to always go to the same days at work, you can’t decide when to go to work: maybe tomorrow I have the exam and what do I do, don’t I go to work? No, go anyway! Because otherwise you will lose your job.”

(Respondent n13)

Responses found the contractual clauses the source of control, but direct and indirect, over gig workers. Hence, strong scepticism was manifested towards gig companies, confirmed in the online survey when gig workers were asked if they felt protected by the gig company (see Figure **0.1**).

Figure 5.1: The proportion of gig workers who feel protected by the gig company



Respondents were highly critical towards the gig companies for which they worked. When asked if they felt supported by those companies, the majority said NO ($n = 7$ or 64%), three said MAYBE (27%) and one responded YES (9%).

5.2 Direct control: gig company harm

As stated above, direct control of gig companies finds its source in the contractual agreements drafted unilaterally and imposed on workers to progressively reduce their rights. While some clear examples related to earnings and financial harm, the triangulated data discovered a range of different harms that affected gig workers. These were collected and presented in major themes.

5.2.1 Absence of compensation for damages

The model implemented by the contracts attributed all burdens on gig workers and shifted the responsibility for harm away from gig companies. A common occurrence representing this shift was accidents to people or personal equipment caused by third parties. For example, riders may have had the means of transport stolen or damaged. Costs associated were not covered by the gig company. It is then on the gig worker to make repairs and continue to work:

"I already lived in Fortitude Valley, which was like King's Cross in Sydney, so it wasn't exactly the best. On Friday evenings, Saturday after 8-9pm, even if you have a scooter, you don't know if one might come and will ruin it, or something like that. Yeah, especially the pickup in those areas."

(Respondent n13)



Post N087, Male

2019 · 🌐

Hello guys. I need your help.

I arrived in Melbourne last Monday. I left Sydney by bike and after 1400 km and 2 weeks reached the city. The first week in Melbourne was awful. Bike stolen after 3 days; 2 hostels changed; minor accident with a car; I probably had bugs in my bed and I was itchy in several places.

On Friday I got a second-hand bike and on Saturday in the middle of rain and wind I punctured BOTH tires at the same time 100m from the hostel.

After fixing them I went back working for UberEats like I used to in Sydney. This morning I leave the hostel to get my bike and... they stole a wheel.

At the moment I don't have a penny (I'm waiting for the salary from UbeEats that, if God wants, will arrive between 6 and 7 tonight BUT I'm not sure (because for the first time I have not received the pay statement, always received on Mondays) and having a bike is essential for me. Anyone has a racing bike wheel (size 25) to lend me for a few days please?

Thank you so much guys.



Like



Comment



Share



Write a comment...



In Airtasker, where the Tasker and the Poster negotiated prices, gig workers might see their work not paid by the client, suffering financial harm:



Post N352, Female

2021 · 🌐

A Poster is not responding to me and not releasing the funds. What can I do?



Post N352.6, Female I had the same problem. Poster finding excuses not to pay me, saying he was busy or not at home on his computer. He said he was happy with the result, but 5 days later he cancelled the post. I reported it to Airtasker and went to a dispute. He then claimed he was not happy about it and didn't want to pay. However, I had screenshots of our conversations so he was then forced to pay

[Like](#) · [Reply](#) ·



Write a comment...



Post N351.2, Female I did a job some time ago for a lady, an infographic project. After the bid, she said she would pay me more for a second one. I did the first task and she was happy. So I left the task open for her to put the extra amount. But then she requested a change, so I waited. She never got back to me. I contacted Airtasker and they also failed to get in contact with her.

[Like](#) · [Reply](#) ·

Some Taskers would purposely work underpaid and create significant unfair competition among gig workers:



Post N367, Male

2021 · 🌐

This Tasker completed puppy transfers for around \$15 per hour. The Poster advertised it for \$120, but take out vehicle, tax, tolls, etc. They are making it hard for everyone else, with these prices



Post N367.1, Male A typical new Tasker undercutting others to get her ratings up!

[Like](#) · [Reply](#) ·



Write a comment...





Post N364, Male

2021 · 🌐

Here is another cheap job so no one can compete: \$50, which then becomes \$40 by taking off Airtasker fees and GST, then 20% business tax (\$10), box of wall plugs (\$8), fuel (\$5), and ultimately earn \$17 for 1.5 hours plus travel. Desperate and stupid I would say...



Like



Comment



Share



Post N364.1, Male Probably a new Tasker who is trying to create his own network and reputation. That means you have to start with cheap fees. Do you think elsewhere is better?

Like · Reply ·



Post N364, Male ✓ No, I know same bad stories

Like · Reply ·



Post N364.3, Male A Tasker then asked for \$86

Like · Reply ·



Post N364, Male ✓ That was me who asked \$86. I want an earning of \$50 once finish. I don't undercut my work and time for a new client. If you do so, then the client will always expect special rates

Like · Reply ·



Write a comment...



While the main scope with Airtasker is the negotiation of prices and bids, such approaches from certain Taskers were 'self-inflicting' financial harm that limited Taskers' ability to negotiate prices. Consequently, only underpaid Taskers would work, while others would be without an income with the permission or absence of proper management of the platform.

While platforms often caused financial harm, in food delivery and transport services, clients or restaurants would cause damages that were covered by the gig worker:



Post N367, Unknown

2021 · 🌐

After 1760 trips, a driver's nightmare occurred to me... A passenger vomited in my car. I stopped once I saw him sick. He continued to vomit, while I tried to clean with what I had. Didn't clean much. I got him home, with that horrid smell. Clearly they were not concerned about ruining me or my car, but only about the cost of cleaning. The platform only provided \$80 to clean it

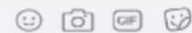


Post N374.4, Unknown For those things, I asked Uber \$160 as if it was a serious damage (that is what they pay). It was hard to negotiate it though

[Like](#) · [Reply](#) ·



Write a comment...



Post N345, Male

2021 · 🌐

I had a customer vomit in my car while driving for DiDi. I sent DiDi the photos of the car, they asked the receipt (happened at 8pm) and being a public holiday the day after, I had to clean the car myself because everything was closed. Since I cleaned it, DiDi said they cannot compensate me for a cleaning fee. I now do not trust DiDi and do not feel safe. Please avoid them.



Post N345.1, Male Uber only gives you \$80 but you have 5 hours to clean it

[Like](#) · [Reply](#) ·



Write a comment...



Gig workers had no opportunity to claim compensation, nor shift responsibility on any party, although some minimal compensation for cleaning cars existed. The risks for these workers included loss of income and feeling unsafe in the case of the DiDi driver.

5.2.2 Absence of training and exposure to physical harm: alcohol delivery and insurance

Safety courses were offered in the past but have been progressively abolished:

"I applied and, at first, I remember that I had to take a course that is no longer done now. But I had to take a safety course, where they took you on the road with the bike, there were quizzes you had to take. All stuff that's been cancelled. In the beginning it was like this. They took you with another rider to see if you could ride the bike, if you followed the rules of the road, all stuff that no longer exists."

(Respondent n14)

A lack of training and proper information exposed workers to physical harm. In the case of alcohol delivery, if a customer was intoxicated, avoiding being assaulted depended on the judgement and autonomy of the worker:



Post N324, Male
2020 · 🌐

I recently got in contact with Uber and said that we deserve a higher pay for alcohol deliveries. I said that we have a higher responsibility in these cases as we also are doing extra checks



Like



Comment



Share



Post N324.1, Male Can you tell me more about it? Where di you do it?

Like · Reply ·



Post n324, Male ✓ I do it in Melbourne. It is a choice if you want to do it. All you have to do is to check if they are sober, then ask ID, record their date of birth and make them sign. But we don't get paid for these extra things

Like · Reply ·



Post n324.2, Male Do you need to have a Responsible Service of Alcohol (RSA) certificate? And what if they are not sober?

Like · Reply ·



Post n324, Male ✓ Politely refuse to give them the alcohol and tell them it's the law, and then return the delivery to the shop. But they can get mad so be careful. Risky, especially at night. I do it only during the day, never had problems.

Like · Reply ·



Post n324.3, Male If you don't have the RSA, you are committing a criminal offence. You cannot provide alcohol to customers without it. Let's say they do something caused by the alcohol you delivered and you get mentioned, you are liable. Not Uber, not the store. You because you served it without RSA and you will go to jail. Uber will never tell you this, they don't care.

Like · Reply ·



Post n324, Male ✓ If something happens to that person, you are alone. Uber nor the store will be liable because they did not serve the alcohol and could not make a judgment about the customer's level of intoxication. I was told that each state may have different laws. Now, I will ring and ask. What is concerning is that Uber relies on common sense. I know how to recognise an intoxicated person, but maybe someone will not. But that is one risk. If they are clearly drunk, then there is another risk.

Like · Reply ·



Write a comment...



A way for gig workers to minimise the risk of harm and exercise some limited autonomy is through a stipulation of personal insurance premiums. In post n307, a rider for Uber Eats asked which type of insurance company was used by others. Responses included companies like Suncorp, NRMA, RACV, SGIC or upcover.

For those who did not have an insurance company, the process of seeking compensation for injuries was not always straightforward. A respondent stated that:

“If you have accidents and prove the fact with medical certificates, Uber pays you the same.”

(Respondent n9)

However, there are legal and technical barriers, especially for non-English speaking migrants, that prevent gig workers from seeking compensation through gig companies:

“In the end, it is always complicated, they use insurances that suck, a thousand tests, they make it super-complicated, they take advantage of people who do not speak English. Yes, you can access the insurance if you are working, you must be connected to the app, you must be placing an order. It’s not easy. There are a lot of limits. It is not easy for someone who is not a lawyer to access that insurance. It almost always ends up that someone must help them ask the question.”

(Respondent n14)

Such insurance provides very little compensation:

“It is an insurance that they do not give you anything eh.... They’ll tell you an average of what you’ve earned in the last 7 days for just 30 days... eh.... It’s not when you get hurt at your job that they keep paying you normal. It’s worse...”

(Respondent n14)



Post N326, Male

2020 · 🌐

I broke my arm while on my bike (slipped while it was raining). Can I get insurance compensation?



Like



Comment



Share



Post N326.2, Male All drivers should be insured with a coverage of 39 days of lost income, written by a doctor that specifies they cannot work. It's around \$150 a day. However, they are not responsible for vehicle damages

[Like](#) · [Reply](#) ·



Post n326.3, Male This is what will happen. Uber will not let you down. It paid me \$3600 for the two weeks I could not work. It's on Uber's insurance policy. Even if it is a bad company, if you were doing a delivery or completed one within 15 minutes from the accident, you will get paid, including a lump sum of \$1500 if you went to hospital.

[Like](#) · [Reply](#) ·



Post n326, Male ✓ My case is 'temporary total disability'. I will get \$150 per day, for a maximum of 30 days. I only went to hospital for some x-rays and other stuff. The rest, like anti-tetanus injections and other things, to my GP

[Like](#) · [Reply](#) ·



Write a comment...





Post N343, Male

2019 · 🌐

In cases of loss of income, does Uber have insurance and, if yes, how can we make a claim?



Like



Comment



Share



Post N343.1, Male No, it is not possible because you are not an employee

Like · Reply ·



Post N343.2, Female Seek help from a Union or media

Like · Reply ·



Post N343.3, Male Uber's support is not based in Australia, it is only an Australian initiative. There is no car insurance while if you are injured, you must go through Chubb. A very basic claim for injury lasts 30 days if you can prove that you are injured and that you cannot work. Such claim requires an injury within 15 minutes from your order. Otherwise you are not covered. You also must report it right away. The max you will get is \$150 a day. That also changes depending how much you driver. You may also get just as \$10 a day if don't driver full time

Like · Reply ·



Write a comment...





Post N74, Male
2019 · 🌐

Hello to all, last night I had a bike accident while I was making deliveries for UberEats. I was walking down the bike lane and a parked car opened the door and hit me right in the face. The police arrived immediately and then called the ambulance. The bike was smashed and at the hospital they gave me a card that says I can't work for 7 days. Can someone advise me what to do? I have Medicare and I also have my own insurance. Uber is not liable for any damage. The second question is: since the hospital they gave me a card that i cannot work for 7 days and I have another job under a casual contract but i had days rostered for this week that I will not be able to do, I am entitled to compensation or something?



Like



Comment



Share



Post N74.2, Male You have to get insurance compensation from the person who caused the damage. With a casual contract you are not entitled to illness compensation, but you are entitled to an accident at work. However, you cannot claim it because you are not injured in the office where you work with a casual contract but on the street, so the only thing you can do is call the owner of the vehicle and do the claim

[Like](#) · [Reply](#) ·



Write a comment...



In Airtasker, the insurance claims can even be more complex to manage than in Uber. Taskers are often liable for damages, and the insurance cover the Airtasker provided is insufficient or has significant limitations for Taskers:



Post N349, Female
2021 · 🌐

Hello, a segway I was transporting for a Poster got damaged and the Poster is asking \$2300 in damages. Also, Airtasker claims it is not responsible but is withholding my delivery fees. Can you help me, please?



Like



Comment



Share



Post N349.2, Male The Poster should go to Airtasker as per contract. Then Airtasker will investigate, contact you and then make a claim or confirm the Poster's request for damages

[Like](#) · [Reply](#) ·



Post N349.9, Male You damaged it, you pay it. If you have insurance, it will cover it

[Like](#) · [Reply](#) ·



Write a comment...





Post N350, Male

2021 · 🌐

For your information, any damages for items valued under \$2500 are not covered under Airtasker insurance. A scam! They say we are covered but are not. Be careful



Like



Comment



Share



Post N350.1, Male But if you are completing tasks valued higher than you can afford to compensate, then you should have your own insurance. Airtasker cannot have a better insurance than the one you can pay for yourself

Like · Reply ·



Post N350, Male ✓ I do have my own insurance. What I am saying is that Airtasker is making a lot of money and not covering jobs valued under \$2500, which is 99% of what I do.

Like · Reply ·



Write a comment...



Not all comments were positive. Some were negatively pragmatic, claiming the Tasker should pay for the damaged item. Other posts are a mere warning for all Taskers to ensure they understand the insurance policies within the platform and are acting through their own personal insurance coverage.

5.2.3 Absence of platform support and sense of insolation

Respondents to the online survey stated they felt mostly unprotected by the gig company. This was confirmed in some posts, where riders complained they had their accounts deactivated in instances of fraud, using multiple accounts or using a fast vehicle like a motorbike instead of a bike as per rider account. In all cases, gig workers had no possibility to challenge decisions and were forced to accept that deactivation, creating a sense of abandonment:

**Post N310, Male**

2020 · 🌐

I write here on behalf of my girlfriend. She had her account deactivated because apparently she was using a car or scooter instead of a bike as per her account. This is not true. We sent photos as evidence. We tried to call, but the help line is only for drivers. Do you have a phone number to call Uber's office?



Like



Comment



Share

**Post N310.1, Male** Uber can track your speed through the app.[Like · Reply ·](#)

Post N310, Male ✓ I know but there are hills where we live, so it happens to go faster downhill, like over 30km/h. We even sent pictures of the parks she crosses to speed up the deliveries, and cars and scooter can not pass through there obviously. The app uses automatic responses, we want to speak to someone face-to-face

[Like · Reply ·](#)**Post N310.2, Female** Unfortunately, once deactivated it cannot be restored[Like · Reply ·](#)

Write a comment...

**Post N303, Female**

2020 · 🌐

I feel very abandoned by Uber as a company. My account was deactivated because they say I was going too fast. I tried to contact them (emails, social media) but they only say they will get back to me and never do. Or they say I am using a motorised vehicle, which is not true: I use a bike and I sent pictures. And when I asked "How do you know if you don't have photos?" they did not respond, or they asked for more pictures, or said that they cannot reactivate my account anymore. So terrible the way I was treated



Like



Comment



Share



Post N303.1, Female Same thing with my husband. They said he was committing a fraud because they believe multiple people were using his account. Not true and we even sent copies of failed selfies. Nothing: account deactivated and they do not respond. We want to go to the Fair Work Ombudsman. However, I don't think it will change much.

[Like · Reply ·](#)

Write a comment...



Companies induced isolation by reducing or deleting instant messaging and becoming less available:

“Platforms have led more and more towards isolation. At first, we had a Telegram channel, like WhatsApp, then they removed it. Then there was the email for the rider support and then they removed it. They made it increasingly difficult to contact the company”.

(Respondent n14)

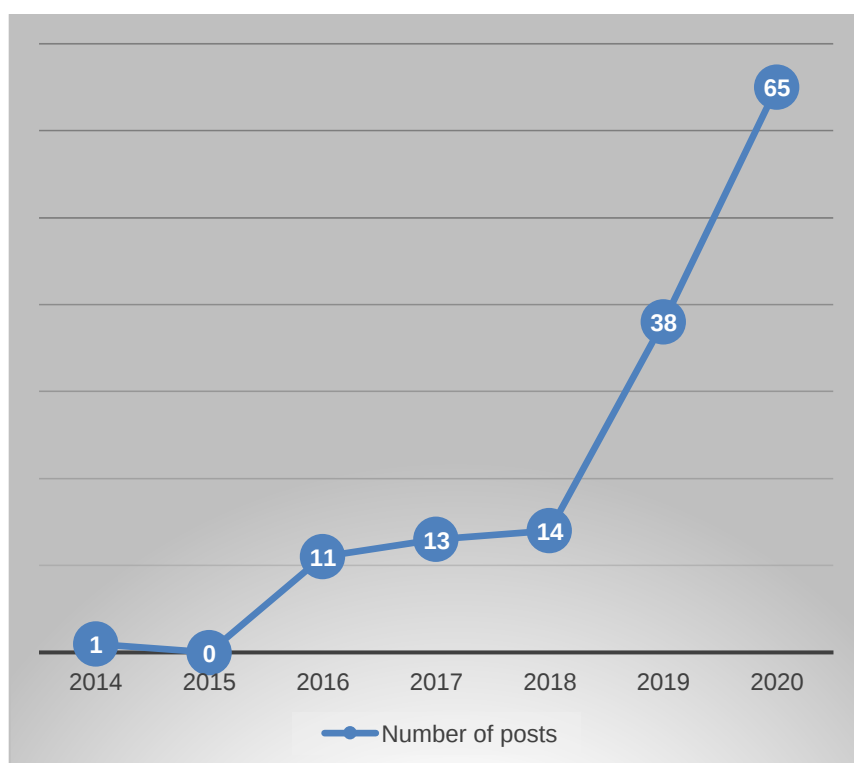
“If you try (I don’t remember now, it seemed to me I had done it, but I don’t remember why) but they always reply with those automatic answers. I had the impression that there was a human who reads the question and sends you one of the automatic answers that seems most appropriate”.

(Respondent n13)

5.2.4 COVID-19 risks and work during lockdowns

The COVID-19 pandemic has fuelled the Australian gig economy. This was evident in the netnographic analysis of posts from Italian gig workers that were collected for recruitment purposes from Italian–Australian Facebook groups. These workers were enquiring about the gig economy, with posts increasing between 2019 and 2020 by around 71% (see

Figure 5.2: The number of posts per year



The COVID-19 pandemic caused significant problems in finding jobs. Gig companies were often suggested as a haven:

“Also, during Covid it was very useful for me, as it was my only means of livelihood, while other people have been out of work for months, so I am very grateful that I was able to support myself financially thanks to this work”.

(Respondent n6)



Post N50, Female
2020 · 🌐

Hello to all, I am in a really problematic situation. I arrived in Australia on March 1st, two weeks before everything closed. I have been out of work for three months and I really need a job, I am here with a Working Holiday Visa. I am already looking on various sites but I cannot find anything. Unfortunately, I left everything back home and therefore returning is not the best option at the moment... Thank you very much



Like



Comment



Share



Post N50.1, Male I also arrived in Australia in March and have not found any work nor even the slightest employment. I bought a motorcycle and started delivering for Uber and Menulog. True, you don't earn much but having a lot of will you earn enough. On average I make \$20 an hour (pre-tax) and not having a "boss" you can work whenever you want and as long as you want. By working long hours, you realize that you make \$1300 a week.

Like · Reply ·



Write a comment...



However, a respondent highlighted the issues of limited market opportunities in Australia:

“I wouldn't have worked for Uber and Deliveroo if I had an alternative”.

(Respondent n2)

The COVID-19 pandemic created significant disruptions and confusion among gig workers when dealing with platform policies, customer requests and complaints and personal safety. At times, while seeking advice, some gig workers face insults via social media. The worker only demanded clarifications of the wording of 'door' in apartment complexes due to the high levels of risk of contracting COVID-19 and was called 'lazy' for not bringing food to the apartment door. Eventually, he had no choice but to risk contracting the virus by delivering at the apartment door:



Post N302, Male

2021 · 🌐

Hi everyone, I am new, delivering for the past 3 days. Got a problem delivering in appartments. A customer complained after I left it outside main door, not appartment door. I don't even get tips for it, why should I do it? Can you give me advice?



Like



Comment



Share



Post N302.1, Female Instead of being lazy, you should have delivered it to her door, unless she said differently. Seems you should already change job

Like · Reply ·



Post N302, Male ✓ You are very rude! It was my first appartment delivery! How am I supposed to know what is a 'door' in an appartment between main door and appartment door? Still resolved the problem by contacting her (she had bad English and did not understand me), but with Covid around I would actually avoid going inside appartments.

Like · Reply ·



Post N302.3, Male If Uber says you have to deliver at their door, then you bring it to them! Now, you make us look as lazy. You deserve to be deactivated!

Like · Reply ·



Write a comment...



Instead, in professional service platforms like Airtasker, Taskers actively questioned the appropriateness of completing tasks in the context of lockdowns:



Post N369, Male

2021 · 🌐

A Poster is asking for a lift after he attended a funeral at 00.40. A funeral in the middle of the night? With Covid-19 around? In one of the most hit areas? I reported him to Crime Stoppers



Like



Comment



Share



Post N369.1, Male Airtasker has responsiblity for not filtering tasks like this

Like · Reply ·



Write a comment...





Post N363, Male

2021 · 🌐

Now that we will go into lockdown, why are non-essential tasks being posted on Airtasker? And why would a Poster put a task if it cannot be done?



Like



Comment



Share



Post N363.1, Male Because Airtasker is only a platform with no responsibility towards job either posted or taken

[Like](#) · [Reply](#) ·



Post N363.2, Male It has zero social responsibility

[Like](#) · [Reply](#) ·



Post N363.3, Male They cannot control all posts so they still say "Your task may be impacted by Covid-19 current restrictions"

[Like](#) · [Reply](#) ·



Write a comment...



5.2.5 Sexual abuse: a gendered social harm?

Sexual abuse was presented as a female gig worker issue and did not have a clear solution other than exercising judgement and autonomy. Either customers or other gig workers caused harm to women:



Post N336, Female

2019 · 🌐

My latest story. I went to a house last week at night. It was an isolated place. I parked and went looking for the house number, but it was dark and I couldn't see. I was scared a bit. This old man comes to me and asks if I am delivering food for his step-son, which I say "Yes". He then starts telling me the step-son is single and, assuming I was single, to go inside and meet him. I said no. Hope it doesn't happen again. So ladies, just be careful when you deliver (I did it because I needed the money)



Like



Comment



Share



Post N336.1, Male The reason why ladies don't deliver at night. Very strange men around ahahah!

Like · Reply ·



Post N336, Female ✓ I had no idea what his intentions were. I was completing a 9-10 hour shift, don't even know how I was looking in the dark or how I smelt. Friends and boyfriend know where I go when I have to deliver in particular areas, or particular food (like chocolate bars and milk drinks) where drugs are highly present, but I think from now on I will tell them always.

Like · Reply ·



Post N336.2, Female I have a tracking app so my husband knows where I am. It's called Life 360 and it's free

Like · Reply ·



Post N336.3, Female Someone in this group privately requested my photos and offered money too ahaha!

Like · Reply ·



Post N336.4, Female The reason why I avoid night deliveries

Like · Reply ·



Write a comment...



There were no other similar cases reported. Nevertheless, these comments suggested that women faced further risks of being harmed as riders.

5.2.6 Verbal abuse

While abuse outside the app does not provide an indication of accountability of algorithms or gig platforms, if it occurs inside the app or platform, it is questionable if the gig company is accountable:



Post N360, Male

2019 · 🌐

Being verbally abused by a Poster after I was told to move a mirror and saying what to do, how to wrap the mirror, that if damages occur it will be taken from payment, etc. All for \$350. I said I was not going on and to look for someone else. What do you think?



Like



Comment



Share



Post N360.1, Male I had a similar experience with a lady who gave me a job and said "you break, you pay". It was also a mirror, but she did not tell me its value. It happened for me to be in the area, so went to her house to inspect this mirror. I went there and a bloke who was in the house told me she broke it while trying to move it. Apparently, I understood that she wanted me to bring it back to the mirror supplier and then claim I damaged it to get money from the insurance.

[Like](#) · [Reply](#) ·



Post N360, Male ✓ Yep. And if I had broken her mirror, she would make a claim with Airtasker insurance and I would be banned from the platform. Too many of these. I had this feeling that the mirror was already cracked and that she would point it out once delivery was ended and get me into trouble

[Like](#) · [Reply](#) ·



Post N360.2, Female Getting insulted for \$350. Better jobs out there. Poor person who accepts such tasks. And you should have asked \$400-\$500 at least.

[Like](#) · [Reply](#) ·



Write a comment...



In this post, the clash was between a Poster and a Tasker. The latter possibly tried to gain an unfair advantage over the gig worker by possibly exploiting insurance clauses and the Tasker's vulnerable status fraudulently.

5.2.7 Legal harm

Data revealed a strong correlation between legal status of gig workers and harm in the gig economy. The harms from this correlation are called in the thesis *legal harm*. In Australia, gig workers are mostly temporary migrants, particularly international students, who suffer significant vulnerability and precariousness due to their temporary status.

The gig economy and temporary migrants

Responses from the interviews provide an interesting picture of the presence of temporary migrants in the Australian gig economy. It seems that not many Australians are gig workers:

“The presence of temporary migrants varies sector by sector, but the most prevalent is the food delivery sector. Between 80%-90% are on temporary visas, mostly International Students, WHVs and Graduate Visas”.

(TWU)

“There have been Australians who have done it, but not many. I would say that 80% were international students”.

(Respondent n14)

There is a strong preference to use food delivery services, with 71% of posts specifically addressing information about Uber Eats and limitedly Deliveroo, noticing that some (11%) did to specify which food delivery platform they were working with clearly. A number of posts perceived Airtasker and Uber similarly. Such limited disclosure is evident in their visa status. Among the posters, six were working holiday visa holders and five were international students, while only two among those who commented stated they were international students.

Interestingly, the TWU explained that there is no equal distribution of temporary visas among different nationalities:

“It changes depending on the nationality. For example, Chinese are less on student visas but more on some kind of ‘extended tourist visa’ of some sort”.

(TWU)

Respondents somehow confirmed this response, indicating South Americans and Indians were the most common nationalities and there were fewer Europeans:

“They are mainly South American and Indian because their currency is poor, so app money makes them happy”.

(Respondent n12)

"If we walk here in Brisbane in Fortitude Valley you see an extermination of gig economy workers who are sitting there waiting to take a delivery. If we go to interview them, I'm sure half of them are all South American".

(Respondent n13)

"There were fewer Europeans, always enough but fewer".

(Respondent n14)

When indicating which kind of visa, instead, student visa holders were the most common gig workers in Australia before the others, mostly university students who moved to Australia to pursue a degree abroad:

"I started with that idea (to qualify in Australia), and then having a degree in my pocket to find work in Australia after my studies, if I could".

(Respondent n13)

"After the WHV I started studying, I wanted to do a master's degree that I already intended to do in Europe but then I came here and decided to do it here".

(Respondent n14)

When asked about the period of their gig work, they were gig workers while being students, approaching it early to support their expenses:

"Only during my studies".

(Respondent n13)

"They need to work (think of international students) who must pay everything and support themselves".

(TWU)

The links between international students and the gig economy were multiple and included employment and language barriers and ways to overcome visa limitations of the student visa.⁴⁹ As the final respondent stated, Australian citizens and permanent residents had a considerable advantage when finding work:

"I started going to university and I told myself that I wanted to get a job. You also know that looking for a job, for example a waiter or positions like this, is a bit easier in Sydney, in Brisbane it's not that simple. Or at least that's what I've always felt".

(Respondent n13)

"They have barriers to employment, while in the gig economy they work and earn income right away".

(TWU)

"It will be bad to say, but it will be people who struggle to find another type of job here. Here there are none. There will be an army working with those apps there. Who knows what they will bring home today ...?".

(Respondent n13)

"If I compare many people I have known who were in my situation, then I eliminate the Australians from the comparison, I have been very lucky, but very lucky, because you also know that without a permanent visa anyway if you are here for less than two or three years, English which is not exactly fantastic (you speak, explain and everything) but you understand from work as a waiter to project manager as I did there is a big difference. It is no small barrier".

(Respondent n13)

⁴⁹ Data collected occurred before the relaxation of the 20 hour per week rule for international students, when student visa holders were allowed to work longer hours legally from 2022 to 2023.

“It’s a way to get around the (student) visa restrictions because you work with ABN, so you don’t have to declare the hours you’ve worked, just the money. And, because for a lot of people it is an easier job to do, they are people who don’t speak English, most of them come here.... It is a job done by most international students who know nothing of English but for some reason they also study at the university, because here at the university if you pay money and you don’t speak English.... And so, it’s the way, the easiest job to do, that’s why they do it: you don’t have to speak, you don’t have to know English, you just have to know how to ride a bike”.

(Respondent n14)

“What people struggle to grasp is that the gig economy allows visa holders to work beyond visa restrictions”.

(TWU)

Consequently, international students were vulnerable and desperate for work and decided to work for gig companies:

“It is nearly impossible for a student to work on a student visa. They are often desperate and turn to the gig economy where they face exploitation”.

(TWU)

“This is caused by our migration system that has created workers who are incredibly precarious and vulnerable”.

(TWU)

Breach of student visas

Breach of student visas was a common problem for gig workers before the limitations were relaxed, which often had limited support from the gig worker community. There are possible and undeclared

breaches of working time capped at 20 hours per week.⁵⁰ Such fear prevents students from reacting against gig companies:

“Many are afraid of the fact that they work more than 20h, they are afraid of doing anything”.

(Respondent n14)

The DHA, according to the same respondent, has the powers to enforce visa clauses to quantify hours in the gig economy:

“You are connected, everything is registered, if you connected 10h it means that you worked 10h. There have been legal decisions that even if you stay 10h it's still work”.

(Respondent n14)

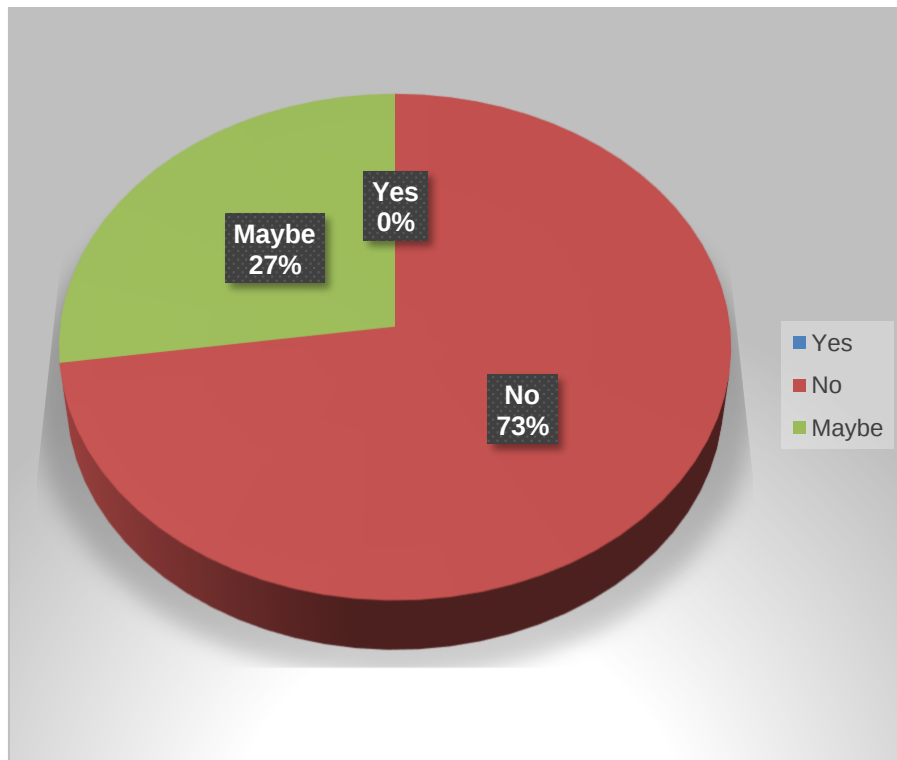
The rule is the cause of wage theft in Australia, both in the gig economy and in traditional work:

“The 20h rule is what favours the exploitation of workers in Australia, in particular in the gig economy, but I have also had experience in other jobs.”

Breaching the laws also comes from a strong delusion of gig workers towards the Australian Government. Respondents to the online survey were highly critical (see

⁵⁰ At the time of writing, the cap has been removed to face a worker shortage caused by the COVID-19 pandemic. However, from June 2023 the cap will return and allow international students to work 24 hours per week.

Figure 5.3: The proportion of gig workers who feel protected by the Australian Government



Gig workers believed the Australian Government did not offer any protections to them ($n = 8$ or 73%), while others were not sure ($n = 3$ or 27%).

5.3 Indirect control: algorithmic harm

In line with RQ2, the data collected aimed to identify how technology (the gig algorithm) harms gig workers by reducing their autonomous choices. Results from the triangulated sources suggest that technology can harm in two ways: through job allocation and deactivation of accounts.

5.3.1 Theory of job allocations

Riders suggested a theory that job allocation was based on three factors: (1) good ratings from a specific restaurant would increase requests from that restaurant, (2) the type of vehicle, with a preference towards motorbikes over cars, and (3) preference over new riders in the first few weeks:



Post N315, Male

2020 · 🌐

I currently live in SA and I would like to select "bike" as my means of transport but Uber says only scooters and motorbikes are allowed. Can someone help me?



Like



Comment



Share



Post N315.1, Male Unfortunately in SA there are too many bikes, so they only allowing scooters and motorbikes to deliver

[Like](#) · [Reply](#) ·



Write a comment...



Post N342, Male

2020 · 🌐

The same rider is getting more orders than me. I don't understand why certain riders are favoured, like certain vehicles get preference too!



Like



Share



Post N342.1, Female Probably he has a new account. There is a theory that new riders get priority at the beginning to make them stay with the platform

[Like](#) · [Reply](#) ·



Post N342.2, Male I know Uber bike riders using car accounts to get priority. It is unfair and discriminates others. Plus it is a fraud. We are forced to follow Uber's Community Guidelines.

[Like](#) · [Reply](#) ·



Write a comment...





Post N308, Male

2019 · 🌐

How can it be that I am here waiting while others are all working?



Like



Comment



Share



Post N308.1 Male I have the same problems, and even if I tried all methods like turning off the bluetooth, restarting phone, changing SIM card, areas and spots, I see riders work. Uber provides me useless help. I worked yesterday for for 5 hours, fram 10am to 2pm and did not get one order, while others were going in and out of the restaurant!

[Like](#) · [Reply](#) ·



Post N308.5, Male If you are doing car, apparently Uber is giving priority to bikes and scooters

[Like](#) · [Reply](#) ·



Post N308.6, Male So, poor ratings can affect allocation of orders, but mostly if you are under 90%. I read elsewhere that if the restaurant gives you a good rating, you will get deliveries from that restaurant. Allocation of orders is also random and not based on where you are or the last delivery. In fact, if you are waiting with other 9 riders in front of a restaurant, you will have only a 10% chance of getting an order.

[Like](#) · [Reply](#) ·



Post N308.7, Male I think there are several reasons why this is happening. UberEats is preferring new accounts and during the first 2 weeks they will get more requests than older riders. A rider and I saw this: when he clicked 'Ready for pickup' the order went to another driver. This because the order was supposed to be ready in 5 minutes and it was sent to a driver 4 minutes away. We saw this new rider arrive, and the bloke that was with me was confused. The new rider came up to chat and when we asked about his work, he said he was very busy for around 3 hours for a weeknight, while we were waiting. You then see that new riders get a lot of work while older ones wait, but once they become 'old', then there is work for everyone.

[Like](#) · [Reply](#) ·



Write a comment...





Post N331, Male

2019 · 🌐

I have been doing both UberEats and driving fulltime, and I can't get any requests. Is this happening to you too?



Like



Comment



Share



Post N331.1, Male Very quiet all week, because jobs are going to pushbike workers

Like · Reply ·



Post N331.2, Male If you are doing car, apparently Uber is giving priority to bikes and scooters

Like · Reply ·



Post N331.3, Female After three years, I have seen also a decline in orders. It seems that newer drivers are getting priority

Like · Reply ·



Post N331, Male ✓ I am very worried about this. It is my only job and things get worse, I don't know what to do. It's the only job I manage to do due to my hip problem

Like · Reply ·



Post N331.4, Male I have a theory which I will explain here: bikes and motor bikes are preferred over cars because Uber makes more money. Many who are registered as bike or motorbikes have cars. In bikes, however, food is cold because they are slower. Uber is also expensive and does not provide a good service: a lot of drivers do not even use a bag

Like · Reply ·



Write a comment...



Post N332, Female

2020 · 🌐

With a 99% rating and no cancellation I still do not get any requests. I tried everything: changed zones, restarted and reinstalled app, etc.). In the busiest moments of the week (Friday-Saturday between 6pm and 8pm) only one request, while others between 6 and 8!!!



Like



Comment



Share



Post N332.1, Female There is a theory that new drivers get priority, and probably also those on scooters/motorbikes

Like · Reply ·



Write a comment...



5.3.2 Prevention of account deactivation

Some instances required care, and conversations with fellow gig workers could help make pondered decisions to avoid account deactivation. For example, a customer suddenly did not want the food and asked the rider to keep it, while another requested a new delivery address to the rider and not on the app. These cases were not considered by the algorithm, which could only base its decisions on the input data. Without the data, workers' accounts can be banned, like below. So, to avoid a ban, advice is asked online to manage these borderline issues:

**Post N319, Male**
2020 · 🌐

I need your help. A customer called me after I picked up his food, requesting a change in the address. I went to the new address but he was not there. I called him and messaged him and he did not reply. I waited 5 minutes and then ended the delivery. As I did so, I got this email from UberEats. I have now been banned temporarily. Can you tell me what to do?

 Like

 Comment

 Share

**Post N319.1, Male** This happened to me, so I will tell you what I did. I had both driver and delivery suspended, so I rang support services and they tried to contact the client. Support then marks it as "undeliverable" and that's it. Nothing happens to your account, it's just a long process.
[Like](#) · [Reply](#) ·

**Post N319.6, Male** Next time do this: if they call you to change address, tell them to do it on the app. You then call Uber support and tell them about the change before you make the delivery. If the customer after 5 minutes does not come and take the order, end the delivery with the red triangle, but don't swipe.
[Like](#) · [Reply](#) ·







Post N313, Male
2020 · 🌐

Can you give me advice on how to deal with these customers?

cancel my order and take the food for yourself

i don't want it anymore

hello

Kindly cancel ur order from ur side i cant do that

pretend you are bringing me the food

but take it for yourself

keep the food for yourself

Why arent you cancelling the order if you dont want it. I cant do it.

i cant cancel it

it doesn't let me

so just take the food to tiursel

yourself



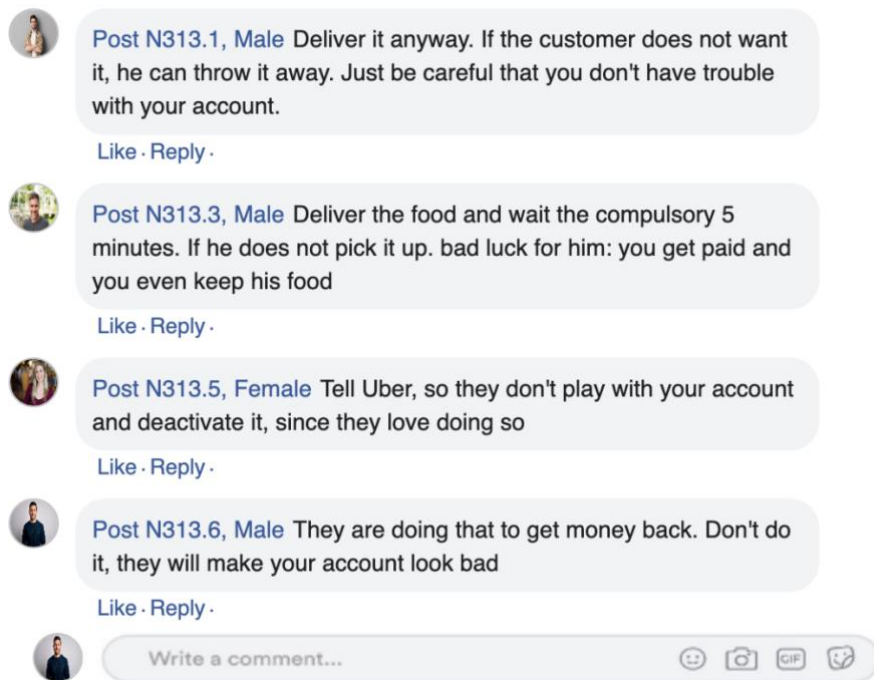
Like



Comment



Share



These issues were related predominantly to the design of the algorithm. There was no suggestion of harm, but account deactivation was a clear risk. These were solely decisional questions about whether to follow the customer's instructions or Uber's algorithm to continue working. In both cases, like in instances of speed on roads, the rider was either risking to be flagged by Uber's algorithm for breaching the means of transport declared in their account or receiving negative feedback, which would then affect the ratings and be flagged by Uber for not keeping the rate of satisfaction need to work with the platform.

In Airtasker, a change of heart was a complex manner when a client, initially happy, then commenced requesting refunds for supposed negligence of the Tasker:



Post N368, Female

2021 · 🌐

I did a cleaning task, fully completed, with photos and a written confirmation that he was ok with the result. He now made a list of complaints and wants a full refund after 8 days. Respond or report to Airtasker?



Like



Comment



Share



Post N368.1, Male Keep all of the conversation you had, because he will then have to provide photos

Like · Reply ·



Post N368.5, Male Don't respond for now. You have the evidence and he released the funds, so he was satisfied. You even told them you would come back to fix the problems, and he did not respond. So in any case, if he wants to bring it further you will win. Airtasker will avoid coming for you if the funds have been released

Like · Reply ·



Write a comment...



In Airtasker, the decisions are based on the negotiations between the Poster and the Tasker and, to a less degree, the platform's algorithm. Hence, Airtasker became part of the operation as a third party to manage a dispute between Poster and Tasker.

5.3.3 Actual deactivation of accounts

In most cases in food delivery services, the algorithm notifies the worker if they are not performing as expected, inducing them to believe they were controlled, although unsure how it works:

"The feeling I had was that you are controlled by an algorithm: if I refuse 1-2 deliveries, nothing happens. Maybe I could be wrong, this is the idea I got. Maybe if I refuse more (orders), the algorithm notifies it as suspicious and maybe asks for the intervention of a human being to really check if there is an error, what happened, etc"

(Respondent n13)

Often, gig workers were notified and then banned from using the platform for lack of performance. Temporary and permanent bans for unclear reasons are considered excuses to reduce drivers. Any mistake committed by the rider would be an element to dismiss the worker:



Post N318, Female

2020 · 2

Hi everyone,
Uber banned me temporarily and I need to work. Can you tell me how long will it take to go back online?



Like



Comment



Share



Post N318.1, Male I think it will be a permanent block even if they say temporarily. There are too many drivers now and they block accounts even for minor mistakes

Like · Reply ·



Post N318.2, Male Same here. I asked evidence so I could take it to Fair Work for making accusations without any proof and for no reason. They are doing so to reduce drivers.

Like · Reply ·



Post N318.3, Male You really think you can go to Fair Work? Ahah, you cannot as you are a contractor. They don't need a reason to get rid of you. I imagine you use multiple apps and are slow to deliver food. Give up, it's not for you.

Like · Reply ·



Post N318.4, Male Did you do both UberEats and Menulog at the same time? I know a lot are doing it. One got three orders all at once!

Like · Reply ·



Post N318, Female ✓ No, I haven't. I had an accident with my bike chain and could not complete the order in time to have it repaired. I cancelled only two orders. My ratings are high. I cannot get in contact with anyone to understand why. However, I didn't even know you could work for multiple platforms, so it is not my case. It actually took 3 months to get this one approved so I was not going to risk it. I also use a normal bike so I cannot ride as fast to do two orders at the same time. Good for those who can. But it is not even safe to do so, with traffic jams, lights. I have seen people driving with Uber crash behind busses and hitting each other for not braking in time. Clearly I am not fast, because I don't want to get hurt, but I can clearly do better.

Like · Reply ·

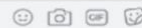


Post N318.4, Male Riding requires to be safe but fast. You are clearly stating you are not capable of doing so. You cannot say that to an employer. And this is valid to any kind of worker. You are paid to do something and if you are not capable, you lose your job or contract. It's ok to worry about safety but in no case you will avoid all risks of injury in any job. If you do this job, you have to delivery food fast and safely, not just safely.

Like · Reply ·



Write a comment...



The gig worker was attempting to avoid harm but was also being threatened by the platform to go faster. Sometimes it was a necessity for the rider to prefer a late delivery rather than risking an accident on the road. Unfortunately, the rider did not always receive community support and was told to improve delivery speeds, even if that increased the risk of physical harm.

However, it was common for riders to have their accounts deactivated for late deliveries:



Post N337, Male

2020 · 🌐

I was an UberEats driver until my account was deactivated in January 2019 for being late in some trips. Since then, I could not access my account. I actually never saw my performance. Is there a way to get it activated again?



Like



Comment



Share



Post N337.2, Male Unfortunately you cannot get it back

Like · Reply ·



Write a comment...



Post N334, Male

2020 · 🌐

After three years delivering with UberEats, my account was deactivated permanently without any explanation, except that I was often late, but that is very unlikely as I only used that app. Did you face the same problems?



Like



Comment



Share



Post N334.1, Female You need to ask them at the Hub why did they flag you as late. Generally, you should have a warning from them before they deactivate your account.

Like · Reply ·



Post N334, Male ✓ I enquired via email but they never replied. I checked my emails, including the spam folder, and there is nothing. I am very upset, as I am totally without a job

Like · Reply ·



Post N334.2, Male I'm facing the same issues. I'm thinking of spamming them with emails and if they do not reply I will go to the TWU

Like · Reply ·



Post N334.3, Male Without evidence on their side, you have some good argument. I suggest you send a letter from a lawyer and that you will act against them in small claims courts

Like · Reply ·



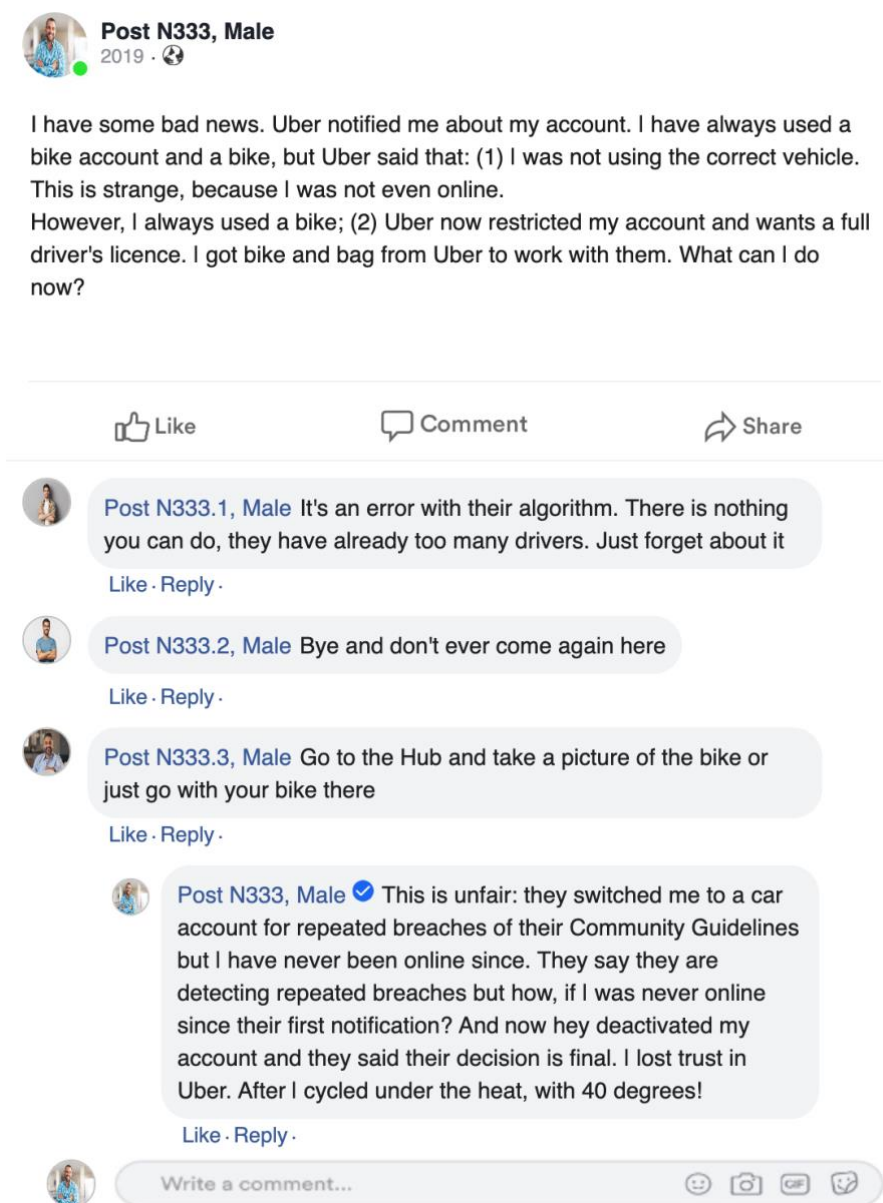
Write a comment...



The technology used by platforms to measure performance and late deliveries is often the concern of gig workers. As in other cases, riders who are not performing well may have their accounts

deactivated without the possibility of replying. However, what seems most concerning is the strong reluctance of platforms to review their decisions by avoiding all contact with their workers.

Another cause of deactivation is the identification of fraudulent activities on the platform. These are often decisions made by the algorithm. Such activities included the use of vehicles not indicated in their accounts, like cars or scooters instead of bikes, or multiple users using the same account to maximise orders and ratings:



There was a curious instance of 'app sharing' and facial recognition. However, in contrast to the other cases, this was a voluntary attempt to commit fraud.



Post N91, Female
2020 · 🌐

Hi, is there someone who wants to sell their UberEats or Deliveroo account? Or someone want's to share it? Thanks



Write a comment...



Post N92, Female
2020 · 🌐

Hi guys, does UberEats facial recognition work only from the phone that is using the app? Thanks



Post N92.1, Female ✓ You can also download the app on another phone and do it from there and then go back to using the app in the other phone, but be careful that every now and then when you use the app it randomly asks you for facial recognition otherwise it blocks you. I can not assure you that it works, because it recognises the gps. So maybe if you accept a delivery, it gives you the map then blocks you because it recognises that the other access was made from somewhere else...

[Like](#) · [Reply](#) ·



Write a comment...



Fraudulent activities also included adding a unique case where the rider was reported by Uber for accepting and cancelling orders from a closed restaurant:



Post N370, Unknown

2021 · 🌐

Due to public holiday, a certain restaurant was closed. I received orders for that restaurant 15-20 times, which I accepted and then cancelled, to then report them to the support team. Now I am getting Uber emails about me involved into fraudulent activities and may risk a permanent ban. This is not my fault. I spoke to Uber and they say I have been flagged on their system. Can someone help me?



Like



Comment



Share



Post N370.1, Unknown This is what we get for dealing with a computer and not real people to talk to. I wonder if the FWO can help

[Like](#) · [Reply](#) ·



Post N370, Unknown ✓ Exactly! We are computer muppets and cannot do nothing. If I decline them, they temporarily ban me, if I accept and cancel, they are considered frauds and I need to agree to the Community Guidelines. I really don't feel like working for them anymore, but I have bills and during the pandemic this job really helped me. But I may quit soon...

[Like](#) · [Reply](#) ·



Write a comment...



The cancellations for the algorithm amounted to a violation of Uber's guidelines, disregarding the public holiday closure. However, as the rider stated that not accepting them in the first place would result in a temporary ban.

5.3.4 Technology harm as the cause of other harms

Posts about job allocation and deactivation indicated that technology exposed gig workers to different types of harm. The issue in question was alleged fraud committed by the rider:



Post N311, Female

2020 · 🌐

I am very confused, because Uber claims multiple people are using my account. This is not true. Can I get my account back or did I lose it? No support is available, I tried. I am very upset. This is my only job and I depend on it to fulfill my responsibilities...

Your account is permanently offline

To ensure that your account is yours, and not used by other people, the app may occasionally ask you to take a real-time photo of yourself before you go online.

We have detected your account being used by other people. Because we take safety seriously this has resulted in the permanent deactivation of your account.

For more information, please refer to our [Community Guidelines](#).

[Community Guidelines](#)



Like



Comment



Share



Post N311.1, Male I am sorry, but you cannot do anything. You should have got warnings from them and messages. I suggest you look for another job.

[Like](#) · [Reply](#) ·



Post N311.2, Male You may have rented you account to someone or maybe other reasons. But now that your account has been cancelled, you cannot do much. You should look for another job

[Like](#) · [Reply](#) ·



Write a comment...



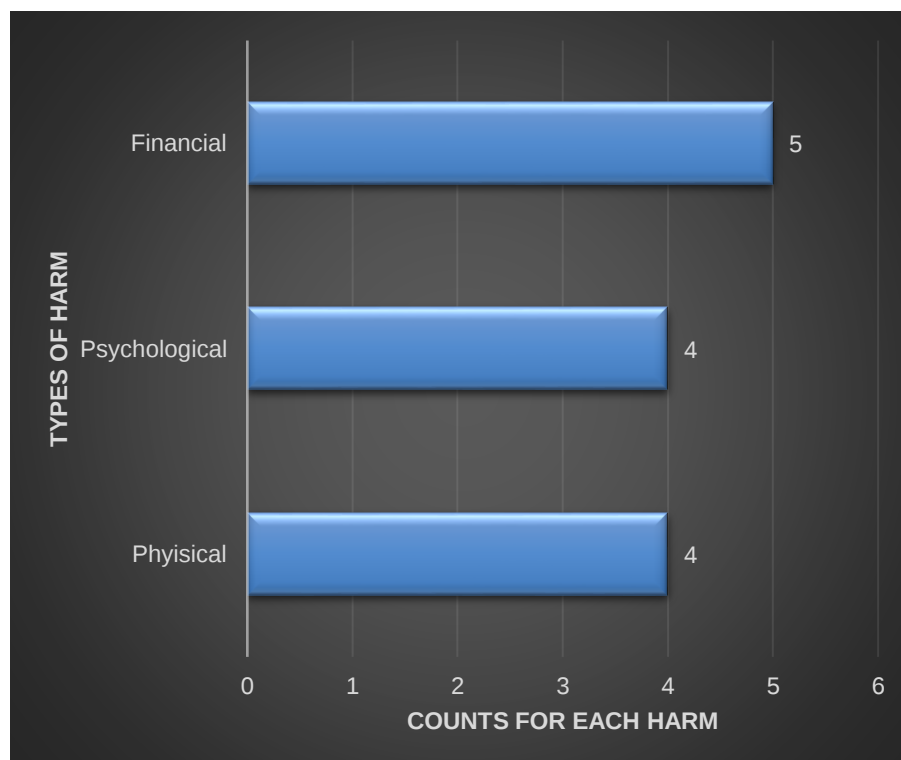
Uber claimed there were fraudulent activities with multiple people using the same account and permanently deactivated the rider from the platform for not recognising the selfies taken to confirm the gig worker's identity. While the community tried to support the rider and questioned if the selfies

taken were done correctly, it seemed the account could not be restored. Some posters simply suggested looking for another job.

As stated in the theoretical chapter, it is important to report data about the *perception of harm*, which is subjective and may not find confirmation in the literature and datasets.

The 13 participants in the online survey were asked to indicate which types of harms they sustained when completing gig work between financial, psychological and physical, based on what they perceived. They could indicate one or more among these options (see **Figure 0.4**).

Figure 5.4: Types of harms sustained by gig workers



In the small pool of participants, there was no clear majority about the predominant type of harm but still very indicative of the range of issues that have consequences for gig workers. Financial, physical and psychological harms will be presented in the order of the chart, together with other emerging harms.

Financial harm

The literature on harm events in Chapter Two in Table 1 at pages 36 to 45 often indicates financial harm as the most predominant form of harm in the gig economy, while paragraph 2.4 in that same Chapter explains that financial harm, which is also referred as wage theft, is a widespread issue in all industries. To verify the literature with empirical data from this thesis, but with reference to the gig economy especially, the participants to the online survey were asked to give a score on their wages from 0 to 10, with 0 being very insufficient and 10 extremely sufficient (see Figure 5.5).

The online survey showed an interesting picture among gig workers who did not complain about the wages in the gig economy (see **Figure 0.5**). Four respondents (37%) gave a score of eight out of ten, followed by seven ($n = 2$ or 18%). On the other side, two respondents gave four out of ten (18%). Single respondents gave each a score of five, three and one ($n = 1$ or 9%). Overall, 55% of respondents ($n = 6$) positively evaluated their wages in the gig economy, while 36% ($n = 4$) were very critical. Only one (9%) responded with five as an average opinion.

Figure 5.5: Scores given to gig economy wages



When asked whether the wages were sufficient for gig workers to cover their expenses, respondents were very uncertain, with four (36%) saying YES, four (36%) saying NO and three stating wages were average (28%). Hence, there was no clear opinion.

Figure 5.5 did not clearly state that gig workers were financially harmed, but responses provided a more comprehensive picture:

"You earn by the hour, and you can earn up to \$200 in one day. Riders in a short time may have:

- 2 orders with Uber at the same time
- 2 orders with Deliveroo at the same time
- 1 order with Menulog".

(Respondent n12)

"If I look at [food] delivery, it may not seem bad to someone, but one has to calculate how many deliveries you make per hour. I don't want to be wrong, but it could be about \$5 when you get food from the restaurant, \$2 and something when you deliver it and then get a tot per km, it seems to me".

(Respondent n13)

"I brought home a decent salary because studying I could not have 40 free hours a week. Except by law, I couldn't work more than 20. And it's not like I worked 20 every week, it was usually less. Logically, it made sense to concentrate those working hours per week in the evening hours on Friday, Saturday, and Sunday. Maybe Friday, Saturday, and Sunday you have a lot of people who do not want to cook and who stay at home because some friends come there on weekends. In short, there is a lot more demand, so I didn't have any dead moments to wait for the new pick up.

Very often it is in those evening hours that you find the boost where you earn more and therefore, I worked those 3 maximum 4 hours on Friday, Saturday and Sunday and I took home sometimes even between \$26-28, on average \$25".

(Respondent n13)

Wages in the gig economy were particularly advantageous in the very first years of the Australian gig economy, particularly in food delivery services:

“At the time it was still in its infancy, it had recently opened in Brisbane, and it was going quite well at the beginning, so I said, ‘I’ll try’.

There were a lot of people ordering through the app but there weren’t many drivers, having recently opened in Brisbane. And so, you had a lot of boosts when you worked at night or in high demand, so you also earned 30% more in certain areas and earned quite well. You didn’t have any dead moments where you are waiting for another delivery”.

(Respondent n13)

“In 2016, while I was studying, I started working in the gig economy. After a couple of months while I was studying, at the time I was paid by the hours, so even if I didn’t take orders, I got paid, so it was fine. Everything was fine for the first six months; the pay wasn’t excellent but the first contract I made they paid \$16 an hour plus \$2.50 for delivery. Then they changed for \$18 an hour and if you were able to do 3 deliveries in an hour ... basically they paid \$9 per delivery but they guaranteed you two deliveries per hour. So even if you made zero, you still got \$18. If you got 3, you got \$27, if you got 4, you got \$36”.

(Respondent n14)

However, as the gig economy became more popular in Australia, wages decreased significantly. This was particularly evident for respondents, who were very influenced by job allocation and competition:

"In the beginning, because they paid for hours, when they started paying for delivery, working in peak time still earned money because there were not many riders yet. Then it became more famous with the flood of people so orders also decreased and one always made less money.

And they also started paying less and less for deliveries.... I did, I connected from 10am to 8pm and I did 10 deliveries and I earned \$90, then I did 10 deliveries and I made \$50-\$60.

"The fees continue to decrease, let's say we went from \$9 for delivery and \$4-5 for delivery, halving it by 80%".

(Respondent n14)

"While later I realized after 3-4-5 months that I had started, work had really dropped, that is, in just an hour you worked half, something like that. And the other half you were sitting there on the scooter waiting for other jobs to arrive".

(Respondent n13)

"Of course, if you have to make 10 deliveries for \$40 eh.... with \$40 in Sydney you don't eat".

(Respondent n14)



Post N347, Male

2020 · 🌐

Is earning only \$5 after one hour and only one trip normal?



Like



Comment



Share



Write a comment...





Post N348, Male

2021 · 🌐

From 9am to 2pm (nearly 5 hours) I only made \$67.88! 7 trips! Not good!!!



Like



Comment



Share



Post N348.1, Male Same: 7 trips in 5 hours on Monday but I managed to do better after. Good luck for the rest of the week

Like · Reply ·



Post N348.2, Male In 12 hours on Monday, I made \$322.07 with 36 trips

Like · Reply ·



Write a comment...



Post N320, Female

2020 · 🌐

I have noticed that if I deliver at lunchtime and make a good income, then I don't get any requests at dinner time. Does that happen to you too?



Like



Comment



Share



Post N320.3, Male There are too many car drivers who are using bikes or scooter accounts and committing frauds. Uber is not stopping it. And they are also preferred accounts, taking work from us who are working properly

Like · Reply ·



Write a comment...



Gig workers explained how the first contracts were very helpful for gig workers who were international students:

"It helped me, while I was studying and working because, in the end, I was connected most of the day, but I went out for two orders, so I studied 8h and at the same time I earned as if I had worked 8h".

(Respondent n14)

"I saw it as a price to pay for having the flexibility that I needed or that was also comfortable".

(Respondent n13)

With the contractual changes based on task completion, working in the gig economy became very troublesome, with more dead moments than actual work:

"The main problem in the last period was waiting an eternity between one delivery and another and staying there for 40 minutes and not arriving anything, even 1h nothing arrives: you are there in effect you are working on the scooter that you look at the phone and nothing comes. So, zero, you didn't earn anything in that hour".

(Respondent n13)

Hence, it became necessary for gig workers to make the most of the boosts made available to them because the actual wages are very low since each worker must cover expenses for insurance, superannuation, leave and other entitlements. Alternatively, they may need to multi-app or find more secure jobs in traditional employment, as explained by the TWU:

"I did it concentrated in those 3 days there and I do it exactly in those hours, otherwise if I worked at noon on a Wednesday, I don't think I would have been able to get \$20. Consider that when I mention these figures, I say on average a salary where you do not get paid the super, (but) you pay the super and no insurance to cover the scooter, the petrol for the scooter, the registration of the scooter, any breakdowns, no sick leave, no annual leave. It's a very low salary, even \$25 an hour is very low for me.

Now I'm pretty sure that on average a person doesn't make \$18 an hour in my opinion. You don't do them anymore. Maybe on Saturday nights you make \$30 an hour but it's only for 1 hour. The other 7-8 hours you worked there on average you no longer even make \$18 per hour on average".

(Respondent n13)

“There were more orders, people mostly eat lunch and dinner”.

(Respondent n14)

“It is actually mixed. We have:

- Multiapping is very common in the gig economy because working with one does not bring enough income to the worker – it really depends on the platform design and the issues linked to it.
- Gig economy and work in the hospitality/retail to gain an income”.

(TWU)

Multi-apping and mixed work between traditional and gig work represent some form of autonomy because they allow gig workers to overcome low pay and minimise the risk of harm:



Post N338, Male

2020 · 🌐

Can I ask who works for UberEats and its the only source of income? In my opinion, it is not a great full-time job. You start good, but then you spend more time waiting for orders and competing with other drivers around the place. Also, it would be nice to see the actual stats about UberEats vehicles (car/bikes/scooters). I use car, but I see a lot of scooters. Clearly quicker and don't have many issues with parking



Post N338.1, Female Full-time worker but UberEats is an extra income. I am not a lazy person, so I try and make some more money when free

[Like](#) · [Reply](#) ·



Post N338.2, Female Part-time worker, and UberEats is an extra income that put me off Centrelink, allowed me to pay bills and I can now go out more often with friends

[Like](#) · [Reply](#) ·



Post N338.3, Male Full-time with UberEats and money is decent. Love the flexibility to bring my son to school

[Like](#) · [Reply](#) ·



Post N338.4, Male I became full-time UberEats worker in the last 10 months and a bit of Menulog. To make good money, however, you really need to work 10-12 hours every day.

[Like](#) · [Reply](#) ·



Post N338.8, Male Best job ever. I work in Sydney on an e-bike. I only need to work 3 hours a day. Rent is shared with my girlfriend. I don't rush and ean \$600-\$700 per week. I am very flexible. With the money I earn, I can go on holidays

[Like](#) · [Reply](#) ·



Write a comment...



These posts demonstrate the strongest and possibly most evident form of harm. Rates were imposed by the platform, and there was no real autonomy to control or maximise earnings. Many posts and responses are complaints about the very few earnings while waiting online. These were out of the control of the workers who must accept those wages and hope for better days. In several comments, the earnings are incredibly subjective, with some riders claiming they are making a good income.

Workers in Airtasker faced other issues related to payments. Unlike food delivery and transport, financial harm was limited to the levels of negotiation between the Tasker and the Poster. As these were negotiated with clients, some of the common issues were non-payment from customers:



Post N366, Male

2021 · 🌐

Apparently, I completed a delivery task but Airtasker claimed the Poster's card was a fraud, so it cancelled my task. Did I actually work for free?



Like



Comment



Share



Post N366.1, Male Hope it wasn't a lot. You should have asked them their contact details, just in case of emergency

Like · Reply ·



Post N366, Male ✓ They did not provide me them... and Airtasker said they cannot do anything

Like · Reply ·



Post N366.2, Male Never seen this. So Airtasker claims you are using a fraudulent card and you actually work for nothing? Again they do not take responsibility

Like · Reply ·



Post N366.4, Male Once they would put jobs on hold until the cards were verified. That made my cancel jobs and ask clients to pay me directly because their process would take days. Airtasker clearly likes the money but not responsibility

Like · Reply ·



Post N366.5, Male Rather they being supportive, their support team just takes money and abuses people

Like · Reply ·



Post N366.8, Male Why isn't Airtasker accountable for accepting a bad card to allow a task to be assigned and completed, and then refusing a payment? I would like to collect a number of complaints and send them to the ACCC. And they don't want the Ombudsman to look into it!

Like · Reply ·



Write a comment...



The case of card fraud was the most concerning because Airtasker did not accept the payments, and the worker did not earn any money. As such, the worker suffered a loss of income and time without any possibility of challenging that fraud, while Airtasker was neither accountable nor the customer.

A final technological issue was related to the service errors on the apps' side, which prevented the worker from completing their tasks and earning an income:



Post N20, Male
2018 · 🌐

Hi guys, I need some advice FROM WHO HAS ALREADY TRIED IT. With Uber I do not understand if it is either Optus or the mobile phone that gives me problems being slow and I cannot make deliveries easily. Do you think there is a way of having a faster connection with Optus, or should I change operator, or mobile phone, or what??? Thanks



Like



Comment



Share



Post N20.1, Male Do you deliver in the CBD? Often my navigator gives me problems when I am working between buildings. I'm with Vodafone, I have a P9 Lite phone.

Like · Reply ·



Write a comment...



Post N85, Male
2019 · 🌐

Hi guys, does anyone know what is happening with Uber (delivery service)? I logged in and when it asks to choose the city, I enter Melbourne and it gives me the following error: "Service error from service". This is from both the app and their website. Thank you all



Like



Comment



Share



Write a comment...



Physical harm

After financial harm, physical harm was often a concern for gig workers. Respondents stated they did not personally sustain any physical harm or accident, but they personally know others who sustained injuries:

"No, fortunately not".

(Respondent n13)

"No, but I have known people who have had accidents. [...] Somebody broke something, and somebody just died".

(Respondent n14)

A rider who participated in the study clearly linked the risk of accidents with deactivation:

“There are no incentives for these things, bad weather, snow, mud, dangers, nothing. There is only the incentive that you must deliver it quickly and if you don’t deliver it quickly, it can deactivate your account and there is no possibility to defend yourself. This means that this job becomes even more dangerous because to make money people pay you \$4 to make a delivery and you must eat, so you try to do more. You pass with a red light, you overtake the cars... you go on the street, you go faster, you go on the sidewalks, you don’t respect the rules of the road. Obviously because you must make money”.

(Respondent n14)

Accidents from weather or traffic hazards to earn more money are not the only cases of blended cases of financial and physical harm. In most cases, physical harm resulted from accumulated fatigue to earn the bare minimum to eat:

“Or they can’t make enough money to eat, or they have to work more: 15h a day to make the same money. Fatigue affects you when you work on the street”.

(Respondent n14)

“There is also huge risk for physical injuries. Think of rushing in work for not (much) money”.

(TWU)

Psychological harm

Issues of psychological harm from technology were not commonly reported but do reflect the theory of job allocation and deactivation of the accounts.

The TWU linked psychological harm with job insecurity and waiting for orders:

“Workers face strong job insecurity and mental harm from it. There is a huge application number (of claims for mental health).

Think of the consequences of being always present for work but not working and the consequences of it”.

(TWU)

A respondent affirmed that it was often caused by fear of having the account deactivated and not being able to make money (respondent n14).

Connected to deactivation and psychological harm was rating dependence. A user on Facebook asked how to request positive ratings from customers, showing how crucial this technological feature was for them:



More problematic than asking for good ratings was receiving unfair negative feedback. In most cases, negative feedback was distressful for workers who felt they could not challenge them. Although some responses were disrespectful towards the worker, some of the reasons advanced in the comments included tactics for customers to obtain free food, instances of racism and discrimination, and bad or grumpy customers. In one other case, it was the lack of options present in the app that would not allow precise feedback, so complaints about random issues would fall in the ‘Professionalism’ category. For this reason, some claims seemed unfair to workers who believed they were being professional:



Post N325, Male

2020 · 🌐

1 would like some help in understanding why I got bad ratings: (1) one said the item was damaged and I can understand that some places are bad in getting packaging right for delivery and (2) I was not nice with customers, which is not true. Is there something I need to be aware of?



Like



Comment



Share



Post N325.1, Male Customers want free food and they do that on purpose to get a refund

Like · Reply ·



Post N325.2, Male Probably you are just bad at it

Like · Reply ·



Post N325.3, Male Don't worry. Customers do that on purpose for many reasons: anger, racism, discrimination. Your ratings will get better soon.

Like · Reply ·



Post N325.10, Male Same with me. For a free meal, someone got my account deactivated for 24 hours. I was accused of fraud.

Like · Reply ·



Write a comment...





Post N327, Female

2019 · 🌐

I have been working for the past 7 months in delivery services. My bad ratings were: (1) customer and merchant saying I was late; (2) no bag (lie); (3) damaged item; (4) not professional with customer. Is it the period that is making people less tollerant?



Like



Comment



Share



Post N327.2, Male Customers want free food and start making up stuff against riders. This will force good drivers out of the system, favouring bad ones in a race to the bottom

[Like](#) · [Reply](#) ·



Post N327.3, Female The reality is different. I can see it as both driver and customer. The fact is that customers have very little options to express their claims and go with the closest thing they find. For example, one common problem is food not placed in the insulated bag. So then the only thing I can click on the app is 'Professionalism' as there is not other button to press for this kind of problem

[Like](#) · [Reply](#) ·



Post N327.6, Male In over 1500 trips, I was rated down twice. Then I got 3 thumbs down: (1) a merchant for not having a bag (not true) and walking in their shop and not in the lane, while (2) and (3) were customers complaining about damaged items. It's just people who want to complain or want a free meal.

[Like](#) · [Reply](#) ·



Write a comment...





Post N329, Female

2019 · 🌐

I had two bad ratings. One was a customer who didn't put his full address and I couldn't find his house. I had to contact Uber to contact him, since he was not replying to my calls, but eventually he was mad and gave me a bad rating. The second was a merchant who said I did not have a bag, when I had one. Is there something I can do about it?



Like



Comment



Share



Post N329.1, Female Just keep your ratings high and don't worry. You can't do much about it, even if you are doing everything correctly.

[Like](#) · [Reply](#) ·



Post N329.3, Female Merchants can change their ratings, so you should discuss it with them. Like you, I got a bad one for not having a bag, but I did instead. I told them and they apologised, removing the bad rating.

[Like](#) · [Reply](#) ·



Post N329.4, Female Uber uses this to control us psychologically. Customers don't even know our ratings.

[Like](#) · [Reply](#) ·



Post N329.7, Female Just relax. I tell you my story. So, I got bad ratings for things that never happened, like not having a thermal bag, not reading notes, etc. Nothing true. Once a merchant was abusive towards me, so now I don't even go there. I ended with 96% overall. After 3 weeks, it was back to 99%. Only last 100 count, so they will disappear at some stage

[Like](#) · [Reply](#) ·



Write a comment...



As one of the comments of the final post pointed out, workers perceive ratings as a form of psychological control.

5.4 Responding to gig company and algorithmic harm

These results indicated how direct and indirect control affects gig workers and reduces their autonomy, leading them to a range of harmful instances. Participants in the survey were finally asked to describe what autonomy they have or perceive and, to conclude, what solutions they suggest to reduce harm in the gig economy.

Respondents were asked if, overall, they were their own bosses or not:

“You don’t have to send a thousand job applications, and you work when you want. You don’t have anyone telling you what to do. You are your own boss”.

(Respondent n13)

The TWU had a completely different opinion:

“They have no autonomy”.

(TWU)

These results highlight a conflicting statement over the autonomy of gig workers, which are clarified below.

5.4.1 Governmental responsibility towards harmed gig workers

Gig workers were very critical of the opinion against the Australian Government, which was intended broadly at both state and federal levels. **Table 0.1.** shows the unanimously negative responses of all participants who suffered harm and also never felt protected by the Australian Government. The Table also compares the types of harm sustained by participants between physical, psychological and financial, and their opinion on the Australian Government’s action to protect gig workers.

Table 5.1: Gig workers’ perceptions of being protected from harm

Type of harm (Physical, Psychological, Financial)	Australian government protection
Physical, Psychological, Financial	No
Financial	No
Physical, Psychological, Financial	No
Physical, Psychological, Financial	No
Psychological, Financial	No
Physical	No

Table 5.2 shows another comparison on the levels of protection between the gig companies and the Australian Government according to the participants' opinions. When comparing the levels of protection between the gig companies and the Australian Government, 55% ($n = 6$) felt they were neither protected by the gig company nor the Australian Government, while 15% ($n = 2$) expressed a neutral view. Only 9% ($n = 1$) were convinced about the gig company providing protection but expressed uncertainty towards the Australian Government (see **Table 0.2**).

Table 5.2: A comparison of how protected gig workers feel

Does the gig worker feel protected by the gig company?	Does the gig worker feel protected by the Australian Government?
No	No
No	No
No	No
No	No
No	No
No	No
Maybe	Maybe
No	No
Maybe	Maybe
Yes	Maybe
No	No

In light of these negative attitudes towards the Australian Government, participants and the TWU were asked what solutions Australia should adopt.

Reclassification as employees for one respondent was crucial to include a minimum wage and all entitlements very similar to a casual worker:

"The government should (change the laws) as soon as possible. I have no idea what laws can be made, but the government must absolutely make sure that those people are paid the minimum wage by law. Now is that \$18.50? You can't give them \$18.50; it must be more, and have super, annual leave, sick leave and all these extra things maybe. They should become such a position (employees) or considered as such. There is no way that a person is online all day, has done nothing wrong (has not stolen food, refused deliveries, nothing like that) and make less than \$18.50 an hour".

(Respondent n13)

The TWU had a different view because gig workers may not want a rigid reclassification:

"They may in fact not want a reclassification but only more access (to rights).

The main concept is 'rights when they need (them)' and not based on rigid legal classifications that can be overturned by very smart lawyers".

(TWU)

Somehow, it is what a respondent was seeking, preferring rights as he needed them as a flexible worker or abandoning the gig economy for another flexible and casual job but more secure:

"I continued to do both jobs for a while and then when I was offered a casual contract, I gave up deliveries after a few more months, because with the casual contract I was very flexible and, therefore, I decided week by week when to work and how many hours to work. So, for me the 'flexibility' issue no longer a problem because I had it anyway. Earning more and having the certainty of earning a minimum wage made me give up on deliveries".

(Respondent n13)

Without current legal changes, the Delivery Rider Alliance and the TWU negotiated significantly with Deliveroo, forcing the platform to create a Health and Safety Representative, but it required discussion and compromise on both sides:

“Deliveroo acts as if they started all this Health and Safety Representative, but it was us Delivery Rider Alliance and TWU who started the whole process because they have been blocking it from day one, they didn’t want to. We had to take them to court. We had to get the NSW Commissioner for Health and Safety involved.

Deliveroo gave us a lot of problems because we wanted to hire a few more, instead of one for all of Sydney. We had a meeting with the one CEO for Deliveroo and his argument was that one person was enough that a Health and Safety Representative would take a little more for all of NSW. We do not agree with what has been done but even if there were more Representatives, they would be always much less than we wanted”.

(Respondent n14)

The final suggestion from the TWU was to create a specific body that considers gig economy issues to prevent gig worker misclassification according to the different types of sectors:

“We suggest a creation of a body that considers the issues so:

- Companies cannot evade classifications.
- Consideration is given to very different kinds of gig economy”.

(TWU)

5.4.2 Social reaction to harm

The difference of views regarding gig workers’ level of autonomy was explored in relation to both the gig company and any algorithm if used.

In the first case, respondents stated that a reaction or better understanding of gig company harm was influenced by the level of education possessed. Those who had a higher level of education or were more conscious of their rights could react against the gig companies:

"I was working and obviously I saw all these things that were not going well and studying at university I started sending emails to the company that things were not right. I started organising (meetings) and then I was contacted by the TWU to create a group with the riders".

(Respondent n14)

"From a personal point of view, riders are often treated badly and made fun of, because apps keep you in ignorance. They don't know the job, how it works, or even how to behave with the client".

(Respondent n12)

Such an advantage over workers, according to one respondent, was caused by their visa status, which prevented them from expressing their opinions and hoping for a change:

"Of those workers, I would like to see how many have a Permanent Visa (let's leave Australian citizenship aside). Nobody! They are all the weakest categories of the population, people who have no alternatives and cannot even go to vote to change the things, because if you are not a citizen you do not vote. So, for me there is no power on the part of the workers".

(Respondent n13)

The lack of power prevented them from organising strikes among gig workers. However, one respondent explained how difficult it was for some nationalities in Australia to commence industrial actions. Particularly non-Europeans were reluctant to participate, worrying about the consequences they could face if they did not work:

"I had contacted the gig company about a contract to say that it didn't suit me, that they should provide incentives for rain, bad weather and all these things here. We had to then organise strikes.

There are so many students here who need work so.... They come from countries where respect for workers' rights is zero, such as China or India, where practically even if they pay you here \$2 for delivery, they will still work. Obviously, all Europeans joined the strike, the others were more difficult to convince them.

Those who came from poorer countries or from a poorer social class who perhaps needed to work said 'if I don't work tonight, I will have problems'".

(Respondent n14)

One of the respondents founded the Delivery Rider Alliance as a manifestation of their autonomy against food delivery gig companies, present in cities where international students are mostly located:

"Yes, we founded the Delivery Rider Alliance. We are others in other states, in Melbourne, Canberra... The more international students there are, the more they work".

(Respondent n14)

5.4.3 Reacting against the algorithm

In relation to the algorithm, gig workers would react by looking at the overall convenience of completing or not that task. This finding was evident in food deliveries, where respondents indicated how they would accept orders convenient to them in terms of pay and distance:

"The pay sucks anyway, if you do 5km they give you an extra \$1, so better close".

(Respondent n14)

"I rarely refused deliveries and only because they gave them to me at disproportionate distances. I remind you that you are not paid for the distance you take to get food. The payment per km is only given when you have the food in hand. You are not paid when you return home after the last delivery. Their excuse may be that they gave you about \$5 per pickup and so for them it's '\$5 that's the money we're giving you, since you (only) have to pick up the delivery'".

(Respondent n13)

Alternatively, gig workers were encouraged to use financial incentives available to riders, including those given during busy times and rainy periods:



Post N033, Male
2020 · 🌐

In order to ensure adequate delivery coverage, Uber Eats offers incentives for busy times (usually during the weekend) and when it rains, which can range from 1 to 2.5 dollars more per delivery.

Furthermore, you can take advantage of the so-called "boosts": for some areas, usually more peripheral, the application provides an incentive that varies from 1.1x to 1.3x. You can find all these promotions directly on the map (the boosts of the whole week are also available on the "Promotions" page of the app).

Rainy periods are usually those with more bonuses and fewer riders to compete with you: get a rain jacket and, possibly, also a cover your pants and shoes to keep them as waterproof as possible.



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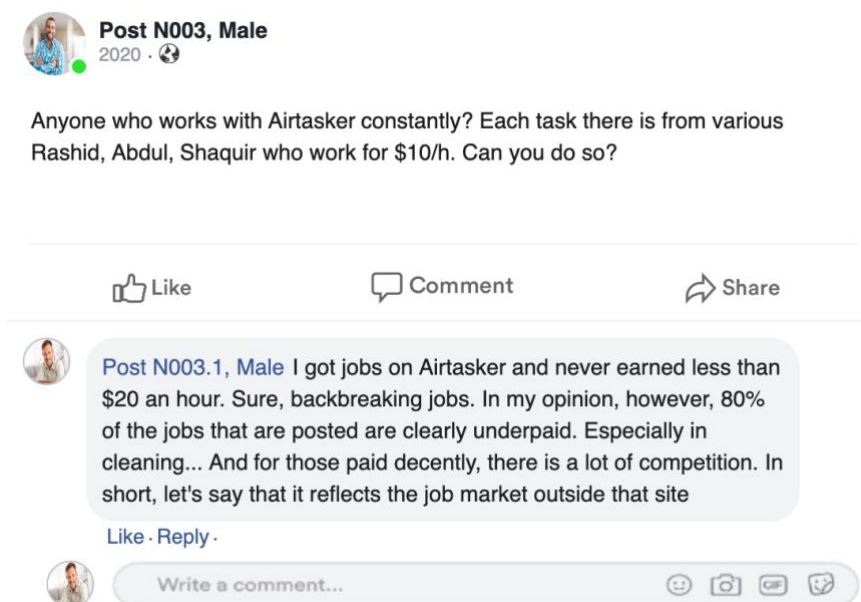
In Airtasker, a gig worker refused to reduce his fees because he preferred to make less money but with proper payments:



Post N002.1, Male I know very well that there are people willing to do deliveries for \$35 on AirTasker. Not me! After tax, gst, fee, fuel they work for \$12 an hour .. maybe they even take 6-7-8 tasks a day .. but on balance I am satisfied with 2- 3 tasks a day of \$80-100 each... It is better to work 3h for \$150-180 (net) than all day for \$220 (net)... And I can assure you that I am in it with the accounts even if Airtasker is much cheaper than many removals companies.. I have the my van and many who contact me via Airtasker then contact me directly and so I created my network... I can do 90-100 jobs per month. Clearly there is a lot af time on the phone to set aside for the negotiation to take the tasks but honestly that doesn't bother me that much...

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However, others acknowledged that competition and the market in Australia were a race to the bottom:



Chapter conclusion

This chapter illustrated the results from the data triangulation between netnography, the online survey and the semistructured interviews that were collected for this thesis and included quantitative and qualitative data.

The chapter identified two main themes related to the control: direct control of the gig company, and indirect control of the algorithm. Such forms of control indicated the emergence of a series of harms that affect gig workers in different phases of completing their tasks. Direct control included the absence of compensation for damages, training and platform support, harm from exposure to COVID-19 and during lockdown periods, sexual abuse affecting women and verbal abuse, and legal harm affecting temporary migrants. Indirect control included the emergence of a 'theory of job allocation' hypothesised by gig workers, prevention and actual deactivation of accounts, and how these caused financial, physical and psychological harm. This chapter also presented some data on how gig workers respond to harm caused by gig companies and their algorithms, from their sense of disappointment towards the Australian Government to social and personal strategies to react against the algorithm control. It must be noted that, overall, empirical data has indicated a stronger presence of financial harm over the other types, implying that it is the most significant among gig workers. However, the thesis treats the other harms as equally important given their seriousness.

Chapter Six discusses how direct control causes social harm and renders gig companies accountable towards gig workers. The social harms in this context will be called 'gig company harms'.

Chapter Seven discusses indirect control and takes a step further towards those gig companies that adopt algorithms as part of their model and argues, through the major themes from Chapter Five, why technology is accountable for social harm.

CHAPTER SIX: ZEMIOLOGY: DETERMINING THE ACCOUNTABILITY OF GIG COMPANIES FOR SOCIAL HARM

Chapter Introduction

Chapter Six is the first of two discussion chapters from the results in Chapter Five. This chapter focuses on the harms directly caused by gig companies and aims to explain how to determine the accountability of gig companies for social harm. It responds to the first research question:

RQ1—Through the lenses of zemiology, why are gig companies a source of ‘social harm’?

The answer is based on the principles of zemiology with the support of ultra-realism in three stages: determination of social harms, establishing the gig companies as a source of social harm and framing the relation between social harms affected by gig workers and gig companies.

Based on zemiology, this chapter examines whether harms caused directly by gig companies are social harms, applying the definition of harm as an impediment and evaluating the proximity and seriousness of such harms, particularly against vulnerable groups. After defining if such harms are social harms, identifies if the gig companies are sources of social harm through their special liberty and the pseudo-pacification process from violent to non-violent harm.

After determining the source of social harm, this chapter examines how social harms and gig companies are linked through the absence of moral responsibility and stability framed by gig companies in their agreements with gig workers to dispossess their rights to accumulate income. Finally, this chapter examines *Deliveroo v Franco* (2022) in light of the principles of this chapter to highlight how these should be applied.

6.1 Gig company harms as social harms

6.1.1 Gig company harms as impediments to gig workers’ autonomy

The first step in the thesis is to indicate why the harms indicated in the data are social harms under zemiology. The notion of social harm is an *impediment to fulfilling personal needs* (Copson 2011, cited in Canning & Tombs 2021, p. 52). From the data collected, this definition can be expanded further to define social harm as the impediment or reduction of gig workers’ *autonomy* to be financially self-sufficient or protect themselves physically, psychologically, and legally or from sexual, physical or verbal abuse or a combination of these, due to control exercised by the gig companies.

In instances of *financial harm*, delivery riders cannot financially support themselves with the earnings from the platform (Veen et al. 2020), while Taskers suffer harm from the posters who refuse to pay (post n351; post n352). Without an income, gig workers struggle to survive and are likely to accept any detrimental condition to earn money or work longer hours to earn a bare minimum, in contradiction with the 'temporal flexibility' they are said to possess (Kilhoffer et al. 2020, p. 75; Wood et al. 2019, pp. 66-7). To earn more, they would work under hazardous weather conditions (Goods, Veen & Barratt 2019, p. 505) or purposely lower their prices to create an unfair advantage over others to increase ratings for the benefit of their account and force fellow gig workers to do the same for the sake of competition in the market (post n364; post n367). This self-inflicted harm creates a cycle of financial harm and diminishes their autonomy to negotiate prices.

If we consider *physical harm*, the impediment exists when gig workers are involved in accidents that cause serious injuries that prevent them from working (Transport Workers Union 2020, pp. 26-7; Veen et al. 2020) to satisfy the requests for speed and timely delivery. Gig workers have less autonomy to make meaningful choices to avoid accidents.

To determine the impediment in cases of *psychological harm*, it is known from the literature and data the presence of stress, anxiety and depression, sense of helplessness and powerlessness among gig workers who feel lonely (Glavin, Bierman & Schieman 2019; International Transport Workers' Federation 2020, p. 7; Rideshare Drivers Association of Australia 2020, p. 8; Walker, Fleming & Berti 2021, p. 34) and being unsupported by gig companies when the platform bans them from accessing their account (Kaine & Josserand 2019, p. 489; post n303; post n304; post n310). In this case, the impediment is determined by the incapacity of gig workers to challenge decisions they find unfair. This reduces gig workers' autonomy to seek support. It instead creates fear towards the platforms and passive acceptance of detrimental terms and conditions of the contracts. Gig workers will then feel pressured to keep working and accept all jobs (Kilhoffer et al. 2020, pp. 55-6).

Cases of *psychological harm from verbal abuse* appear in Airtasker prior to negotiation processes (post n360). In this case, the difficulty in this case is the absence of an agreement to be challenged. However, it can be argued that the lack of moderation of the gig companies does create a sense of helplessness and powerlessness that generally affects gig workers who feel unsupported by the gig company (Glavin, Bierman & Schieman 2019; International Transport Workers' Federation 2020, p. 7). Gig workers are rather bound to the normative control rules (Veen, Barratt & Goods 2019, pp. 8-9) contained in the Community Guidelines and contracts of services. Hence, the impediment is the impossibility to effectively report an abusive client and ensure a safer environment for all gig workers.

The impediments in cases of *legal harm* can be more generic and affect all gig workers irrespective of their social status. The study identifies two instances. The first, and where impediment is stronger, concerns specifically temporary breaching their visa clauses to complete gig work (post n302). In this case, social status is crucial. The second instance is the breach of Australian laws that regulated

lockdowns and movement restrictions (post n363, post n369). Here, social status is irrelevant and applies to any person.

Impediment is more relevant in the first case. According to the data, for many temporary migrants, life in Australia is hard and expensive. Finding an appropriate job is limited by market requests and skills that most do not possess. Hence, they will accept working in the gig economy even if they earn very little because there may not find better options (respondent n13; Churchill & Craig 2019, p. 747; Goods, Veen & Barratt 2019, pp. 516-7). Since the income is poor, temporary migrants will work longer hours and under any harmful circumstances, maybe in breach of their visa. Aware of the breach and fearing they may be ordered to leave Australia, temporary migrants do not seek any legal remedy to uphold their working rights, trumping their autonomy (respondent n14).⁵¹ Alternatively, they may not fear the Australian Government but have a general distrust towards the legal system (according to the online survey), maybe caused by past experiences in their home country or simply to avoid their taxation obligations (The State of Victoria 2020, p. 44; Unions NSW 2020, p. 56).

Special harmful cases emerged from the results. Specifically they were exposure to COVID-19, assault from alcohol delivery, and sexual abuse. Impediment in these cases affected the autonomy in multiple ways, enhancing the exposure of gig workers to harm and reducing their options to avoid or minimise harm.

Regarding *gig work during the harshest moments of the COVID-19 pandemic*, admittedly, it was a lifesaver for temporary migrants (post n50; respondent n6), although not the best alternative for them (respondent n2). The impediment is the reduction of autonomy in choosing a manner to avoid or minimise contracting the virus. Vague instructions as a form of information asymmetry from the gig company, the need for an income in extraordinary times, and dependence on client feedback suddenly become more important than personal safety, exposing the worker to the virus and to the fear of breaching the company's guidelines and risking a ban from the platform (post n302). Unsurprisingly, the sense of pressure to live in Australia may also induce to accept all tasks (Kilhoffer et al. 2020, pp. 55–6).

Similarly, *alcohol delivery* in situations of client intoxication increases the risk of being physically assaulted and not completing the delivery, with the same physical and psychological risks of harm (post n324). The case also has legal ramifications, with alcohol delivery in the gig economy allowed in Victoria and Queensland. Indeed, it is not compulsory and requires riders to check if customers are sober or adults and to sign the order. It also has financial consequences as the extra care and

⁵¹ These restrictions primarily affected international students (student visa subclass 500) who could not work more than 20 hours per week. However, due to the COVID-19 emergency, this limitation was temporarily waived in 2022 and 2023.

checks of the order which are not paid. Arguably it is not convenient, but still an extra job that brings income.

A sensitive issue remains the possibility of *sexual assault* affecting women during gig work (post n336). Unfortunately, data cannot provide an in-depth understanding of the impediment to women's autonomy in such cases. Post n336 and its comments, in fact, indicate only the exposure of women to sexual harm and a possible reluctance to work at night. However, the reasons why women accept work in the gig economy even at risk of being sexually assaulted seem to be tied with the market. Compared to men, women in the gig economy suffer more precariousness and market limitations (Churchill & Craig 2019, p. 758; Commonwealth Senate 2018, p. 28; Mosseri, Cooper & Foley 2020, p. 6) and a wage gap (Chaudhary 2021, p. 54; Kelkar 2022, p. 10; Tripathi 2021). In a context of a lack of employment options (Churchill & Craig 2019, p. 757; Commonwealth Senate 2018, p. 28) and a need for income (Vyas 2021, p. 46), it can be argued that some women may struggle in exercising autonomy in situations where there is a risk of sexual assault, fearing that their financial needs will not be met.

6.1.2 Gig company harms as proximate and serious harms

In all types of harm, the thesis proves the existence of an impediment to autonomy, but to be considered social harms, gig companies must cause harm to gig workers that are *proximate* and *serious*. As stated in Chapter Three, the seriousness and proximity of harm can be perceived differently depending on the actual harm, industry, and company (Canning & Tombs 2021, pp. 90-3).

The results showed that financial and physical harm were proximate and serious. Proximate and serious *financial harms* are the low fees imposed by the gig company on the rider in food delivery services (post n347). Earnings are proximate in the context of the working hours, with gig workers in the data quantified and compared with others to establish how much they were earning on average (post n348). Seriousness is visible through their reports of very low income, forcing them to use multiple services, or 'multiapp', to earn sufficiently (TWU).

Proximity in *financial harms* can also occur either during negotiations or competition between gig workers and after the completion of a task with a client. These cases are evident mostly in gig companies like Airtasker. In the first case, gig workers must strongly consider prices that are competitive and still allow them to earn when accepting a job, which does not always occur: some would lower their prices and work underpaid to be more competitive (self-inflicting financial harm) and forcing other to do the same if they want to win the task (gig worker-induced financial harm) (post n364; post n367). In the second case, they often complete their work, but the client refuses to pay (post n368) or commits fraud (post n366). In both cases, seriousness is the lack of proper earnings proportionate to the completed task.

Proximity and seriousness of *physical harm*, compared to financial harm, are more immediate to identify due to their visibility. Accidents to gig workers on the road often occur (post n74; post n326), either caused by careless driving (post n74; respondent n14; Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8), fatigue (respondent n14) or determined by bad weather and traffic (Goods, Veen & Barratt 2019, p. 505; The State of Victoria 2020, p. 69). In this case, proximity is caused by the platform that imposes certain routes on the gig worker. The seriousness of physical harm is based on the consequences of the accident, from having minor injuries (less serious), which only require temporary recovery, to death (the most serious) (respondent n14; International Transport Workers' Federation 2020, p. 7).

The categorisation between financial and physical harm should not be taken rigidly when discussing proximity and seriousness. A road accident like in post n74 will be particularly burdensome for 'moonlighters' (The Feed SBS 2017), who face physical harm from the accident and financial harm for being unable to work for the gig company and mostly for their primary job, increasing the level of seriousness of the harm and beyond the gig work.

Proximity and seriousness are not as clearly perceivable in *psychological harm* like financial or physical harm. Gig workers are generally harmed by negative feedback and isolation (Rideshare Drivers Association of Australia 2020, p. 8; Walker, Fleming & Berti 2021, p. 34) and job insecurity (post n318; TWU). Gig workers fear negative feedback that can trigger account deactivation (post n323). Also gig companies cause psychological harm and purposely isolating gig workers by not being readily available in cases of need (respondent n13; respondent n14; Chung 2020).

In these circumstances, the company is harming gig workers although in different but proximate ways that directly or indirectly create fear and delusion. Seriousness, instead, seems to be linked to an account deactivation, the lack of company support, and the desperate need to work coupled with helplessness, powerlessness, stress, anxiety, depression and very little control over problems and lives (Glavin, Bierman & Schieman 2019; International Transport Workers' Federation 2020, p. 7; Kaine & Josserand 2019, p. 489; Kerényi 2021, p. 156; MacDonald & Giazitzoglu 2019, p. 734).

In terms of *legal harm*, proximity and seriousness are more straightforward to identify. Gig companies that do not strictly enforce laws allow gig workers to breach them freely (post n302; post n363; post n369). However, such a breach is deemed by gig workers necessary to earn more due to low pay. Hence, there is a very proximate connection between the gig company inducing in a non-coercive manner the gig workers to breach the laws. Seriousness is evident: while not directly involved, the gig companies not only are pushing for gig workers to infringe Australian laws, but they often put these workers, if they are caught as temporary migrants in breach of their visas, at risk of being banned from the country. This latter risk is real as the majority of gig workers in Australia are non-Australian citizens (Barratt, Goods & Veen 2020a, pp. 11-2).

In all other cases where multiple harms occur, proximity and seriousness not only depend on the types of harm as part of the event but on the quantity and effects resting on the gig workers. In these cases, proximity requires the harms to be directly or indirectly caused by the gig company, or one event triggers others which all lead back to the gig company. Seriousness is instead the sum of the harms that occur in one event.

In the case of *delivery during the COVID-19 pandemic* (post n302), proximity is caused by the lack of proper guidance to minimise contracting the virus that triggers a series of other harms. While the worker is given autonomy to choose what is best to avoid the virus, such choice is dependent on receiving good customer feedback for more work and income from the platform and may have to take the risk of getting ill. These events are linked, and all lead back to the gig company, which does not provide sufficient clarity. Seriousness is the sum of lack of income, exposure to the virus, and fear of negative customer feedback, which are all problematic for gig workers who, as independent contractors, cannot avoid nor challenge any of these.

In *alcohol delivery* (post n324) or in cases of *sexual assault* (post n336), proximity is subjecting gig workers to be potentially assaulted by clients. Similar to the cases regarding the COVID-19 pandemic, gig workers can exercise some autonomy and judgement but at the risk of being assaulted, not paid, receiving bad feedback or distress from the event. These are caused by the gig company for not putting in place protective measures to ensure the gig worker can complete the task in a safer manner, determining proximity to harm. Seriousness, like above, is the sum of the harms that affect the gig worker.

6.1.3 Gig company harms systemically affect powerless workers

Finally, these harms are ‘social’ by systemically *affecting marginalised and powerless groups* (Canning & Tombs 2021, pp. 55-6) in line with the literature and the positioning of the cases of gig harm. More broadly, any worker that is classified as an independent contractor in the gig economy is marginalised and powerless, regardless of personal or social status, due to the impossibility of seeking legal remedies if harmed (Barratt, Goods & Veen 2020a, p. 6; Cherry & Aloisi 2017, p. 642; Chung 2020).

There are two subgroups that are particularly vulnerable to harm in the gig economy: temporary migrants and women. *Temporary migrants* face a strong level of precariousness and need to work to cover living expenses and education fees, so they turn to the gig economy and accept any working conditions (respondent n12; respondent n13; respondent n14; TWU). These workers find themselves in a condition of multilayered vulnerability. As temporary visa holders, they cannot rely on Australian social services. As independent contractors, they cannot seek support from the FWO or any service that considers the prerogatives of employees. Finally, as most of them are not qualified in Australia, they are limited by poor market opportunities. Hence, the gig economy naturally places temporary migrants in a significantly vulnerable condition if we compare them with other groups

based on social status (e.g., Australian citizens) or employment status (e.g., employees) or educational status (e.g., workers whose qualification is obtained or recognised in Australia, which allows them to apply for better jobs).

This study did not gather the same amount of data from the *women* subgroup but post n336 indicates a risk of sexual harm which seems to be more evident towards women working in the gig economy, expressed as a concern that requires family (personal warnings) or technological support (GPS) to overcome. Recently, the McKell Institute Queensland has reported this issue (The McKell Institute Queensland 2023, p. 21). Unfortunately, this area remains under-researched and a limitation of the thesis, compared to non-Australian literature where women abuse in the gig economy is described more precisely (Chaudhary 2021, p. 55; Kelkar 2022, p. 10; Lin & Fang 2022, p. 912; Shah, Maina & Kipkoech 2021, p. 96; Uber 2022h, pp. 56-7).

The problem seems in reality more serious. In fact, the post does not suggest a clear support from gig companies to guarantee women's safety in Australia which is a concern given that Uber was fined in New South Wales not reporting sexual assaults (Bonyhady 2021b) and, in a case of a driver sexually assaulted by a drunk passenger, instead of a permanent ban and a report Uber required only to read the terms and conditions on the platform's use (Bonyhady 2021a).

6.2. Gig companies are a source of social harm

After establishing why harms in the gig economy are social harms, the following step is to determine *why gig companies are a source of social harm*. Such determination is necessary to decide on gig company accountability which currently encounters a dead end due to the lack of appropriate regulations in employment law (Barratt, Goods & Veen 2020a, p. 6; Cherry & Aloisi 2017, p. 642). As argued by zemiologists, countries across the globe prefer limiting their control over businesses to allow competition under the ideas of the neoliberal free market (Raymen & Smith 2019, p. 120; Tombs & Hillyard 2004, pp. 38-9). Consequently, gig companies are free to misclassify gig workers as independent contractors as one of their privileges, part of their "corporate citizenship" (Whyte 2018). As explained in Chapter Three, this notion is framed under a state-corporate crime perspective but being a thesis on social harms and not crimes, the sufferings of gig workers move away from this approach. However, its principles do indicate where the capacity of gig companies to harm lies but, without a legal basis, zemiology is deemed more suitable in this part of the thesis.

With the support of ultra-realism principles, zemiology provides an appropriate basis to overcome the legal limitations in the Australian system, following the scope of this thesis to seek accountability of gig companies for social harm instead of arguing on the issues of misclassification. As explained in Chapter Three, to inflict harm under, a company must exercise both its *special liberty* through

political and market structures independent from human intervention (Hall & Winlow 2018b, p. 49; Lloyd 2018a, pp. 24-5; Raymen & Smith 2019, p. 121) and using a *pseudo-pacification process* or socioeconomic competition created by the market (Hall & Winlow 2018b, p. 49; Wood, Anderson & Richards 2020a, p. 644). Paraphrasing Hall & Winlow (2018b, p. 43), the question to answer is to then explain why gig companies have the willingness to inflict harm to gig workers for a personal benefit, using their special liberty, given by the absence of laws that regulate the gig sectors, with a range of harms beyond physical violence created by the market, or process of pseudo-pacification.

Two elements are then developed below: the content of the special liberty with reference to the types of harm and the passage to non-violent harm in the gig economy.

6.2.1. Special liberty of the gig companies

The *special liberty* in the gig economy is created by the non-intervention of the Commonwealth, which, at the time of writing, has not yet provided a definitive response about the classification of gig workers as independent contractors. The non-intervention of the Commonwealth that allows gig companies to have their special liberty was strongly criticised in the results (respondent n13; online survey). Chapter Two showed that Australia was discussing how to regulate the gig economy (Commonwealth Senate 2018, 2020; Parliament of New South Wales 2020; The State of Victoria 2020), with very limited advancement, while cases have formed a consistent view of gig workers as independent contractors (*Kaseris v Rasier Pacific* [2017]; *Pallage v Rasier Pacific* [2018]; *Suliman v Rasier Pacific* [2019]; *Gupta v Portier Pacific* [2020]; *Deliveroo v Franco* (2022); The State of Victoria 2020, pp. 152-3). These precedents allow the gig companies to pursue their interests freely by using the independent contractor model supported by Australia's neoliberal policies and its 'fair go' approach to avoid any accountability for social harm.

This is the essence of the 'corporate citizenship' (Whyte 2018) of gig companies, which is coupled with the normative control they utilise (Veen, Barratt & Goods 2019, pp. 8-9). Using the independent contractual model, gig companies impose terms and conditions of gig work and create the imbalanced contractual power that plays a strong role in determining the cases of harm in the gig economy and yet these do not fall under a protective regime of employment or criminal law.

Such liberty specifically in the gig economy becomes evident in the Community Guidelines where gig companies legally deny any form of responsibility for harm but simply list expectations that must be followed (Rideshare Drivers Association of Australia 2020, p. 12; Uber 2022g). In Uber, for example, workers only have obligations to 'treat everyone with respect', 'help keep one another safe' and 'follow the law' regarding road safety and delivery (Uber 2022g). A broad interpretation of the guidelines indicates only obligations on the gig workers while the platform has full discretion to enforce any rule that it believes it was breached, keeping the capacity to dictate any rule without encountering liability. Consequently, gig workers are obligated to change their behaviours in line with

the gig company's rules, becoming subjected to its *bureaucratic control* (Veen, Barratt & Goods 2019, pp. 8-9).

An analogy with forms of wage theft proves the point above. Wage theft is denying working entitlements or creating sham contracts to represent workers as independent contractors when they are more similar to employees (Multicultural Youth South Australia 2019, pp. 2-3; National Union of Workers 2019, p. 5; The Construction Forestry Maritime Mining and Energy Union 2019, pp. 2-3 [4.a]; The McKell Institute 2019, p. 9; The McKell Institute Victoria 2019, p. 14; Young Workers Legal Service 2019, p. 13 [49]). Similar to what happens in the gig economy, which the thesis calls *financial harm* and possibly the most common and evident instance, the special liberty is imposing or encouraging payments significantly below national minimum standards for the completion of a task (post n347; post n348; post n364; post n367). However, if we include in financial harm any damages to personal property belonging to the gig worker that requires financial coverage and is not a result of physical harm, we do have a grey area when gig companies are compensating their drivers (post n345; post n374) or even neglecting to do so (post n345).

In *physical harm*, the special liberty is denying compensation for accidents that may occur during the completion of the task under the independent contractor model and requesting workers to have their own personal insurance (post n307; posts n349 and n350). Insurance premiums are never legally compulsory for gig workers to possess, nor the gig company has an obligation to provide them, even if some gig companies like Uber, Airtasker and Deliveroo have given some concessions but with multiple limitations and exceptions (Airtasker 2022a, 2022b; Chubb Insurance Australia 2021a, 2021b; Deliveroo Australia 2020b, 2022a, 2022c; Marsh Advantage Insurance 2022a, 2022b; Uber 2022c).

In addition, terms and conditions of the insurance premiums for Uber (post n326; post n343; respondent 9), Deliveroo (respondent 14), or Airtasker (posts n349 and n350) are disadvantageous or too hard to access and understand. Uber, for example, recommends gig workers seek their own insurance if they want proper coverage. Hence, gig company's special liberty to frame gig workers as independent contractors with significant obligations not only allows it to avoid accountability but also consists of the power to frame concessions, in this case insurance claims hard for gig workers to use and forcing them to seek alternative companies.

Special liberty is building an invisible wall between the gig company and the gig worker by becoming progressively unavailable and unhelpful in resolving any queries, a tactic to avoid any responsibility (post n303; post n304; post n310; post n360; respondent n13; respondent n14). Nevertheless, this creates feelings of isolation and helplessness that affect gig workers and their performance and result in *psychological harm*. This trait is controversial in the gig economy and gig companies differ in their attitude towards psychological harm. Deliveroo does not cover untreated mental conditions (Marsh Advantage Insurance 2022a, p. 9). Therefore, if there is distress from gig work, the burden

is on the workers. Instead, Uber provides psychological consultations if gig workers are harmed by gig work, but a special team must evaluate the claim (Uber 2022c).

Legal harm is crucial when discussing special liberty. When referring to temporary migrants, the gig company has no obligation to ensure the workers comply with visa clauses and, if found in breach, the consequences with the DHA are only on the worker (respondent n14). In cases of gig work in breach of lockdown regulations, the fine is on the gig worker caught violating the law (post n363; post n369). In both scenarios, the responsibility is only on the worker while the gig company, which enjoys its special liberty, is not accountable but, at most, is required to produce a warning regarding breaches of the laws.

Special liberty, in *particular cases* such as exposure to COVID-19 (post n302), assault by intoxicated customers (post n324) and sexual abuse (post n336), all follow a similar pattern. The gig company has no responsibility in regard to any of the harms from the events mentioned and simply makes recommendations to gig workers to follow the laws and list the consequences for not complying. There are no obligations to protect their safety whatsoever.

6.2.2. The pseudo-pacification process

In no case did a gig company exercise physical violence on its gig workers, but the company could still cause social harm through the *pseudo-pacification process*. The gig economy enjoys enormously from this process by exploiting the Australian market deficiencies and the consequences of the COVID-19 pandemic, which significantly reduced the jobs available for people in Australia and driving them to platform work (respondent n2; The State of Victoria 2020, p. 44; Unions NSW 2020, p. 56).

In each form of harm identified in the study, the pseudo-pacification process creates immediate consequences that affect the gig worker, all caused directly by the gig company but none of them violent.

In *financial harm*, it is the imposition of or allowing earnings below national minimum standards or shifting the burden of financial compensation for damages on the personal property of the gig worker (post n87, Respondent 13).

In *physical harm*, it is the lack of effective insurance coverage by offering difficult access premiums due to complex terms and conditions and forcing gig workers to seek their own personal insurance (post n307; post n326; post n343; Respondent 9).

In *psychological harm*, it created the sense of oppression felt by gig workers to satisfy gig company's demands for performance, or isolation and helplessness of gig workers who feel abandoned by the gig company when in need (post n303; post n304; post n310; Respondent n13; Respondent n14).

In *legal harm*, it allows gig workers to breach different laws, but if caught, they face the consequences alone (post n363; post n369; Respondent n14).

In *other cases*, like delivery during COVID-19 emergencies, alcohol delivery and sexual abuse, gig workers are only advised to take care and follow any rules (post n302; post n324; post n336).

These findings show that conditions are not imposed violently on gig workers. These are only market-generated rules that gig workers must accept if they want to work in the gig economy.

6.3. The relationship between gig workers and companies in the independent contractor model

Until now, this thesis demonstrated that harms in the gig economy are social harm and that those gig companies have the capacity to inflict harm on gig workers. However, this thesis still lacks an examination of the relationship between gig workers, the gig company and being independent contractors. This is the crucial relationship in the gig economy of interest. Whether it is triangular like Airtasker or Uber or quadrangular like Uber Eats, the contract remains 'for services' that explicitly states there is no employment relationship (The State of Victoria 2020, p. 108).

Following Lloyd, the thesis argues that social harm will occur if the gig company possesses both an *absence of moral responsibility* (Lloyd 2018b, pp. 256-8) and an *absence of stability* (Lloyd 2018a, p. 42; Lloyd 2018b, p. 251; Lloyd 2020, p. 81) while *dispossessing gig worker's rights to accumulate income* (Lloyd 2020, p. 89).

6.3.1. Absence of moral responsibility of the gig company

The *absence of moral responsibility* (Lloyd 2018b, pp. 256-8) is the willingness of gig companies to inflict harm to maximise profits and overcome any ethical responsibility reflecting the various harms in the gig economy again.

One of the most evident moral responsibilities in current workplaces is to ensure that all workers are paid sufficiently. In instances of *financial harm*, the gig company has no interest in ensuring that the workers are earning adequately.

The same is present in *physical harm*, where gig companies are limitedly interested if their workforce is safe and do not appropriately insure them (post n326; post n343; respondent 9). Taking Uber's Community Guidelines as an example, it requires only gig workers to 'treat everyone with respect', 'help keep one another safe' and 'follow the law' (Uber 2022g). All other matters are not discussed.

In *psychological harm*, gig companies leave their workers in isolation and despair, avoiding confrontation (post n303; post n304; post n310; Respondent n13; Respondent n14)

In the cases of *legal harm*, the lack of moral responsibility was actually mentioned with reference to their tolerance in case of breach of lockdown laws but, as said, this also includes visa breaches. Such permission puts their workers at risk of being fined or deported from Australia (post n363; post n369; respondent n14).

Finally, in special circumstances, the gig company avoids all responsibilities by providing only warnings to gig workers to take safety precautions or list the relevant regulations to follow (post n302; post n324; post n336) (Uber 2022g) but, as Tombs argued with reference to the UK's neoliberal approach to regulate the spread of COVID-19, gig companies are willing to accept illness or harm (and even death) of gig workers as long as the company can still continue to work and produce revenue, as part of that compromise between states and corporations that criminalise only limited harms (Tombs 2023; Tombs & Whyte 2015, p. 156) to protect capitalism (Hébert, Bittle & Tombs 2019; Tombs 2018b).

All these cases have a common denominator: the gig company has no duty of care towards the worker in nearly any circumstance. Its only concern, which was clearly indicated in post n351, is making income through its fees.

6.3.2. Absence of stability in the gig company

The *absence of stability* (Lloyd 2018a, p. 42; Lloyd 2018b, p. 251; Lloyd 2020, p. 81) depends on the independent contracting model. Under this arrangement, all protective rights that are traditionally provided to employees are not applicable and let gig companies avoid obligations and still create income.

In the gig economy, it seems that two subcategories of the absence of stability emerge from the data: the *absence of contractual stability* and more *general absences*.

The *absence of contractual stability* is driven by the ambiguous and unilateral terms and conditions that gig workers must accept to work in the gig company (respondent n14). Constituting an example of “institutional violence” (Cooper & Whyte 2022, pp. 211-2), such contracts give the gig company absolute control over the gig worker, regulating not only the manner to complete the tasks but also whether the gig worker is suitable to continue to work for the platform exclusively under its own parameters contained in the Community Guidelines (Uber 2022g).⁵² Any contractual violation will determine a punishment towards the gig worker, which can ultimately lead to exclusion from using the account. Needless to say that stability is absent while the contracts possess a power imbalance

⁵² This argument is also valid for gig companies that strongly use algorithms, explained in the following chapter.

in favour of the gig company and the terms and conditions cannot be negotiated with the workers (Rideshare Drivers Association of Australia 2020, p. 12; Uber 2022g).

The *general absences* refers to those instances that, linked to the contract of services, reflect the consequences financial, physical and psychological harms that the data grouped in three categories: absence of compensation for damages, absence of training and absence of platform support.

In the *absence of compensation for damages*, gig workers are left with the burdens of having to cover for any damage they suffer. Setting aside the physical consequences of being involved in an accident that causes damages, the financial struggles of having a means of transport damaged or stolen (respondent n13; post n87) but still having to pay for its repair or substitution increase the levels of precariousness of gig workers.

In the *absence of training*, the level of precariousness is evident in the lack of safety courses that have been abolished (respondent n14) and the lack of guidance for appropriately managing alcohol delivery (post n324), exposing gig workers to serious physical harms.

Finally, the *absence of platform support* reflects that distance the gig companies purposely create to isolate gig workers (respondent n14) and confine them in permanent situation of exploitation.

Consequently, the absence of stability in the independent model not only creates an unstable workforce through its contractual terms and conditions, but these produce broader absences that are not strictly contractual but are rather further consequences or harms that the model can create.

6.3.3. Accumulation by dispossession

The final concept presented is *accumulation by dispossession* (Lloyd 2020, p. 89), or the argument that gig companies are accumulating wealth by dispossessing working rights in a slow and invisible process.

Dispossession seems to occur in two manners: on one side, by the adoption of the independent contracting model that prevents gig workers from seeking remedies for being harmed, while on the other side, by exercising fear on the most vulnerable gig workers, namely temporary migrants who are generally unaware of their working rights (Stewart & Stanford 2017, p. 428).

While this chapter has extensively discussed how the independent contracting model dispossesses working rights, this part is devoted more to temporary migrants. Gig companies 'use' the fear these workers have towards the Australian legal system to exercise control over them and to accumulate income, knowing they cannot find better work (Lloyd 2020, pp. 78-9). This was explicit in the results, which acknowledged that for temporary migrants the barriers to employment often are too high in Australia to secure better quality jobs, making the gig economy their best option (respondent n13; TWU). Hence, they are 'dispossessed' of their working rights like better pay (post n347), proper

insurance protections (post n87, respondent 13), or mental health support (respondent n14), while the gig companies accumulate finances and power over the market and their workers. Such accumulation is evident from Uber's reports from 2019 to 2021, where the COVID-19 pandemic benefited significantly the gig company with increases in reviews and profits (Foote 2022; Khadem 2021) while gig workers were facing the various social harms.

In some ways, this reflects the issue of wage theft in Australia, where some categories of workers including temporary migrants, women, and youth workers, are deprived of their rights (The McKell Institute 2019, p. 9).

6.4 Rethinking *Deliveroo v Franco* (2022) in light of zemiology

Throughout the chapter, zemiology was presented as possible alternatives to employment and criminal laws and criminology in attributing accountability to gig workers for social harm when the laws did not to offer sufficient protection. Using an analogy, the gig economy is the "Grenfell Tower" (Tombs 2021, pp. 11-2) of Australia where gig workers through the years have reported their exploitation and vulnerability only to become a true issue during the COVID-19 pandemic when the death of a number of gig workers were told by media (Blakkarly 2020; Brancatisano 2020; Zhou 2020).

To conclude the discussion, it is important to see how zemiology with the support of ultra-realist principles should be applied concretely through a judicial holding on the Australian gig economy not only to explain the usefulness of these but also to highlight the limitations of the current Australian laws.

The *Deliveroo v Franco* (2022) case is appropriate to understand the practical value of zemiology because it is the most recent gig economy case decided in Australia and reflects the current historical context.

As explained in Chapter Two, the point of contention in the case was Franco's late deliveries, which Deliveroo considered as a breach of the agreement signed between Franco and the platform. Based on this element, Deliveroo decided to suspend his account. Although Franco, through the TWU, appealed the decision as a case of unfair dismissal, the Full Bench of the Fair Work Commission (FWCFB) 'regrettably' decided that Mr Franco could not seek a remedy in law due to the lack of control of the platform over its worker (*Deliveroo v Franco* (2022) [46]–[56]) but admitted that Deliveroo's was an 'unfair treatment' [57], although maintaining the idea that gig workers are independent and autonomous.

The thesis contends that gig workers are truly autonomous under the FWCFB's reasoning, and that gig company reduces autonomy through various forms of control. Autonomy, while praised by gig companies and gig workers as 'being their own boss' (respondent n13; Barratt, Goods & Veen 2020), does not encounter the reality of the gig economy where control is more relevant (TWU; Wu et al. 2019, p. 590). However, the gig companies avoid their responsibility for control through their Community Guidelines, drafted as a series of recommendations and obligations on gig workers to use a platform while not being employed.

Reflecting on *Deliveroo v Franco* (2022) this chapter asks the following questions:

1. Was the unfair dismissal for late deliveries a social harm?
2. Did Deliveroo possess any special liberty during the pseudo-pacification process?
3. Did Deliveroo adopt a contractual model that denied any moral responsibility or stability to workers and dispossessed worker rights while accumulating income?

Regarding (1), Franco lacked the autonomy to challenge the decision of dismissal because the agreement did not provide him with the opportunity to be heard by Deliveroo after deactivation, constituting a creation of legal (and procedural) harm. Denying any possibility to review the decision after deactivation can be argued as both proximate, since it was caused by the gig company, and serious because it was preventing Franco from accessing the platform and earning money. Franco also was in a more vulnerable position as he was a temporary migrant from Brazil who required local support from the TWU to bring his case to the FWCFB. The Full Bench could then identify the denial of fair hearing as a form of social harm as these would apply to any gig worker and particularly vulnerable temporary migrants.

After determining the lack of a fair hearing as a social harm, the Full Bench would need to identify if Deliveroo was granted (2) any special liberty by the Australian legal system, as part of the process of pseudo-pacification of the platform. Deliveroo's special liberty necessarily needed to come from the agreement with Franco. In reviewing the terms and conditions, the Full Bench would have found that the clauses were disproportionately in favour of the company, which had full control over the accounts, including the power to deactivate them arbitrarily (Deliveroo Australia 2022b).

Finally, the Full Bench would have to establish (3) the link between the procedural denial as social harm and the power to deactivate accounts granted by Deliveroo's special liberty, to determine if Franco suffered truly unfair dismissal. This is where the legal arguments show the limitations of the Australian legal system and why *zemiology* should be scrutinised as alternatives.

Franco had to prove that Deliveroo was *absent of moral responsibility* (Lloyd 2018b, pp. 256-8) and had the 'will' to inflict harm to the gig worker to maximise profits and overcome any ethical

responsibility. The only circumstance available to Franco was the will of Deliveroo to deny a fair hearing after deactivation.

Conversely, Franco had to demonstrate the *absence of contractual stability* by proving the strong power imbalance Deliveroo possessed in the agreement. Evidence needed to include not only the full discretion of Deliveroo to deactivate his account, which was clear as it was the platform's special liberty, but also that orders were managed (controlled) by Deliveroo. This point shows a limitation of the Full Bench. While Franco argued he was controlled by the algorithm, the Full Bench rejected his argument and stated that the role of the algorithm was to assign tasks and indicate locations but that he had full discretion in how to deliver the order, as long as it was done safely [56].

Franco stated that dismissal caused financial harm and a reduction of income, but the Full Bench, on the grounds of appeal, stated the claim was unacceptable because Franco was multi-apping (*Deliveroo v Franco* (2022) [18]). Unfortunately, on one side Franco could not prove other harms that may have affected him as a vulnerable worker, such as any personal consequences from lack of communication with Deliveroo after deactivation to obtain a fair hearing. If the judges had considered any other harm sustained by the gig worker in their judgment, they might have been grounds to seek a remedy from the dismissal, reminding the problems of perception that some harms carry. On the other, it was the Full Bench that attributed to Franco control over the management of the orders, disregarding the role of the algorithm, which instead was crucial, as we will see in Chapter Seven.

6.5 Advantages of zemiology in the Australian gig economy beyond *Deliveroo v Franco* (2022)

It is important to note the advantages of zemiology. It does not reference the dichotomy of employee and independent contractor as framed in Australia, nor about a third category, nor the indicia in *Hollis v Vabu* (2001) but recognise an impediment to the worker's autonomy., the approach is capable of identifying the gap in workers' protections in the Australian legal systems and framing rights or, as in the words of the TWU in their interview 'putting rights where needed' without a rigid worker reclassification, although this is still the solution preferred by some gig workers (respondent n13) and in the literature (Cherry & Aloisi 2017; Commonwealth Senate 2018, 2021, 2022; Goods, Veen & Barratt 2019; Nossar 2020; Rawling & Munton 2021; Stewart & Stanford 2017).

Currently, gig workers have no avenue for protection and can only rely on the support of the TWU and the Rider Alliance (respondent n14) even if gig workers are reluctant to believe in 'collective agency' (Barratt, Goods & Veen 2020a, p. 14) and 'backstage activism' (Popan 2021, pp. 8-10). Hence, while constructing a proper law that finally regulates the gig economy, possible alternatives can be achieved through courts and tribunals that consider new interpretations of the terms and

conditions of contracts for services by looking at how social harm affects gig workers, but obviously taking a different and innovative stance from *Deliveroo v Franco* (2022).

Another alternative is creating an *ad hoc* body that differs from the Health and Safety Representative in Deliveroo (respondent n14) and that oversees each company's Community Guidelines and the diversity in the gig economy (TWU). This approach could apply the same zemiological principles and support the creation of agencies to reduce or prevent social harm (McGregor 2021).

As a final note, zemiology, other than being different and innovative compared to others in law and criminology, is also able to address the strong distrust of gig workers towards the Australian Government and that lack of protection that they perceived (online survey), a perspective that Australia should consider heavily in light of the recent Uber scandal that is affecting the political spheres in Europe (Davies et al. 2022; Freedberg et al. 2022). Given the strong migrant presence in the gig economy, Australia's extended protections beyond labour classifications can attract more workforce in the country which, during the COVID-19 pandemic, was significantly reduced.

Conclusion

The scope of this chapter was to answer RQ1:

RQ1—Through the lenses of zemiology, why are gig companies a source of 'social harm'?

Gig companies are a source of 'social harm' because their actions or omissions are *impediments* to *powerless and vulnerable workers'* autonomy to avoid or reduce the risk of *proximate and serious* harms.

Using their *special liberty* provided by non-governmental action, they cause non-violent harm by controlling the market, called *process of pseudo-pacification*, through the use of the independent contracting model. Such a model allows the gig company to act in the *absence of moral responsibility* to protect the safety of gig workers and an *absence of stability* through detrimental terms and conditions and beyond these that compromise their lives while *dispossessing* gig workers' rights to accomplish the goal of maximising income.

This chapter concluded with a review of *Deliveroo v Franco* (2022) and how the principles identified in the chapter should be applied to the case. However, as shown, Franco did not provide sufficient evidence of the harm he sustained. Further, the Full Bench lacked analysis of Deliveroo's algorithm, posing a legal limitation that the Australian legal system still has regarding gig economy technology.

The chapter finally suggests that zemiology supported by ultra-realism is appropriate to frame gig worker's rights without a reclassification in employees nor using other legal definitions, allowing courts and tribunals to attribute those rights based on the level of harm sustained or even to determine a policy that attributes overseeing powers to ad hoc bodies to ensure gig companies are not harming their workers.

While some possible uses of zemiology are applicable to all gig companies, a hurdle remains when some platforms hide their responsibility behind algorithms like in *Deliveroo v Franco* (2022). This final point is the core of the debate in Chapter Seven, where the discussion concerns the determination of accountability for the social harm of algorithms used by gig companies.

CHAPTER SEVEN: ZEMIOLOGY AND TECHNOLOGY HARM: DETERMINING ACCOUNTABILITY OF GIG COMPANIES' ALGORITHMS FOR SOCIAL HARM

Chapter introduction

In Chapter Six, this thesis adopted zemiology and ultra-realism to explore and establish why gig companies are sources of social harm and ended with a review of the case *Deliveroo v Franco* (2022). The thesis recognised that the case lacked relevant arguments on harm on Franco's side. Chapter Six also showed how the Full Bench did not give enough weight to the platform's algorithm.

Algorithms are one of the most controversial tools used to assign tasks or determine whether the gig worker is still fit to work for a platform, called 'algorithmic control'. Not all gig companies adopt algorithms to control their workers, not all algorithms work the same, and how algorithms work is not fully understood. Hence, like the gig economy in general, this area is vague and uncertainties arise when attributing accountability for harming workers who rely on the directives of the algorithms.

The aim of this chapter is to answer RQ2:

RQ2—Through the lens of zemiology and technology harm, why is the algorithm a source of 'social harm'?

The scope is overcome uncertainties related to the role of the algorithm in the context of social harm by applying the principles of zemiology to demonstrate that harms from algorithms are social harms but also technology harm to demonstrate that algorithms can be held accountable for harming gig workers irrespective of their design and nature and are a 'tool of harm'.

Mirroring Chapter Six, Chapter Seven examines whether harms caused indirectly by algorithms are social harms, applying the definition of harm as an impediment to reduce the risk of harm, and evaluating the proximity and seriousness of such harms, particularly against vulnerable groups.

After defining if these are social harms, the chapter applies the principles of technology harm to identify if the algorithms are sources of social harm through Wood's *stratigraphy of harm*. After determining the source of social harm, the chapter uses the notion of interface harm to indicate how social harms and algorithms are linked together.

Finally, the principles of the chapter are adopted with reference to algorithms' deactivation to establish if *Deliveroo v Franco* (2022) could have been decided differently.

7.1 Algorithmic harms as social harm

In Chapter One, this thesis defined an *algorithm* as ‘a process or a set of rules to be followed by calculations or other problem-solving calculations’ (Gilbert & Thomas 2021, p. 9) and *algorithmic control* as management of labour decisions through algorithms at the expense of human control, and a tool to restrict, recommend, rate and discipline workers’ behaviour (McDonnell et al. 2021, p. 4003), exercising bureaucratic control (Veen, Barratt & Goods 2019, pp. 8-9). However, gig workers are managed by the app used by the platform which collects data through the rating system, a form technical and computer control (McDonald et al. 2019, pp. 16-7; Veen, Barratt & Goods 2019, pp. 8-9). These highly technical definitions, while helping understand how gig companies work with algorithms, do not demonstrate why algorithms, intended as a ‘tool of harm’, are accountable for harming gig workers.

Zemology can aid by establishing if harms caused by algorithms are social harms. This chapter explores the questions of (1) *what is a social harm* with reference to the algorithm, (2) *how serious and proximate* those social harms are, and (3) *how they systemically affect powerless workers*.

7.1.1 Algorithmic harms as impediments to gig workers’ autonomy

Like for gig companies, the algorithm must cause an *impediment to fulfil personal needs* (Copson 2011, cited in Canning & Tombs 2021, p. 52) or an impediment to gig workers’ autonomy caused by the algorithmic control. Data from Chapter Five suggested two ways that the algorithms were a ‘tool of harm’ for gig workers: (1) by controlling job allocation and account deactivation, and/or (2) by causing financial, physical or psychological harm.

Following Copson’s definition and the broad data categories, we can hypothetically define such harms the impediment or reduction of gig workers’ *autonomy* to manage job allocation or challenge account deactivation, be financially self-sufficient, or protect themselves physically or psychologically or a combination of these, due to control exercised by algorithms. The thesis refers to them all as ‘algorithmic social harms’.

Job allocation and account deactivation as algorithmic social harms

The manner in which *jobs* are *allocated by the algorithm* is unknown due to information asymmetry conveniently created to avoid accountability (Kilhoffer et al. 2020, p. 55) but delivery riders attempted to overcome this lack of clarity to explain job allocation, which this thesis calls the ‘theory of job allocation’ and expresses their ‘collective sensemaking’ (Weber, Remus & Pregoner 2022, pp. 12-3). Based on their experiences, riders suggest that *allocation* depends on good ratings, better from a specific restaurant (post n308), the type of vehicle used, favouring motorised ones (post n308; post n315; post n342; Chung 2020), and the time of commencement of working with the gig company, with more orders given to new workers (post n311; post n322). Working for specific

restaurants clearly disproves the concept of ‘spatial flexibility’ (Kilhoffer et al. 2020, p. 75; Wood et al. 2019, pp. 66-7), as riders seem to be bound to certain locations and have fewer opportunities if they move away from certain areas. It instead confirms their ‘malevolent sensemaking’ of feeling under constant scrutiny and needing to follow specific but abstract rules (Weber, Remus & Pregonzer 2022, pp. 12-3).

Although not explicit, there is a correlation between women and algorithmic allocation of tasks. Women’s fear of sexual assault discourages them from working at night. If the algorithm acquires this behaviour, there is a risk of ‘algorithmic bias’ that will assign tasks to men rather than women because men work more (Vyas 2021, pp. 41-2).

In applying the definition of algorithmic social harm, the combination of these factors clearly reduces gig worker autonomy. Gig workers, if they wish to work, cannot rely on the autonomy praised by the gig company but are subject to these criteria, which are purely theorised and expose the gig workers to strong labour uncertainty. This confirms the existence of the capacity of the algorithm to exercise *bureaucratic* control to regulate the worker’s behaviour (Veen, Barratt & Goods 2019, pp. 8-9).

Account deactivation occurs when the algorithm calculates a lack of performance through the rating system (Kaine & Josserand 2019, p. 493; Wood 2019a, pp. 112-3), which analyses acceptance, cancellations and customer satisfaction by exercising *technical* and *computer* control (Deliveroo Australia 2020a, p. 7; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9). While common instances of account deactivation are late deliveries (post n318; post n334; post n337), data identified other circumstances like fraudulent activities, such as using different vehicles from the ones linked in their accounts (e.g., using a car instead of a bike: post n333) or ‘account sharing’ to maximise income and rating score (post n91; post n92). Hence, accounts can be deactivated not only on the basis of worker performance but also worker behaviour (Kilhoffer et al. 2020, p. 262; The State of Victoria 2020, p. 69). Unfortunately, gig workers may also be victims of algorithmic errors or penalised by negligent restaurants that jeopardise orders which may result in a penalty (post n370; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 10).

Account deactivation is a significant issue for gig workers who are aware that, once they are banned from the platform, they cannot be reinstated for breach of the agreement and of the Community Guidelines (Rideshare Drivers Association of Australia 2020, p. 12). Gig workers try to prevent deactivation by seeking advice through WhatsApp (Walker, Fleming & Berti 2021, p. 34) and, as the netnography shows in Chapter Five, Facebook Groups (post n313; post n319). However, this seems to be the highest level of autonomy they possess. When an account is totally deactivated by the algorithm gig workers as independent contractors have no avenue to seek a remedy (or may not have knowledge about avenues of support, like seeking support from the TWU, but must accept the complete job loss (post n318; Goods, Veen & Barratt 2019, p. 513).

Social harms related to the algorithm consequently reflect the idea of 'algorithmic domination' (Muldoon & Raekstad 2022, p. 7). The common trait is the lack of gig worker autonomy which fuels the 'power of the algorithm' to flag or ban a worker from the platform for unproductive performance, even when errors are to be attributed to third parties like restaurants or the algorithm itself.

Financial, physical and psychological harms as algorithmic social harms

Algorithmic control can harm gig workers to various degrees beyond attributing tasks or deactivating accounts. The algorithmic change that occurred to the Adelaidean rider is possibly the most evident example of financial, physical and psychological harm that occurred nearly simultaneously (Chung 2020).

In terms of *financial harm*, the allocation of orders purely on the side of the algorithm impedes the workers from exercising autonomy and earn decently. The lack of proper earnings causes gig workers to suffer significant struggles to survive in Australia and elsewhere (Barratt, Goods & Veen (2020a, p. 12); Veen et al. (2020) Jamil & Noiseux (2018, p. 19); The State of Victoria (2020, p. 68). To earn a decent pay, possibly they adopt income strategies through multi-apping (respondent n12; TWU) or using the best times to deliver and maximise the bonuses (respondent n13). However, respondents n13 and n14 both described a progressive reduction of wages per delivery since the early stages of delivery services to more recent years in Australia due to the increased number of riders and the less allocation of work to each gig worker, often forcing them to wait for orders without working but virtually still 'on call' or 'at work'. The lack of delivery requests was confirmed in post n320, post n348, and particularly in post n338 where 'full-timers' of the gig economy (The Feed SBS 2017) pose the issue of income due to fewer orders and the need to reconsider other 'traditional' jobs or work longer hours to make a decent earning. Bonuses are surely a good way to maximise earnings but they cannot be predicted by gig workers since they are fully managed by the algorithm. Hence, gig workers will accept as many orders as possible, hoping to score some kind of bonus (The State of Victoria 2020, p. 69; Veen, Barratt & Goods 2019, pp. 11-2).

A second and more technical impediment linked to financial harm is app errors. As shown in post n20 and in post n85, gig workers may be prevented from working when the app is unresponsive or in the presence of tall buildings in metropolitan areas where the internet connection is insufficient. When these circumstances occur, gig workers do not have the tools to overcome the impediment but are simply cut off from deliveries and suffer financial harm until the telephone service provider or the platform resolve the issue.⁵³ These circumstances are clearly beyond the control of the gig worker.

Physical harm is the impediment to avoiding accidents while completing a task. For respondent n14 and the TWU, the number of accidents is high and caused by the fear of account deactivation by the

⁵³ The poor reception that reduces orders is an example of interface technology harm as an unintentional harm caused by the technology. The details are explained below.

algorithm. Such fear reduces gig workers' autonomy to complete tasks safely. This occurs for riders who purposely speed on roads and breach safety rules (respondent n14) or are careless during weather and traffic hazards (Goods, Veen & Barratt 2019, p. 505). Being bound to the algorithm, gig workers may suffer excessive fatigue and, in some cases, cause accidents that result in physical impairment or death to complete a task and satisfy the demand (Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8; Veen et al. 2020).

On a specific occasion, the TWU explained that *psychological harm* is an emerging issue, represented by gig workers as 'fear' of not earning an income by not receiving orders (TWU; MacDonald & Giazitzoglu 2019, p. 734), having the account deactivated (respondent n14) or receiving negative ratings that affect their accounts (post n325; post n327; post n329; Rideshare Drivers Association of Australia 2020, p. 8). These fears are a form of 'psychological control' over the workers (post n329) and indicate clear correlations between psychological harm and other types of harm.

The impediment to workers' autonomy is evident through these correlations. In cases of fear of not receiving orders and not earning enough, gig workers must adopt any possible strategy under the 'theory of job allocations', work at convenient times or try to multi-app. This ties psychological harm with financial harm. When a gig worker fears deactivation, the gig worker can only rely on keeping positive ratings high and delivering at all costs, including risking an accident. This is the link between psychological harm and physical harm. Hence, psychological harm, while seemingly invisible, emerges less as a stand-alone harm, but it is always present with other harms, making it more serious than what it is perceived.

The definition of the algorithm as a 'tool of harm' applies to these forms of harm. In all circumstances presented, there is a lack of a reduction in autonomy to avoid them. They are clearly attributable to the level of control exercised by the algorithm that defines 'who earns' and 'how the delivery should be done', and completely disregards any distress from its decisions, regardless of whether one or more harms occur.

7.1.2 Algorithmic harms as proximate and serious harms

As for gig company harms, algorithmic harms must be *proximate* and *serious* (Canning & Tombs 2021, pp. 90-3), reminding that they can be perceived differently by gig workers. Proximity is the relationship between the algorithm (the technological offender) and the gig worker (the victim), while seriousness looks at the effects of such harm on the individual worker.

In *job allocation*, such a relationship exists in two ways: during the assignment of the task by the algorithm and when the algorithm sets the manner the task should be completed. The ways proximity exists in job allocation affect seriousness of the harm differently. In task assignments, seriousness is the waiting time for a notification from the algorithm (respondent n13): the longer the waiting period,

the less income can be made (post n348). During the completion of a task, seriousness is the exposure to risks of harm. For example, imposing to complete an order quickly in breach of road safety rules increases the chance of an accident (respondent n14; TWU).

In *account deactivation*, proximity occurs at the final stage of the relationship, when the algorithm 'decides' that the worker no longer satisfies the gig company's standards or Community Guidelines (post n318; post n334; post n337). The seriousness depends on the consequences of the deactivation. While the general consequence is the impossibility of continuing to work with that gig company, seriousness is perceived as stronger when gig work is the only source of income. In such cases, gig workers suffer significant distress when they are not allowed to work, fearing they cannot earn enough to live (post n318; post n334).

In cases of *financial harm*, proximity can occur at any stage of the relationship. Financial harm occurs during job allocation when the algorithm does not notify any order, forcing the worker to be available but not earn money (post n347; post n348). During deactivation, it is the impossibility to access the account and work (post n311). The seriousness reflects the need for income. Possibly, it is perceived stronger by those who do not have an alternative job, compared to those who may be supported by other means, either a mixed gig work-employment status or through multi-apping (TWU) or, for Australians, social service benefits (post n338).

Physical harm proximity seems to occur only during the completion of the task. Gig workers are constrained by the algorithm, which strictly imposes how the task should be completed. Often, the algorithm expects gig workers to be on time according to the app's calculations. If the workers are not on time, the algorithm will trigger warnings and suspensions (post n311). To avoid it, gig workers will speed up to quickly they make deliveries, increasing the level of fatigue (TWU) or causing accidents to themselves or others (Respondent n14; Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8; Veen et al. 2020) or even death (Respondent n14). The seriousness depends on the types of injuries sustained by the gig worker in the attempt to strictly follow the algorithm's orders.

Psychological harm can be proximate in all stages. As per respondent 13, the level of mental distress increases when waiting for orders to arrive. The same level of distress can occur during delivery of an order to satisfy the algorithm and avoid negative feedback (post n325; post n327, post n329) and, finally, upon deactivation of the account (post n311). As in other cases of psychological harm, the seriousness is perceived differently, but there is no suggestion that certain instances are less serious than others. Instead, the lack of orders, the fear of account deactivation and the actual account deactivation all create psychological harm, seemingly for the same reason—the distress that the worker will not be able to work and earn enough to live in Australia.

7.1.3 Algorithmic harms systemically affect powerless workers

Algorithmic harms must finally *affect marginalised and powerless groups* (Canning & Tombs 2021, pp. 55-6). There is some overlapping between gig and algorithmic harms when classifying powerless workers. Unsurprisingly, *temporary migrants* are the most vulnerable category if compared to Australian citizens (respondent n12; respondent n13; respondent n14; TWU).⁵⁴ This is evident in post n338. For an Australian citizen, an instance of financial harm is more limited when supported by social service payments. Not working or being deactivated is not a severe issue if such payments are available. Instead, a temporary migrant suffers significantly more as social services are unavailable to non-Australian citizens. Hence, when deactivated, a temporary migrant has no other means of income except other gig or traditional work, if available (post n311).

However, other categories of powerless workers emerged in algorithmic harm that was not present in gig company harm. These are present in the 'theory of job allocation'. The first category is the *non-motorised worker*. These are mostly riders who deliver with bikes and receive fewer orders from the algorithm purely on the basis of the means of transport (post n308; post n315; post n342; Chung 2020). The second category is the *senior gig worker*. Senior gig workers will also receive fewer orders compared to newly recruited individuals (post n311; post n322).

7.2 Algorithms are a source of social harm

As explained in previous chapters, ultra-realism principles are applicable to identify the accountability of gig companies but do not consider the use of algorithms that are crucial for companies like Uber and Deliveroo to avoid accountability. To overcome this difference, this thesis looks at the principles of technology harm: the *stratigraphy of harm* and the relations between technology and harm.

7.2.1 Stratigraphy of harm and the algorithms

In an argument that favours gig companies, algorithms do not embed the values nor the intentions of the platforms but depend on how the technology is used. For example, frauds like account sharing to maximise earnings (post n91; post n92) are prohibited by gig companies to avoid unfair competition. The algorithm that identifies such fraud will deactivate that account. This finding is valid for all technologies (Wood 2021, p. 638).

Any technology can provoke intended and non-intended effects (Wood 2021, p. 638). Algorithmic harms fall under the *non-intended effects*. Causing physical harm when the algorithm imposes orders or times of completion that create fatigue (respondent n14; TWU), psychological harm from the strong dependence of gig workers on the rating systems (post n325; post n327, post n329) or

⁵⁴ There is no specific data on women being more vulnerable than men in algorithmic harms. However, data suggests that women can suffer the same harms as men when bound to the algorithm.

financial harm for not working correctly in certain areas and preventing the worker from receiving notification of orders (post n20; post n85) are all unintended effects, not part of the values of the gig companies. If the effects are not intended, it seems impossible to attribute accountability for harm to an algorithm. However, Wood's theory of *stratigraphy of harm* can aid in determining accountability.

As explained in Chapter Three, harm in technology is not located in one single stratum (Wood 2021, p. 635) but 'emerges' in various strata when the user interacts with it (Wood 2021, p. 637). In the case of the gig economy, it seems difficult to establish exactly in which strata algorithmic harm is located due to the complexities and vagueness of the functionalities of the algorithms. Nevertheless, Wood's categorisations and the different social harms identified in this chapter overcome such limitations even in presence of strong information asymmetries.

The first category is *generative utility harms*, or the changes in the technology that modify actions, behaviours, means, or ends (Wood 2021, p. 639). Wood asserts these are generally glitches and bugs, which may easily occur in the gig economy when reception is poor and the system fails to notify orders (post n20; post n85).

This thesis goes beyond the presence of system glitches. When Wood indicates the possibility of technology to modify actions, behaviours, means or ends, we can inevitably relate it to the Adelaidean rider who initially thought there was a system glitch that prevented him from receiving orders. The article reporting this story stated the possibility of an algorithmic change that preferred motorised over non-motorised workers (Chung 2020). This was then confirmed in the data as part of the 'job allocation theory' (post n308; post n315; post n342). If gig workers want to receive orders and work, they will have to change means of transport from bikes to cars or scooters.

A further case of generative utility harm concerns gig workers who received bad ratings, who were forced to change their behaviour and please customers for better ratings to avoid deactivation (post n325; post n327; post n329).

Considering these circumstances, we can then expand Wood's categorisation in two substrata: *unintentional generative utility harms* (bugs or glitches in the platform) and *intentional generative utility harms* (algorithmic changes and preferences).

The second category proposed by Wood is the *instrumental harms*, which affect users depending on the design of the technology (Wood 2021, p. 639), and more specifically, *instrumental technicity harms* or the unintentional uses, needs, end, functions and mechanisms created by technologies but beyond the designer's intentions (Wood 2021, p. 638). As stated previously, gig companies do not embed values in their algorithm but rely on the manner it manages the workforce in the best interest of the company. Nonetheless, it unintentionally causes social harm as one of its ends. The 'job allocation theory' reflects this when it notifies a rider of an order, preferring a motorised or a more

recent gig worker to deliver more efficiently and maintain the gig company's popularity. However, this also creates an unintentional waiting time that affects the other workers financially.

Another application of this stratum is delivery times and routes. The algorithm calculates the best option available and requires the gig worker to comply. Nevertheless, excessive speeding or careless driving to complete the order may cause an accident, which again is not an intended effect of the use of the algorithm.

Finally, the consequences of account deactivation constitute unintentional application of the stratum. The ultimate scope of deactivation is to continuously restructure the workforce based on performance, favouring those who work better through ratings and algorithmic calculations between order acceptance, cancellations and customer satisfaction (Deliveroo Australia 2020a, p. 7; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9), and worker behaviour (Kilhoffer et al. 2020, p. 262). This idea contradicts the argument for 'gamification' as fun activities in the gig economy (Vasudevan & Chan 2022, pp. 867-8; Veen, Barratt & Goods 2019, p. 13; Veen et al. 2020) and instead creates unintended fear among gig workers who try all means to keep ratings high.

7.3 The relationship between gig workers and algorithms: interface harm

Similar to gig company harms, harms caused by algorithms are social harms, with the difference of having the technology and design to unintentionally inflict harm on gig workers, forming a technological 'tool of harm'. However, as for gig company harms, the final step is establishing the link between algorithmic harm and the gig workers who burden by the harmful consequences of algorithmic decisions. Wood (2022) again provides an appropriate perspective to determine this link.

Gig workers depend on the apps used to receive notifications of orders. Hence, they rely on the interface of the app. Wood defines this type of relationship between user and technology *interface harm*, as a form of use-harm where the user of a technology is directly but unintentionally harmed by *immediate, long-term, physical or psychological harms* (Wood 2022, pp. 517-8).

Immediate interface harm can be account deactivation (post n311): gig workers, when sharing their issues, provided screenshots of the app interface showing the deactivation notification. The levels and types of harm can differ in this case, as we saw in various parts of the thesis, but generally gig workers will immediately suffer financial harm from job loss and psychological harm for the distress caused by that loss.

Long-term interface harm can be accumulated fatigue from deliveries or rides that cause accidents to gig workers and well as others (respondent n14; Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8; Veen et al. 2020) or pressure to complete as many tasks as possible to earn an income, maintain high ratings and avoid account deactivation (post n325; Chung 2020).

Interface physical harm, other than fatigue, can include imposing dangerous routes to deliver an order (respondent n14; International Transport Workers' Federation 2020, p. 7), while *interface psychological harm* is, for example, the level of distress while waiting for an order to be notified by the algorithm (respondent n13) or even from account deactivation (post n311).

Hence, the relationship of social harm between gig workers and the algorithms can be then referred as an instance of interface harm.

7.4 Rethinking *Deliveroo v Franco* (2022) through technology harm

When discussing the responsibility for harm of the gig company explored in Chapter Six, *Deliveroo v Franco* (2022) is an appropriate example of how the judicial system in Australia is not yet ready to consider the algorithms in the gig economy as an element of scrutiny. The algorithm used by Deliveroo is barely mentioned, only to state that it decides which rider online at that time of the request can complete the delivery more efficiently [4], and Franco claimed the tool had exclusive control over his orders [25]. The FWCFB did not accept Franco's argument, stating he had control over the management and performance of the order [46]. No further reference was made to the algorithm. This ruling contradicts the idea in this chapter which argues that algorithms are 'tools of harm' and should be scrutinised whenever they are part of the structure of a platform.

While the analysis of *Deliveroo v Franco* (2022) in Chapter Six concerned Deliveroo's power to inflict social harm by deactivating Franco's account, this chapter takes a further step and questions if the algorithm is a 'tool of harm'. This chapter asks the following questions:

1. Was the unfair dismissal for late deliveries a technological social harm?
2. Where does harm emerge in Deliveroo's algorithm?
3. Does Deliveroo's interface unintentionally cause harm?

Regarding (1), the Full Bench completely disregarded the role of the algorithm as part of the unfair dismissal, stating that Franco had control over the management of the orders [56]. Nevertheless, under Chapter Seven this is an erroneous interpretation of the algorithm that deactivated Franco's

account as part of *technical* and *computer* control possessed by Deliveroo (Deliveroo Australia 2020a, p. 7; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9) against his late deliveries, which we have seen are a common instance in the gig economy (post n318; post n334; post n337). Possibly Franco was flagged by Deliveroo for not respecting the speed standards of other riders and clearly a victim of an ‘algorithmic kaizen’ (Veen et al. 2020) that pushed him to be more performative than other workers in that given area. It is an expression of Deliveroo’s ‘algorithmic domination’ (Muldoon & Raekstad 2022, p. 7).

However, while deactivation was proximate, analysis of the evidence provided by Franco does not fully demonstrate its seriousness. Franco was also multi-apping and working for Uber Eats and DoorDash when he was deactivated by Deliveroo [5], so it was not his only source of income like in other deactivations reported in this thesis (post n318; post n334) or even in cases where Uber Eats was the sole source of income (*Gupta v Portier Pacific* [2020]) although as a migrant Franco was in a more vulnerable position in 2020 during the early COVID-19 pandemic. As multi-apping is an expression of gig worker autonomy, the Full Bench would have discretion on whether this is a social harm. Likely his claim for financial harm from deactivation would still be rejected, so he would then have to prove other social harms arising from the deactivation as unintended effects (Wood 2021, p. 638). The facts, however, do not suggest this and, even under technology harm, his claim for unfair dismissal may fail on this ground, being unable to demonstrate that the algorithms are a ‘tool of harm’.

If hypothetically the discretion of the Full Bench recognised the presence of financial harm as a social harm, under Wood’s *stratigraphy of harm* it may emerge (2) in the stratum of *instrumental technicity harms* as an unintentional consequence of Deliveroo’s evaluation of Franco’s performance (Deliveroo Australia 2020a, p. 7; Kilhoffer et al. 2020, p. 262; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9). However, legal arguments would be required to establish if financial harm was truly an unintentional consequence and convince the Full Bench.

If points (1) and (2) were proven, Franco would have to prove (3) that the consequences of being deactivated through the app interface were *interface harm*. Uber does this via the app (post n311), making interface harm easier to determine. However, the facts of the case stated that Deliveroo notified the breaches and dismissed Franco via email [15], so Franco would have to demonstrate that the email constituted a notification that produced the same harmful effect as Uber’s app notifications. Again this would require innovative legal arguments and judicial discretion.

To conclude, under zemiology and technology harm *Deliveroo v Franco* (2022) fails again for lack of evidence on the harmful consequences sustained by the gig worker. Franco admitted to multi-app (Barratt, Goods & Veen 2020a, p. 9; Unions NSW 2020, p. 31[99]; Veen et al. 2020), so he had that ‘competitive flexibility’ to maximise earnings (The State of Victoria 2020, p. 110), and making his claim not as serious as others.

Chapter Conclusion

The chapter responded to RQ2:

RQ2—Through the lens of zemiology and technology harm, why is the algorithm a source of ‘social harm’?

Algorithms are a source of ‘social harm’ because data collected, elaborated, and calculated are the source and unintentional cause of *impediments to powerless and vulnerable workers’* autonomy to avoid or reduce the risk of *proximate and serious* harms.

The source of such harm lies in the *unintended harmful effects* that emerge when gig workers use the tool to work. These harms include *unintentional generative utility harms* (bugs or glitches in the platform) and *intentional generative utility harms* (algorithmic changes and preferences). Harm also arises from *instrumental technicity harms* when such unintentional effects are created by the algorithm but are not designed by the gig company. The *unintended harmful effects* occur when the gig workers interact with the interface of the app. The gig worker-algorithmic harm relationship is called *interface harm*.

As done in Chapter Six, Chapter Seven applied these principles with reference to the case *Deliveroo v Franco* (2022). The review of the case demonstrated that Franco would have failed even in this case because he did not provide sufficient evidence that the deactivation was serious.

The following chapter is the Conclusion of the thesis and provides a summary of the responses of the RQs, indicates the limitations encountered, suggests future studies and provides some final remarks.

CONCLUSION OF THE THESIS

This chapter concludes this thesis, summarising the analysis and application of zemiology, as a possible alternative to employment and criminal laws to attribute accountability to gig companies and their algorithms for harming gig workers.

The chapter is divided into three main sections. The first section responds to each RQ by stating the question, the gaps and limitations identified in the literature, the answer to the question, and the contribution to knowledge.

The second section lists the limitations encountered in the research, mostly related to the focus of this study limited to Australia, the difficulties in the data collection process during the COVID-19 pandemic, the poor statistical representation of women, the scepticism of temporary migrants to participate and the lack of support of stakeholders other than the TWU in this project.

The final section indicates some areas of future research from the thesis, including 'new' social harms, the need for more research in the gig economy focusing on smaller Australian states or on minor or less studied gig companies, research on different migrant communities and their perspectives on harm in the gig economy, the value of netnography, and finally a suggestion that new studies may consider the application of the principles indicated in this thesis more broadly to other judicial cases to highlight other limitations in the Australian legal system.

Final remarks are then provided, describing the development of the literature and the studies in the gig economy from the infancy of the thesis to its termination and what may be the future of the gig economy.

Responding to the RQs and the original contribution to knowledge

This section responds to the RQs presented in the thesis. Each answer commences with a review of the gaps and limitations present in the literature, followed by the development of the responses, the solution this thesis is proposing, and the explanation of the original contribution to knowledge.

Answering research question 1

The gaps and limitations in the literature

RQ1 was answered in Chapter Six and stated the following:

RQ1—Through the lenses of zemiology, why are gig companies a source of 'social harm'?

To answer Q1, this thesis reviewed the gaps in the literature to understand the reasons why zemiology was deemed an appropriate alternative over employment, contractual, and criminal laws and criminology.

Australia classifies gig workers as independent contractors, following the *Independent Contractors Act 2006* (Cth), and denies them basic labour rights like leave or minimum wages, which are the prerogatives of employees. By applying this model, gig workers carry the burdens of low pay, injuries, and any sense of isolation and delusion that may affect them (Goods, Veen & Barratt 2019, p. 505; Rideshare Drivers Association of Australia 2020, p. 8; Transport Workers Union 2020, pp. 26-7; Veen et al. 2020; Walker, Fleming & Berti 2021, p. 34). While all studies, including this thesis, identify this classification as the core issue in the Australian gig economy, the broader scholarship currently maintains its attention on labour and contractual laws, and on the *fissurisation* of modern workplaces that reduces workplace safeguards (Aloisi & De Stefano 2020, pp. 51-2; Barratt, Goods & Veen 2020a, p. 2; Weil 2014, p. 10).

This finding was confirmed in cases and laws in Australia. Under the principles of the multifactorial test in *Hollis v Vabu* (2001), the majority of cases which concern unfair dismissal of gig workers through account deactivation (*Kaseris v Rasier Pacific* [2017]; *Pallage v Rasier Pacific* [2018]; *Suliman v Rasier Pacific* [2019]; *Gupta v Portier Pacific* [2020]; *Deliveroo v Franco* (2022); The State of Victoria 2020, pp. 152-3) judges and commissioners question the existence of employment in the gig economy but, still today, agree that gig workers are independent contractors and do not seem ready to change their perspective. In fact, as Flamingh & Casey (2021, p. 81) state, other than judicial precedents Australia requires specific laws that regulate the gig economy, but currently there are only debates and governmental submissions on the matter (Commonwealth Senate 2018, 2020; Parliament of New South Wales 2020; The State of Victoria 2020).⁵⁵

While awaiting for important regulatory changes, zemiology can offer a different alternative. While the denial of gig workers' rights and the difficulty to make gig companies liable remain the starting point of the issue, the thesis moves away from the legal terminologies and principles in employment and criminal laws and pursues the possibility of being liable for *harming* gig workers and not for committing a crime. This constitutes the essence of RQ1.

Gig company accountability for social harm

Zemiology has a definitional advantage over legal definitions. Applicability of the protections for gig workers under employment and criminal law requires a law or a case that legally defines the ways a gig company is accountable for misclassifying a worker or when it is guilty of a criminal offence

⁵⁵ In April 2023, The Parliament of South Australia has established its committee for enquiring on how to regulate the gig economy: <https://www.parliament.sa.gov.au/en/News/2023/04/19/05/32/SUBMISSIONS-OPEN---Select-Committee-on-the-GIG-ECONOMY>.

against a gig worker. Zemiology does not require any legal definition, but it is sufficient that the gig company harms the gig worker. However, to prove this sufficiency under zemiology, gig companies must cause a 'social harm'. With reference to gig companies, these social harms in the thesis are called 'gig company harms'.

This thesis followed three main steps to determine if the harms attributed to gig companies are 'social harms' under zemiology: (1) *what is a social harm* with reference to the gig company harms, (2) *how serious and proximate* social harms are, and (3) *how they systemically affect powerless workers*.

In the gig economy, this thesis hypothesised the definition of 'social harms' adopting Copson's notion of *impediment* (2011, cited in Canning and Tombs 2021, p. 52). Social harm is then the impediment or reduction of gig workers' autonomy to be financially self-sufficient or protect themselves physically, psychologically, and legally, or from sexual, physical or verbal abuse, or a combination of these, due to control exercised by the gig companies. This definition means that the gig company perpetrates social harm if it prevents (impedes) the gig worker from exercising autonomy to avoid or reduce the risk of harm.

Impediments depend on the nature of harm, whether they are financial, physical, psychological, legal, sexual, or a combination of one or more of them. For example, a gig worker who delivers food during hazardous weather conditions (Goods, Veen & Barratt 2019, p. 505) or speeds through traffic to supply goods on time may risk an injury that prevents them from working (Transport Workers Union 2020, pp. 26-7; Veen et al. 2020). In this case, the impediment to autonomy is the impossibility of taking any precautions to avoid the accident as they are obligated to satisfy requests in a timely manner. If they are involved in an accident, they can be prevented (impeded) from working.

To be a 'social harm', a harm must also be *proximate* and *serious*. Proximity is the closeness of the relationship between the gig company (the offender) and the gig worker (the victim). Seriousness is the incidence of harm affecting the gig worker (Canning & Tombs 2021, pp. 90-3).

In *physical harm*, the gig company imposes timely completion of a task as a condition for the gig worker to keep working on the platform even if this may cause an accident (post n74; post n326) or if it causes the worker to suffer excessive fatigue (respondent n14) or death (International Transport Workers' Federation 2020, p. 7). Hence, there is a proximity between the gig company and the physical harm. The seriousness is the injury a gig worker sustains, which varies in degree depending on the exact harm. For example, fatigue is less serious than death.

In *financial harm*, all earnings that are lower than the national minimum wage are proximate because the gig company imposes the fees on the gig worker (post n347). The seriousness is the low income that precludes the gig worker from living with dignity (TWU).

Psychological harm, instead, can be perceived differently, depending on the circumstances and the personal perception of that harm, like the level of toleration of negative feedback, isolation from other workers and from the gig company (Rideshare Drivers Association of Australia 2020, p. 8; Walker, Fleming & Berti 2021, p. 34), or job insecurity (post n318; TWU). Proximity, in this case, is any manner the gig company creates the worker a sense of fear and delusion towards the gig economy (online survey; respondent n13; respondent n14; Chung 2020). The seriousness is how much a gig worker feels helplessness, powerlessness, stress, anxiety, and depression, and has very little control over the gig work (Glavin, Bierman & Schieman 2019; International Transport Workers' Federation 2020, p. 7; Kaine & Josserand 2019, p. 489; Kerényi 2021, p. 156; MacDonald & Giazitzoglu 2019, p. 734).

This thesis also identified novel forms of harm, such as visa breaches or *legal harm* (post n302; post n363; post n369) *contracting COVID-19* (post n302), *physical assault from intoxicated customers* (post n324) and *sexual assault* (post n 336).

Finally, harms caused by gig companies must *systemically affect marginalised and powerless groups* (Canning & Tombs 2021, pp. 55-6). This thesis identified two main groups: (1) *temporary migrants*, who face a condition of 'multilayered vulnerability', which means they cannot rely on employment protections (Barratt, Goods & Veen 2020a, p. 6; Cherry & Aloisi 2017, p. 642; Chung 2020), nor on alternative jobs which often require skills and Australian qualifications, nor on Australian social services (respondent n12; respondent n13; respondent n14; TWU); and, although not sufficiently represented in the study, (2) *women* subject to risks of sexual abuse (post n336; The McKell Institute Queensland 2023, p. 21-2).

The three steps from zemiology ascertained that harms caused by the gig companies are 'social harms' or 'gig company harms' but did not establish the reasons why gig companies were the *source* of social harm to answer RQ1. In support to zemiology, some principles of ultra-realism provided those reasons by exploring why gig companies are more likely to harm their workers (Hall & Winlow 2018b, p. 43).

Gig companies are a *source of social harm* if they have the *willingness* to inflict harm on gig workers for a personal benefit using their *special liberty*, given by the absence of laws that regulate the gig sectors (Hall & Winlow 2018b, p. 49; Lloyd 2018a, pp. 24-5), with a range of harms beyond physical violence created by the market, or *process of pseudo-pacification* (Hall & Winlow 2018b, p. 49; Wood, Anderson & Richards 2020a, p. 644).

In the gig economy, *special liberty* is the state's non-intervention that allows gig companies to operate under the independent contractor model and exploit gig workers who suffer harm and are unable to defend themselves. Special liberty, for example, results in imposing or encouraging payments significantly below national minimum standards for the completion of a task (post n347;

post n348; post n364; post n367), or denying proper compensation for accidents (post n307; posts n349 and n350), or becoming unavailable to resolve gig worker queries to avoid responsibility (online survey; post n303; post n310; post n 360; respondent n13; respondent n14), including cases involving exposure to COVID-19 (post n302), assault by intoxicated customers (post n324) and sexual abuse (post n336).

By controlling the market, gig companies do not need to inflict violence to exercise power over gig workers but rely on the need for income of these people who will accept any risk of harm of living in Australia. This is the *pseudo-pacification process*. For example, if temporary migrants are caught breaching their visas by working longer hours than allowed, they may be banned from Australia (respondent n14). No violence is perpetuated on these gig workers, but gig companies allow their workers to commit such breaches knowing that these workers, to continue to live in Australia, are prepared to violate any migration regulation.

Although this thesis recognises gig companies as the source of 'gig company harm', it did not yet challenge the independent contractor relationship between the gig company and the harmed worker. The literature argues for the reclassification of gig workers to employees (Cherry & Aloisi 2017; Commonwealth Senate 2018, 2021, 2022; Goods, Veen & Barratt 2019; Nossar 2020; Rawling & Munton 2021; Stewart & Stanford 2017). This thesis does not counter-argue this approach but opposes the independent contractor model again through *zemiology* beyond employment laws.

If reclassification is not legally available, the gig company may be accountable for 'gig company harm', provided that the gig company (1) is acting in the *absence of moral responsibility* (Lloyd 2018b, pp. 256-8) and (2) in the *absence of stability* (Lloyd 2018a, p. 42; Lloyd 2018b, p. 251; Lloyd 2020, p. 81), while (3) *dispossessing gig worker's rights to accumulate income* (Lloyd 2020, p. 89).

Gig companies do not possess *moral responsibility* because their scope is to maximise earnings, and they are not interested, for example, in whether the gig worker is earning sufficiently or appropriately insured (post n326; post n343; respondent 9). Gig companies support the *absence of stability* by backing up the independent contracting model (*absence of contractual stability*) through ambiguous, unilateral and unnegotiable terms and conditions (respondent n14), and Community Guidelines which gig workers must accept to work in the gig company (Rideshare Drivers Association of Australia 2020, p. 12), compromising the lives of these vulnerable people who will lack any support, including insurance protection against income loss, accidents or assaults, or personal assistance in cases of broader issues related to gig work (*general absences*). Through the independent contracting model, the gig companies accumulate income and market control over gig workers by nullifying any possible working right (*accumulation by dispossession*) such as Uber during the COVID-19 pandemic which reported between 2019 and 2021 increases in profits and revenue while gig workers were suffering social harms (Foote 2022; Khadem 2021).

Conclusively, this thesis demonstrates that harms caused by gig companies are 'social harms' or 'gig company harms' and are attributable to gig companies because they purposely exploit legal and market loopholes for personal benefit at the expense of gig workers. The independent contracting relationship, which cannot be currently contested in the absence of laws and cases, can still be challenged by proving that the company denies moral responsibility, prohibiting stability and reducing workers' rights while accumulating income.

Zemiology was applied in the thesis in the case *Deliveroo v Franco* (2022) to indicate if the gig worker's claim for unfair dismissal would have had a different outcome. While it seemed that zemiology and ultra-realism could frame accountability for financial social harm, the case would fail on the ground that Franco was not seriously harmed by the unfair dismissal since he was multi-apping and could make an income using other apps other than Deliveroo's to work.

Finally, the thesis argues that through zemiology, judges or even *ad hoc* body created as a gig economy "watchdog" are capable of attributing accountability without having to refer to the classification between employees and independent contractors by only interpreting differently the terms and conditions of the agreement.

Contribution to knowledge in RQ1

By answering RQ1, the thesis advanced the knowledge in different areas.

First, it offered an alternative solution to determine the accountability of gig companies for social harm using zemiology. The literature has mostly analysed the issue with reference to the distinction between employees and independent contractors and how gig workers, part of the latter, have their rights denied by misclassification (Barratt, Goods & Veen 2020a, p. 6; Cherry & Aloisi 2017, p. 642; Chung 2020). However, while the literature struggles to find a balance between these two categories to attribute more rights to gig workers, this thesis, using this issue as a starting point, has applied zemiology and ultra-realism to present a different perspective. Rather than focusing on the reclassification of gig workers to apply employment protections, it uses the notion of 'social harm' (Copson 2011, cited in Canning & Tombs 2021, p. 52) and some principles of ultra-realism to frame gig companies as the *source* of social harm (Hall & Winlow 2018b, p. 49; Lloyd 2018a, pp. 24-5; Raymen & Smith 2019, p. 121; Wood, Anderson & Richards 2020a, p. 644).

Second, zemiological approaches should not be considered a substitution for employment and criminal laws and criminology but as an alternative. This interpretation is fundamental for the scholarships in gig economy studies because it does not disregard the importance of past research but simply acknowledges the struggles of the Australian legal system (and others internationally). The decisions of Australian case law are, in fact, inconclusive to frame a set of rights for gig workers (*Kaseris v Rasier Pacific* [2017]; *Pallage v Rasier Pacific* [2018]; *Suliman v Rasier Pacific* [2019]; *Gupta v Portier Pacific* [2020]; *Deliveroo v Franco* (2022); The State of Victoria 2020, pp. 152-3)

prompting the thesis to think of a different solution to set a novel way to approach the issue while parliaments in Australia are developing their regulations on the matter.

Zemiology offers a different way to overcome these legal and judicial limitations by disregarding strict legal definitions and being open to different possibilities that the scholarship has not yet considered to its fullest. For example, the zemiological analysis of *Deliveroo v Franco* (2022) established that the gig company was potentially accountable for socially harming gig workers for unfair dismissal because it possessed the special liberty to enforce its agreement arbitrarily while denying any working rights. Such rationale does not clash with the current laws and cases but offers a different way of interpreting any agreement between gig companies and their workers without changing any legal classification. However, the judges' reasoning was in favour of Deliveroo and confirming the power of gig companies while maintaining gig workers in a vulnerable position. Through zemiology, the thesis indicates this as a contradiction in law that judges in Australia are prepared to tackle.

Finally, this thesis not only mirrored the common workplace harms broadly construed as financial, physical or psychological (Canning & Tombs 2021, p. 73; Naughton 2007, p. 171; Tombs 2004, p. 159; Tombs 2018a, p. 25) but included 'new' harms that emerged in the study, which conventionally the thesis calls legal, sexual, COVID-19 and alcohol-related social harms. These 'new' harms expand the possibilities of zemiological application and its reach.

The application of ultra-realism to frame accountability of gig companies has been suggested by Lloyd but never tested (Lloyd 2018a, 2018b, 2020). This thesis does not accomplish this test but shows how some of its principles, even if used limitedly, can constitute a theoretical foundation if further developed. Although limited to Australia, this thesis advanced the theoretical knowledge in the field by explaining why and how some of the core ultra-realist principles and definitions can apply to the gig economy.

Answering research question 2

The gaps and limitations in the literature

The second RQ was the following:

RQ2—Through the lens of zemiology and technology harm, why is the algorithm a source of 'social harm'?

Not all gig companies use algorithms, but Chapters One and Two showed that the algorithm is the technological tool used by the most important platforms in Australia to control their workers. The role of 'algorithmic control' has always been the major focus of the literature, framed as the power of the gig company over its workers to determine how to complete a task (Veen, Barratt & Goods 2019, pp. 9-10).

Using the algorithms allows gig companies to deny their responsibilities and hide behind an algorithm that manages gig work to indirectly cause harm to workers. The Adelaidean rider who saw a reduction in orders from Uber Eats due to the algorithm change in 2020 is a clear example. By preferring riders on motorised transport instead of bikes, Uber Eats was indirectly harming bike riders who, like the reported victim, saw a reduction in orders and income and longer working hours to make up the loss, hence increased fatigue and distress for not making ends. Using information asymmetry on the algorithm's functionality, the company denied any accusation (Chung 2020).

The literature has extensively questioned the appropriateness of algorithmic control over workers but has mostly focused on whether this technological tool 'masks' the employment relationship as independent contracting to avoid accountability for breach of labour rights. They suggested reclassifying gig workers as employees based on control exercised by the algorithm to determine an employment relationship (Cherry & Aloisi 2017; Commonwealth Senate 2018, 2021, 2022; Goods, Veen & Barratt 2019; Nossar 2020; Rawling & Munton 2021; Stewart & Stanford 2017).

Even Australian case law attempted to do the same through the multifactorial test (*Hollis v Vabu* (2001)) but, as seen above, with very limited success (*Kaseris v Rasier Pacific* [2017]; *Pallage v Rasier Pacific* [2018]; *Suliman v Rasier Pacific* [2019]; *Gupta v Portier Pacific* [2020]; *Deliveroo v Franco* (2022); The State of Victoria 2020, pp. 152-3). The limited success in adopting a strong stance in Australia is possibly caused by the vague understanding of algorithmic control. It is known that most algorithmic decisions are based on the platform's rating system that does calculations using seemingly neutral data from the workers' performances and their behaviours, but adopting criteria that vary from platform to platform (Deliveroo Australia 2020a, p. 7; Kilhoffer et al. 2020, p. 262; The State of Victoria 2020, p. 69; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9).

The thesis drew on ideas from zemiology and technology harm to revisit the idea of the algorithm as neutral data and codes and framed it into a 'tool of harm'.

Algorithmic accountability for social harm

Between RQ1 and RQ2, there is some conceptual and procedural overlapping when determining the accountability of algorithms for social harm.

As for RQ1, the harmful instances attributed to the algorithm must be 'social harms' through the three steps: (1) *what is a social harm* with reference to the algorithm, (2) *how serious and proximate* social harms are, and (3) *how they systemically affect powerless workers*.

As for gig companies, algorithms must cause a 'social harm' which is an *impediment to fulfill personal needs* (Copson 2011, cited in Canning & Tombs 2021, p. 52) or, in the context of algorithms, an impediment to gig workers' autonomy caused by the algorithmic control.

This thesis defined ‘algorithmic social harm’ as the impediment or reduction of gig workers’ autonomy to manage job allocation, or challenge account deactivation, or be financially self-sufficient, or protect themselves physically or psychologically, or a combination of these, due to control exercised by algorithms.

Such definition, which resulted from the themes that emerged in the data, was then applied to two main categories of harm: (1) job allocation and account deactivation and (2) financial, physical and psychological harms.

Job allocation, which is done by the algorithm, is an obscure aspect of the gig economy, prompting gig workers to theorise the ‘theory of job allocation’ to explain how the algorithm manages and notifies work. Gig workers believe that allocation depends on good ratings (post n308), preference for motorised vehicles (post n308; post n315; post n342; Chung 2020), and recent period of the commencement of gig work (post n311; post n322).

Account deactivation, the permanent ban from working in a gig company, is calculated by the algorithm which elaborates rating system data from acceptance, cancellations, and customer satisfaction (Deliveroo Australia 2020a, p. 7; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 9), and worker behaviour (Kilhoffer et al. 2020, p. 262; The State of Victoria 2020, p. 69).

However, when an account is permanently deactivated, gig workers may suffer a range of harms, from impossibility to earn income to mental distress. Unfortunately, they do not have the autonomy to challenge the algorithm’s decision as no remedy is available to them (post n318). Common cases that determine deactivation are late deliveries (post n318; post n334; post n337), fraudulent activities (post n91; post n92; post n333), algorithmic errors, and negligent third parties like restaurants who do not prepare orders appropriately (post n370; Transport Workers Union 2020, p. 57; Veen, Barratt & Goods 2019, p. 10).

Financial harm is caused by the algorithm in two main circumstances: (1) during order allocation, as the ‘theory of job allocation’ will prefer only certain categories while others may be waiting for hours without earning money (post n320; post n338; post n348) and (2) unresponsive apps (post n20; post n85).

Physical harm is mostly determined when the algorithm calculates unfeasible routes and delivery times, forcing gig workers to experience fatigue or even death (Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8; Veen et al. 2020) or accidents by breaching road rules (respondent n14) or working in dangerous road and weather conditions (Goods, Veen & Barratt 2019, p. 505). Gig workers take these risks to satisfy the algorithm, keep a high rating and avoid account deactivation (respondent 14; TWU).

Psychological harm is the ‘psychological control’ that the algorithm exercises over gig workers (post n329). Gig workers suffer distress when they do not receive orders and cannot make enough income (TWU) or when their account is permanently deactivated (post n325; post n327; post n329). In contrast to the other two forms of harm, psychological harm can occur at any stage of completing the task.

All categories of harm are equally *proximate*. All cases of harm depend on the decisions of the algorithm. *Seriousness*, instead, changes according to each circumstance and may be perceived differently by each gig worker.

In *job allocation*, seriousness is the long waiting hours without receiving an order, not making money (post n348), or being involved in an accident on the roads (respondent n14; TWU). In *account deactivation*, it is the level of distress caused by the impossibility to continue working with a given gig company, which is perceived as stronger when gig work is the only source of income (post n318; post n334). Similarly, in *financial harm* it is the actual lack of income due to the impossibility to find another job, unless through multi-apping or traditional work through mixed employment-gig work (TWU). The seriousness in *physical harm* depends on the level of injuries sustained by the gig worker. These can include fatigue (TWU), accidents (Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8; Veen et al. 2020) and death (respondent n14). Finally, the seriousness in *psychological harm* can manifest when waiting for orders (respondent n13), when receiving negative feedback (post n325; post n327, post n329) and when an account is deactivated (post n311).

As for gig company harms, the harms caused by the algorithm must affect *marginalised and powerless groups* (Canning & Tombs 2021, pp. 55-6).

Temporary migrants are considered the most vulnerable category (Respondent n12; Respondent n13; Respondent n14; TWU). Overlapping with RQ1, they suffer the condition of ‘multilayered vulnerability’.

However, new vulnerable categories emerged mainly from the ‘job allocation theory’: *non-motorised workers* and *senior gig workers*. In both cases, the algorithm discriminates these categories on the basis of means of transport (post n308; post n315; post n342; Chung 2020) and recruitment period (post n311; post n322), preferring those who work with motorised vehicles, like personal cars or scooters, and that have been recruited more recently.

Harms caused by algorithms are then ‘social harms’ or ‘algorithmic harms’. As for RQ1, this only establishes the appropriateness of *zemiology* as the theoretical basis for RQ2 but does not explain why algorithms are the *source* of social harm or a technological ‘tool of harm’.

Answering this question is complex because the algorithm is only data and codes, so it is seemingly impossible to attribute such liability. The initial argument, challenged in the thesis, is that the neutrality of the algorithm cannot make harmful decisions.

Nevertheless, Wood (2021) elaborated a series of principles, broadly construed as ‘technology harm’ and, in particular, *stratigraphy of harm*, which this thesis adopted in the context of algorithmic harms to contend the gig companies’ arguments on the neutrality of their technological tools. Under Wood’s classification, technology can cause intended effects and unintended effects (Wood 2021, p. 638). Algorithmic harms cause *unintended effects*, such as imposing orders or times of completion that cause fatigue (respondent n14; TWU) or creating distress from dependence on the rating systems (post n325; post n327, post n329) or preventing a worker from receiving an order due to technical issues (post n20; post n85). Although unintended, algorithmic harms emerge in various levels or strata when the algorithm is actioned and the gig workers interact with it (Wood 2021, p. 635).

This thesis identified two strata in which algorithmic harm is located: *generative utility harms* and *instrumental technicity harms*.

Generative utility harms occurs when the technology modifies actions, behaviours, means, or ends like glitches (Wood 2021, p. 639), such as those when reception is poor and fails to notify orders (post n20; post n85). In the ‘job allocation theory’ (post n308; post n315; post n342), the algorithm forces gig workers to change their behaviours (e.g., working longer hours or please differently customers for better ratings (post n325; post n327; post n329) or means of transport (e.g., scooters over bikes) to receive orders in cases of sudden algorithmic changes (Chung 2020). The thesis defines them under two substrata: *unintentional generative utility harms* (bugs or glitches in the platform) and *intentional generative utility harms* (algorithmic changes and preferences).

Instrumental technicity harms occurs when the design of the technology is correctly designed but unintentionally affects uses, needs, ends, functions and mechanisms, and harms the users (Wood 2021, p. 638). While gig companies have no intention to harm their workers, their algorithm is designed to unintentionally do so. The ‘job allocation theory’ (post n308; post n315; post n342), for example, while designed to simply allocate work, ‘prefers’ certain categories over others and creates an unintentional waiting time that causes loss of income in those who are not ‘preferred’ by the algorithm.

Stratigraphy of harm locates the strata in which algorithmic harm emerges when the gig workers use it and determines why the algorithm is the *source* of social harm.

Based on Wood’s categorisation of technology harm relationships, gig workers and algorithmic harms are tied by *interface harm*, a form of use-harm where the user of a technology is directly but unintentionally harmed (Wood 2022, pp. 517-8). Gig workers using the app are bound to an interface

that can cause *immediate interface harm*, like account deactivation that causes distress, loss of job and income (post n311), *long-term interface harm* such as accumulated fatigue from deliveries or rides, road accidents (respondent n14; Gildfind 2019, p. 21; Transport Workers Union 2020, pp. 37-8; Veen et al. 2020) or pressure to complete orders and keep personal ratings high (post n325; Chung 2020), *interface physical harm* such as imposing dangerous routes to deliver an order (respondent n14; International Transport Workers' Federation 2020, p. 7) and *interface psychological harm* as distress from waiting for an order (respondent n13) or even actual account deactivation (post n311), both through prolonged use of the app's interface.

Consequently, the protections granted to gig companies by the independent contractor model can be challenged by proving that the interface can harm the gig worker. This was attempted through the analysis of *Deliveroo v Franco* (2022) under technology harm, although the facts of the case did not suggest Franco had the evidence to prove he was seriously harmed by algorithmic control, nor the Full Bench was prepared to look at the algorithm as a 'tool of harm'. Franco, in fact, was multi-apping. Hence, account deactivation did not cause other harms as unintended effects of the interface except financial harm. Yet, through the lens of zemiology, the case revealed another legal contradiction when the judges entirely overlooked the harms inflicted by the algorithms.

Contribution to knowledge

RQ2 contributes to knowledge in different sectors.

First, it looks at the accountability of algorithmics not as a tool of control but as a 'tool of harm' against gig workers. Scholars in the gig economy (Cherry & Aloisi 2017; Commonwealth Senate 2018, 2021, 2022; Goods, Veen & Barratt 2019; Nossar 2020; Rawling & Munton 2021; Stewart & Stanford 2017) have viewed the algorithm as a form of control over gig workers and argued for their reclassification in employees but in Australian courts no advancement has occurred (*Kaseris v Rasier Pacific* [2017]; *Pallage v Rasier Pacific* [2018]; *Suliman v Rasier Pacific* [2019]; *Gupta v Portier Pacific* [2020]; *Deliveroo v Franco* (2022); The State of Victoria 2020, pp. 152-3). The thesis, instead, through zemiology and technology harm, provides a novel approach to algorithms and an alternative to accountability regardless of the current dichotomy of employees and gig workers.

This thesis identifies new harms other than financial, physical and psychological harms, like the 'theory of job assignment' and 'account deactivation' as the essence of the issue and not just the cause of harm, without disregarding the necessity to attribute protections to gig workers that scholars continuously forward.

Second, zemiology has not been applied under these terms. Defining the harms caused by the algorithm as 'social harms', the thesis adds the 'theory of job assignment' and 'account deactivation' as novel types of harm to include financial, physical and psychological harms. In the context of the

gig economy, the two novel types of harm actually precede other social harms and activate or cause them. The thesis conventionally calls them all 'algorithmic harms' as a catch-all term.

Further, when looking at powerless groups socially harmed by the algorithm, other than temporary migrants, this thesis identified two additional groups: *non-motorised* and *senior gig workers* who are affected by the 'theory of job application'. Although specific to algorithmic harm, they can include any other vulnerable category (temporary migrants, women, elderly workers, etc.), expanding the reach of zemiology to new areas of modern work governed nearly exclusively by technology.

Finally, this thesis is one of the first attempts to test technology harm but with exclusive reference to the algorithms used in the gig economy and expands Wood's (2021) *stratigraphy of harm* in the context of *generative utility harms*, proving the presence of two substrata applicable to the algorithms in the gig economy: *unintentional generative utility harms* (bugs or glitches in the platform) and *intentional generative utility harms* (algorithmic changes and preferences).

Limitations in the research

Although this thesis accomplished its task and responded to the RQs, there were several limitations in the study.

Geographically, the study uniquely focused on Australia, which, in the context of the gig economy, is still behind compared to other countries, particularly Europe and the UK where there is more discussion and action to build a legal framework of legal protections for gig workers. Australia is still in its infancy in the context of the gig economy and probably deserves more scholarly attention, especially in the difficulty of its parliaments and its judiciary to think of ways to grant rights to harmed gig workers.

This limitation was also tied to the *legal* limitations of this thesis. Australia is still anchored to the dichotomy of employees and independent contractor labour relations, and the theoretical analysis and application of the principles of zemiology, ultra-realism and technology harm refer mostly to countries that, like Australia, are bound to this duality. This is not necessarily the same in the rest of the world, where some countries have thought to include gig workers in a stand-alone hybrid category of workers (Cherry & Aloisi 2017). However, how would the theoretical principles apply in these hybrid circumstances is unknown. This thesis had not gone that far since, in Australia, there is no third model, nor are there scholars that approve of it.

More geographical limitations emerged in the process of data collection. As an urban phenomenon, it was expected to collect data from all major centres in Australia. That was not achieved. For

example, data from smaller states and territories like Western Australia, South Australia, Tasmania or the Northern Territory were not closely comparable to Victoria, New South Wales, and Queensland.

While it was still possible to discern some cases of social harm from the smaller states and build a broader overview, the risk is to generalise social harms in the Australian gig economy, which may not apply to all states. The case of alcohol delivery exclusive to Victoria and Queensland and not the other states is a clear example. The lack of data from smaller states did not allow such analysis in the thesis.

The lack of data from smaller states can also trigger other limitations. For example, data does not provide information about the perception of harm among gig workers that work in different states. As one respondent stated, earning very little in Sydney is a significant financial harm. However, what about the same type of gig worker, like a rider or a Tasker, in smaller cities like Adelaide or Perth? Would that financial harm be perceived the same or not?

With reference to the *demographics* of the data, limitations were even stronger.

The thesis identified a series of vulnerable categories affected by social harm, but their voices were sometimes less heard. This is the case for *women*, since data indicated the chance of being victims of sexual abuse while completing a task. Unfortunately, this was the only instance recorded, but we cannot assume it is the only case given the McKell Institute Queensland has recently reported this as an important issue of the Australian gig economy (The McKell Institute Queensland 2023, pp. 21-2).

Temporary migrants were also not fully represented in the data demographics. It should not surprise, given the presence of legal harm (overwork in breach of visas clauses) that impacts this cohort specifically. At the initial stages of the study, migrants from Italy who had recently arrived in Australia were chosen as the pool of participants. During the recruitment phase of Facebook, these migrants declined in a very harsh manner from being involved in the study, fearing repercussions from the Australian Government.

Regarding *gig companies* present in the study, as in other literature, the most important ones, like Uber Eats, Uber and Airtasker, are overrepresented in the Australian gig economy. In this sense, data did not reach other gig companies, even those mentioned in posts and responses. DoorDash, Ola and Menulog are only a few of these, but their role in framing the thesis was minor compared to others. It would also have been appreciated to have data from workers in Amazon Flex.

Unsurprisingly, gig companies did not participate in the study when contacted, and the study could not compensate for this limitation.

It was quite disappointing to see other stakeholders, with the exception of the TWU, refuse to participate in this study. The TWU provided valuable information by being directly involved in surveys, case law and media articles in favour of transport and delivery gig workers. However, while the contribution of the TWU strongly helped the completion of the thesis, more stakeholders would have provided other options, solutions, or themes.

Finally, the COVID-19 pandemic significantly disrupted the data collection process. This thesis commenced as the first cases of COVID-19 were reported in Australia in February 2020. The Commonwealth Government adopted a hard border approach in March 2020 to contain the spread of the virus, prohibiting Australian citizens from leaving the country and non-Australian citizens from entering. Temporary migrants in Australia were also invited to leave and return to their home countries. As they are the most represented category in the gig economy, the hard border measures reduced the pool of people who worked in the gig economy and suffered harm.

In addition, states and territories adopted their own hard border measures, restrictions and state-wide lockdowns, preventing all people in Australia from freely travelling interstate. Such measures varied considerably during the pandemic and lasted from March 2020 to March 2022.

These restrictions made it impossible to collect data through in-person interviews and focus groups. While Skype interviews were useful, certain people were reluctant to participate because they did not trust such a type of interview. This was understandable. The lack of physical presence could not grant a sense of trust and empathy towards participants and towards the study, particularly needed to comprehend the effects of social harm for the thesis.

Thankfully, these limitations were anticipated and covered by the triangulation of different data. While surely the study would have benefited more from more participants and stakeholders, the aims of the thesis to study social harms in the gig economy were still accomplished.

Future studies

This thesis opens to several areas of future research in the gig economy, zemiology and, more broadly, social and legal studies.

The thesis highlighted the presence of harmful instances such as sexual violence, assault from intoxicated clients, health-related issues from contracting COVID-19 and legal consequences from international students breaching their visa clauses. These 'new' social harms in the context of the gig economy have received less attention compared to others due to data limitations but are equally concerning. Further studies should focus on one or more of these 'new' social harms and question

the social impact of these on vulnerable gig workers: how do they cope with these harms? What are their strategies to mitigate harm? Are they actually able to, or is the gig company so controlling that gig workers cannot escape from it?

The presence of these 'new' social harms does require some geographical attention, particularly with alcohol delivery which is currently present only in Victoria and Queensland. We can interpret this as state-based social harm or geo-localised social harm, using a technological term. However, with states presenting different social harms, does this mean we have some sort of 'differentiated social harm' in Australia? How does this change the landscape of social harm in the country?

One of the core limitations of the thesis was stronger data from bigger states on the east coast of Australia, with some minor data from other major cities in smaller states. New research should consider the working conditions of gig workers in other parts of the country. Does a gig worker earn more and better when working in South Australia, where the cost of living is cheaper than in NSW, or is the level of harm the same? Do gig workers in Perth suffer the same level of mental distress compared to those in Melbourne?

Gig economy studies will benefit from state-based data because it would highlight the major differences and explore the needs of gig workers at a state level. For example, in smaller cities like Hobart or Perth, are tasks allocated according to the 'theory of job allocation', or if the location affects how the algorithm works?

Application of social harm principles should not only concern the location of gig workers but also focus on gig companies like Ola, DoorDash, or Amazon Flex which are not commonly reported and also new gig companies that are reaching Australia that may possibly use new labour models, algorithms, structures, workplaces or workspaces. Compared to Uber Eats or Airtasker, how do these platforms work? Are the workers harmed by these gig companies and why?

Such a study would benefit gig economy and zemiology studies enormously, widening the relevance of these companies in the net of the Australian gig economy, allowing exploration of social harm and expanding the reach of zemiology, ultra-realism and technology harm. New social harms may possibly emerge, just as new vulnerable categories of workers.

If we take an international approach, the application of these principles may change further, and the outcomes will differ from Australia. This will depend on local laws and policies governing the gig economy.

To better understand the gig economy in Australia, we need data from different states and migrant communities in Australia. Unfortunately, they are very reluctant to disclose harms. It may be necessary to coordinate research with gatekeepers in the gig economy that will help support the collection of data, including migration centres across the country and trusted representatives of each

nationality that can bring forward migrants to disclose their harms without fearing repercussions and reminding us that, as this thesis indicated, Europeans and North Americans perceive social harm differently from Asians and South Americans. A surely hard and ambitious study.

In terms of methodology, netnography should still be adopted for future studies and used to revisit the ideas of isolation and psychological harm in the gig economy in greater depth. While we know that some communication exists on instant messaging apps, but does this work even through Facebook pages and groups? Does this communication change the sense of isolation in the gig economy? Do gig workers use new social media apps, like TikTok, to disclose their harms?

While netnography should still be triangulated with other methods of data collection like interviews and online surveys, it does constitute a valuable starting point for multiple studies. Other than isolation, netnography can uncover some cases of racism and gender abuse in the gig economy and develop it further with more data.

The thesis did explain 'how' zemiology may work in Australia with its laws and cases through the analysis of *Deliveroo v Franco* (2022). Although the facts of the case were not sufficient to prove that *Franco* could have been decided differently, zemiology did expose the contradictions of Australian laws which still support the claims of powerful corporations at the expense of vulnerable gig workers like *Franco*. Possibly, an analysis of other cases using zemiology where legal contradictions emerge and an in-depth comparison could help draw a policy or a series of principles that the Australian parliaments could adopt for their laws and the judiciary for their reasonings.

Final remarks

In concluding this thesis, a final reflection on the past and the future of the gig economy should be made. Since the start of the COVID-19 pandemic when this thesis was conceptualised, the gig economy has changed and is continuing to change in Australia and globally. During the early stages of the thesis at the beginning of 2020, publications about the gig economy in Australia were limited to very few scholars (Goods, Veen & Barratt 2019; Josserand & Kaine 2019; Kaine & Josserand 2019; Stewart 2018; Stewart & Stanford 2017; Veen, Barratt & Goods 2019) and law cases (*Kaseris v Rasier Pacific* [2017]; *Klooger v Foodora* [2018]; *Gupta v Portier Pacific Pty* [2019]) that were grappling whether the gig workers are independent contractors or employees.

Throughout 2020, new reports were published to frame the major traits of the Australian and European gig economy (Kilhoffer et al. 2020; The State of Victoria 2020), while at the end of the year, the Australian case *Gupta v Portier Pacific* [2020], which was about to set a precedent in favour of gig workers, was settled out of court by Uber in favour of its gig worker. Also in 2020, New South

Wales opened a call for submissions on state-based protections to gig workers that it could offer. A few months later, the UK, with the case *Uber BV and others (Appellants) v Aslam and others (Respondents)* (2021), reclassified gig workers as employees in the world's first case that badly hit the gig economy. However, if the UK was ready to change its approach to the gig economy, the rest of Europe and Australia was still facing significant challenges.

However, in mid-2021 the COVID-19 pandemic prompted the European Union to seriously consider a new way to regulate the gig economy (European Commission 2021), while in Australia Franco was first heard by the FWC in *Diego Franco v Deliveroo Australia Pty Ltd* [2021] FWC 2818. His case became the battleground between the TWU and platforms belonging to the gig economy in Australia. In the meantime, the Commonwealth Senate called for submissions to reform its laws regarding gig work and I was personally involved in a submission in late 2021. In the submission, I suggested a set of protection rights for gig workers such as better pay, the appointment of a 'gig economy watchdog' within the FWO, and more transparency regarding personal data and causes of dismissal. These principles took inspiration from the *Charter of Fundamental Rights of Digital Work in Urban Contexts* (Bologna, Italy) (Sinopoli, Marmo & Guo 2021).

In early 2022, I published a co-authored article with academics from Flinders University, arguing under state-corporate criminology that harms in the gig economy are market-generated social harms. In the article, we suggest to review these new forms of labour in light of the ongoing precariousness and vulnerability that gig workers are subject to in Australia (Marmo, Sinopoli & Guo 2022). Again in early 2022 the Commonwealth Senate published its Report on the gig economy (Commonwealth Senate 2022). However, the fight against the exploitation on the gig economy heated up only from mid-2022, with the unveiling of the Uber scandal to gain control over the market that involved lobbying European politicians, and in Australia, where Deliveroo won its case against Franco, proving that courts and tribunals were not ready to grant protections to gig workers (*Deliveroo v Franco* (2022)). Notwithstanding this important victory, Deliveroo announced that by the beginning of 2023 it will abandon the Australian market, with now Uber Eats and other minor companies like DoorDash dealing with the delivery sector, leaving a number of people without jobs (Taylor 2022a). Deliveroo's departure in 2023, like Foodora in 2018, will surely change the scene of food delivery services, but it is unsure if Uber Eats will create a monopoly or if new gig companies will enter the Australian market.

The academic literature in 2023 on the gig economy is expected to be still prolific (Altenreid 2023; Barratt, Goods & Veen 2023; Regan & Christie 2023; van Doorn 2023). However, it will be interesting to see how Europe and Australia decide to regulate the gig economy, either following the UK in the reclassification strategy or creating different and unique laws. At the time of writing, we are expecting South Australia to give its contribution on regulating the gig economy (Parliament of South Australia

2023). Nevertheless, whichever path Australia will take there is a general consensus of experts in the gig economy that legal reforms are needed (The McKell Institute Queensland 2023, p. 22).

It seems that the gig economy's future is yet to be decided. However, there is one firm point: until governments take a strong stance in regulating gig work, there will be a second class of workers in countries like Australia, where they have only obligations towards their companies and their clients and no labour rights.

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APPENDICES

APPENDIX 1 PARTICIPANT INFORMATION SHEET (ONLINE SURVEY)

Title: The 'Gig Economy': cases from Italian Working Holiday Makers and International Students in Australia⁵⁶

Researcher(s)

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Description of the study

This study is part of the project titled "*The 'Gig Economy': cases from Italian Working Holiday Makers and International Students in Australia*". The project investigates recent temporary Italian migrants in Australia under a Working Holiday Visa or are international students that work or have worked in

⁵⁶ Please note that the title was changed in due course.

the 'gig economy', a form of online work, for example Uber, Deliveroo, Airtasker, etc. The project aims to explore the how 'gig work' is carried out by these groups of migrants, the advantages and the disadvantages of being a 'gig worker' in Australia.

This project is supported by Flinders University, College of Business Government and Law.

Purpose of the study

This project aims to find out how positive and negative aspects of 'gig work' affect the opportunities and lifestyles of Italian temporary migrants.

What will I be asked to do?

You are invited to complete an online survey on Google Forms with questions about your 'gig work' in Australia.

The completion of the survey will be around 10 minutes. However, if you would like to comment further, I made available the possibility to expand your answers if you wish. This will increase the time of completion of the online survey.

The results will be collected in an automated sheet and stored securely at Flinders University.

What benefit will I gain from being involved in this study?

The sharing of your experiences will assist in documenting the impact of the 'gig economy' in Australia, especially Italian migrants, and critically evaluate advantages and disadvantages present in the 'gig work'.

Will I be identifiable by being involved in this study?

Your personal data will be confidential through the publications. All responses are stored on a password protected computer that only the investigator (Elvio Anthony Sinopoli) and the supervisors (Associate Professor Marinella Marmo and Dr Sanzhuan Guo) will have access to file. Your comments will not be linked directly to you.

Are there any risks or discomforts if I am involved?

You may feel upset in talking about your experiences or be worried about disclosing illegal activities. On the occasion you may find yourself uncomfortable during the online survey, please advise Mr Sinopoli.

If you feel the need to talk to someone, I have included some free counselling services.

Lifeline – Ph: 13 11 14 (24 hour crisis support)

Beyond Blue – Ph: 1300 22 4636 (24 hours a day, 7 days a week)

Women's Information Services - Ph. 8303 0590 or 1800 188 158: (Mon-Fri 9.00am-5.00pm)

Withdrawal Rights

You may, without any penalty, decline to take part in this research study. If you decide to take part and later change your mind, you may, without any penalty, withdraw at any time without providing an explanation. To withdraw, just close the browser. Any data collected up to the point of withdrawal will not be registered by the system.

Confidentiality and Privacy

Only researchers listed on this form have access to the individual information provided by you. The research outcomes may be presented at conferences, written up for publication or used for other research purposes as described in this information form. However, the privacy and confidentiality of individuals will be protected at all times. You will not be named, and your individual information will not be identifiable in any research products without your explicit consent.

However, I anticipate that any disclosure of illegal activity must be reported to the relevant authorities according to Australian laws.

No data, including identifiable, non-identifiable and de-identified datasets, will be shared or used in future research projects without your explicit consent. These projects may include academic articles, books, reports, and others.

Data Storage

The information collected may be stored securely on a password protected computer and/or Flinders University server throughout the study. Any identifiable data will be de-identified for data storage purposes unless indicated otherwise. All data will be securely transferred to and stored at Flinders

University for at least five years after publication of the results. Following the required data storage period, all data will be securely destroyed according to university protocols.

Ethics Committee Approval

The project has been approved by Flinders University's Human Research Ethics Committee (project n. HEG2554-1).

Queries and Concerns

Queries or concerns regarding the research can be directed to the research team. If you have any complaints or reservations about the ethical conduct of this study, you may contact the Flinders University's Research Ethics & Compliance Office team via telephone 08 8201 3116 or email human.researchethics@flinders.edu.au.

Thank you for taking the time to read this information sheet and if you accept our invitation to be involved, please complete the Consent Form in the online survey.

APPENDIX 2 PARTICIPANT INFORMATION SHEET (INTERVIEW)

Title: The 'Gig Economy': cases from Italian Working Holiday Makers and International Students in Australia

Researcher(s)

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Description of the study

This study is part of the project titled "*The 'Gig Economy': cases from Italian Working Holiday Makers and International Students in Australia*". The project investigates recent temporary Italian migrants in Australia under a Working Holiday Visa or are international students that work or have worked in the 'gig economy', a form of online work, for example Uber, Deliveroo, Airtasker, etc. The project

aims to explore the how 'gig work' is carried out by these groups of migrants, the advantages and the disadvantages of being a 'gig worker' in Australia.

This project is supported by Flinders University, College of Business Government and Law.

Purpose of the study

This project aims to find out how positive and negative aspects of 'gig work' affect the opportunities and lifestyles of Italian temporary migrants.

What will I be asked to do?

You are invited to attend an interview with the researcher conducted through Skype, who will ask you some questions about your 'gig work' in Australia. The interview will be around 45-60 minutes. The interview will be audio recorded using a digital voice recorder to help with reviewing the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file and will only be destroyed after the transcript is checked by you.

What benefit will I gain from being involved in this study?

The sharing of your experiences will assist in documenting the impact of the 'gig economy' in Australia, especially Italian migrants, and critically evaluate advantages and disadvantages present in the 'gig work'.

Will I be identifiable by being involved in this study?

Your personal data will be confidential, and you will remain anonymous through the publications. Once the interview has been typed-up and saved as a file, the voice file will then be destroyed. Any identifying information will be removed, and the typed-up file stored on a password protected computer that only the investigator (Elvio Anthony Sinopoli) and the supervisors (Associate Professor Marinella Marmo and Dr Sanzhuan Guo) will have access to file. Your comments will not be linked directly to you.

Are there any risks or discomforts if I am involved?

You may feel upset in talking about your experiences or be worried about disclosing illegal activities. On the occasion you may find yourself uncomfortable during the interview, please advise Mr Sinopoli.

He will offer you the possibility to complete the interview online to maintain your information confidential. This will take around 60 minutes but can be more or less depending on your responses. Some Sections are smaller than others.

If you feel the need to talk to someone, I have included some free counselling services.

Lifeline – Ph: 13 11 14 (24 hour crisis support)

Beyond Blue – Ph: 1300 22 4636 (24 hours a day, 7 days a week)

Women's Information Services - Ph. 8303 0590 or 1800 188 158: (Mon-Fri 9.00am-5.00pm)

Withdrawal Rights

You may, without any penalty, decline to take part in this research study. If you decide to take part and later change your mind, you may, without any penalty, withdraw at any time without providing an explanation.

To withdraw, please contact the Mr Sinopoli prior the interview, or simply refuse to answer any question. Any data collected up to the point of withdrawal will be securely destroyed.

Confidentiality and Privacy

Only researchers listed on this form have access to the individual information provided by me. The research outcomes may be presented at conferences, written up for publication or used for other research purposes as described in this information form. However, the privacy and confidentiality of individuals will be protected at all times. You will not be named, and your individual information will not be identifiable in any research products without your explicit consent.

However, I anticipate that any disclosure of illegal activity must be reported to the relevant authorities according to Australian laws.

No data, including identifiable, non-identifiable and de-identified datasets, will be shared or used in future research projects without my explicit consent. These projects may include academic articles, books, reports, and others.

Data Storage

The information collected may be stored securely on a password protected computer and/or Flinders University server throughout the study. Any identifiable data will be de-identified for data storage

purposes unless indicated otherwise. All data will be securely transferred to and stored at Flinders University for at least five years after publication of the results. Following the required data storage period, all data will be securely destroyed according to university protocols.

Ethics Committee Approval

The project has been approved by Flinders University's Human Research Ethics Committee (project n. HEG2554-1).

Queries and Concerns

Queries or concerns regarding the research can be directed to the research team. If you have any complaints or reservations about the ethical conduct of this study, you may contact the Flinders University's Research Ethics & Compliance Office team via telephone 08 8201 3116 or email human.researchethics@flinders.edu.au.

Thank you for taking the time to read this information sheet and if you accept our invitation to be involved, please accept all conditions in the Consent Form.

APPENDIX 3 PARTICIPANT CONSENT FORM (INTERVIEW)

- ☐ I have read and understood the information about the research, and I understand I am being asked to provide informed consent to participate in this research study. I understand that I can contact the research team if I have further questions about this research study.
- ☐ I am not aware of any condition that would prevent my participation, and I agree to participate in this project.
- ☐ I understand that I am free to withdraw at any time during the study and that my withdrawal will not affect my relationship with Flinders University and its staff and students.
- ☐ I understand that I can contact Flinders University's Research Ethics & Compliance Office if I have any complaints or reservations about the ethical conduct of this study.
- ☐ I understand that my involvement is confidential, and that the information collected may be published. I understand that I will not be identified in any research products.
- ☐ I understand that the information collected that relates to crimes may be disclosed under Australian laws

I further consent to:

- ☐ participating in an interview
- ☐ having my information audio recorded
- ☐ my data and information being used in this project and other related projects for an extended period of time (no more than 10 years after publication of the data)
- ☐ being contacted about other research projects

Signed:

Name:

Date:

APPENDIX 4 PARTICIPANT INFORMATION SHEET (INTERVIEW WITH OTHER STAKEHOLDERS)

Title: The 'Gig Economy': cases from Italian Working Holiday Makers and International Students in Australia

Researcher(s)

Mr Elvio Anthony Sinopoli

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Flinders University

Email: elvio.sinopoli@flinders.edu.au

Supervisor(s)

(1) Associate Professor Marinella Marmo

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(2) Dr Sanzhuan Guo

College of Business, Government and Law

Flinders University

Tel: 8201 3737

Email: sanzhuan.guo@flinders.edu.au

Description of the study

This study is part of the project titled "*The 'Gig Economy': cases from Italian Working Holiday Makers and International Students in Australia*". The project investigates recent temporary Italian migrants in Australia under a Working Holiday Visa or are international students that work or have worked in the 'gig economy', a form of online work, for example Uber, Deliveroo, Airtasker, etc. The project aims to explore the how 'gig work' is carried out by these groups of migrants, the advantages and the disadvantages of being a 'gig worker' in Australia and the presence of any form of 'harm'. Further, it explores how criminalisation of wage theft should be regulated in Australia with reference to 'gig workers'.

This project is supported by Flinders University, College of Business Government and Law.

Purpose of the study

This project aims to find out how positive and negative aspects of 'gig work' affect the opportunities and lifestyles of Italian temporary migrants.

What will I be asked to do?

You are invited to attend an interview with the researcher conducted through Skype, who will ask you some questions about 'gig work' in Australia, any harm temporary migrants face while working in the 'gig economy', and any commentary about criminalisation of wage theft in Australia a focus on 'gig workers'. The interview will be around 45-60 minutes. The interview will be audio recorded using a digital voice recorder to help with reviewing the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file and will only be destroyed after the transcript is checked by you.

What benefit will I gain from being involved in this study?

The sharing of your experiences will assist in documenting the impact of the 'gig economy' in Australia, especially Italian migrants, and critically evaluate advantages and disadvantages present in the 'gig work', the presence of harm in the 'gig economy' and how criminalisation of wage theft should be regulated to protect these workers from any harm.

Will I be identifiable by being involved in this study?

Your personal data will be confidential, and you will remain anonymous through the publications. Once the interview has been typed-up and saved as a file, the voice file will then be destroyed. Any identifying information will be removed, and the typed-up file stored on a password protected computer that only the investigator (Elvio Anthony Sinopoli) and the supervisors (Associate Professor Marinella Marmo and Dr Sanzhuan Guo) will have access to file. Your comments will not be linked directly to you.

Are there any risks or discomforts if I am involved?

The investigator anticipates no risks from your involvement in this study. However, on the occasion you may find yourself uncomfortable during the interview, please advise Mr Sinopoli. He will offer you the possibility to complete the interview online to maintain your information confidential.

Withdrawal Rights

You may, without any penalty, decline to take part in this research study. If you decide to take part and later change your mind, you may, without any penalty, withdraw at any time without providing an explanation.

To withdraw, please contact the Mr Sinopoli prior the interview, or simply refuse to answer any question. Any data collected up to the point of withdrawal will be securely destroyed.

Confidentiality and Privacy

Only researchers listed on this form have access to the individual information provided by me. The research outcomes may be presented at conferences, written up for publication or used for other research purposes as described in this information form. However, the privacy and confidentiality of individuals will be protected at all times. You will not be named, and your individual information will not be identifiable in any research products without your explicit consent.

However, I anticipate that any disclosure of illegal activity must be reported to the relevant authorities according to Australian laws.

No data, including identifiable, non-identifiable and de-identified datasets, will be shared or used in future research projects without my explicit consent. These projects may include academic articles, books, reports, and others.

Data Storage

The information collected may be stored securely on a password protected computer and/or Flinders University server throughout the study. Any identifiable data will be de-identified for data storage purposes unless indicated otherwise. All data will be securely transferred to and stored at Flinders University for at least five years after publication of the results. Following the required data storage period, all data will be securely destroyed according to university protocols.

Ethics Committee Approval

The project has been approved by Flinders University's Human Research Ethics Committee (project n. HEG2554-1).

Queries and Concerns

Queries or concerns regarding the research can be directed to the research team. If you have any complaints or reservations about the ethical conduct of this study, you may contact the Flinders University's Research Ethics & Compliance Office team via telephone 08 8201 3116 or email human.researchethics@flinders.edu.au.

Thank you for taking the time to read this information sheet and if you accept our invitation to be involved, please accept all conditions in the Consent Form.

APPENDIX 5 PARTICIPANT CONSENT FORM (INTERVIEW WITH OTHER STAKEHOLDERS)

- ☐ I have read and understood the information about the research, and I understand I am being asked to provide informed consent to participate in this research study. I understand that I can contact the research team if I have further questions about this research study.
- ☐ I am not aware of any condition that would prevent my participation, and I agree to participate in this project.
- ☐ I understand that I am free to withdraw at any time during the study and that my withdrawal will not affect my relationship with Flinders University and its staff and students.
- ☐ I understand that I can contact Flinders University's Research Ethics & Compliance Office if I have any complaints or reservations about the ethical conduct of this study.
- ☐ I understand that my involvement is confidential, and that the information collected may be published. I understand that I will not be identified in any research products.
- ☐ I understand that the information collected that relates to crimes may be disclosed under Australian laws

I further consent to:

- ☐ participating in an interview
- ☐ having my information audio recorded
- ☐ my data and information being used in this project and other related projects for an extended period of time (no more than 10 years after publication of the data)
- ☐ being contacted about other research projects

Signed:

Name:

Date:

APPENDIX 6 INTERVIEW GUIDE WITH PARTICIPANTS

Theme	Questions	Checklist
Greetings and ice breakers <i>Say hello to the participant, thank them warmly for participating, and ask how he or she feels. If he or she is a little worried, tell him or her not to worry, and that everything is under control. Talk about something else (e.g. the weather, the news) until they are ready.</i>		☐ Is the participant feeling comfortable? ☐ Is the participant ready?

Explain the study objectives <i>Explain to the participant that the scope of the research is to understand better 'gig workers' in Australia, and the main interest of the study is on temporary migrants. Tell the participant that by participating in the study he or she is contributing in exploring the lives of these workers and, if he or she agrees, the information may be used for other projects.</i>		☐ Has the scope of the research been explained? ☐ Has the contribute of the participant been explained? ☐ Has the participant any questions to ask?
Explain what is expected from them		☐ Has the voluntary nature of the interview been stated?

<i>Re-emphasise the voluntary nature of this interview. He or she will be told to answer a series of questions, which will be recorded with a device. Whatever is said remains confidential, stored securely and that once they finish, the researcher will provide a transcript for them to review and amend in the following weeks.</i> <i>Pause and ask if the participant wants to go over this part again, if he or she has any questions before moving on.</i>		☐ Has the interview process been explained? ☐ Has the researcher explained to the participant about the interview being recorded with a device? ☐ Has confidentiality and storage of the data been explained? ☐ Has the researcher explained about providing a transcript of the interview after it has been transcribed? ☐ Does the participant have any questions about the interview? ☐ Has the researcher explained that they can stop or not answer any interview questions?
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<i>Tell the participant that if they have questions during the interview or they want to stop or not answer, not to be shy and say it. Even a non-answer is important for us.</i>		
Personal details (if not collected in advance) <i>If they agree, ask the participant personal details if he or she did not provide them in the Interview Form that is completed online. All information is voluntary except the contact details.</i>	Name: _____ Gender: ☐ M ☐ F ☐ N/A Age: _____ Current Location: ☐ ITA ☐ AU	☐ Have all details been collected?

<i>Otherwise, if the information has been provided, just confirm them.</i>	Email address or other contact details:	
Migration experiences in general <i>Start asking the participant to talk about his or her migration in Australia (e.g. why did he or she migrate to Australia, why that visa, etc). It is important to understand the motivations and desires from this experience. This is a very general part. Let the participant speak.</i>	1. Do you want to talk about your experience as a migrant in Australia from when you arrived until now?	☐ Did the participant provide the date/period of arrival? ☐ Did the participant explain the reasons why he/she moved to Australia? ☐ Did the participant say under which visas he/she arrived/stayed in Australia? ☐ Did the participant explain how was the experience of living in Australia? ☐ Did the participant explain his/her expectations and if they were met?

Labour experiences in general <i>Ask questions about the participant's work or works in Australia in general, such as when, where and what the participant was/is doing. This is important to understand what he or she did during the experience, if he or she was employed in traditional work or only in the 'gig economy'. Again, this is a general part and the participant should talk freely.</i>	2. What kind of work did you do while in Australia?	☐ Did the participant provide the industry/work/employer? ☐ Did the participant explain why those kinds of works? ☐ Did the participant explain when?
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‘Gig work’ experiences in detail <i>Here the participant will be asked more detailed questions specifically about a participant’s work as ‘gig workers’.</i>	3. When did you approach and started working the ‘gig economy’? 4. Under which visa? 5. In which sector/company? 6. Do you depend on this work or do you have other jobs? 7. Why did you work in the ‘gig economy’ and not in other traditional occupations? 8. What were your duties? 9. How does the platform actually work? 10. To what extent are you free to work whenever you prefer? 11. Does the ‘gig company’ control you? If YES, how? 12. Why do you think people get involved with this kind of gig work?	☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
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Wages in the ‘gig work’ <i>This is one of the crucial parts as it relates specifically to the issue of ‘wage theft’ in the ‘gig economy’. The participant will be asked details of the wages they earned,</i> <i>Possibly participants may feel confronted by these questions. Be careful, because issues or crimes may be disclosed (such as theft). Always treat the participant with care and if he or she is worried,</i>	13. How much were you paid per completed task? 14. Was the wage sufficient for your living expenses in Australia and why? 15. Do you think the payment/wage was/is fair? If not, why?	☐ Did the participant indicate the wages per task completed? ☐ Ask the participant more details about wages, specifically: ☐ Day (like Monday, Tuesday, etc.) _____ ☐ Hours _____ ☐ Orders _____ ☐ Distance _____ ☐ Income \$ _____

<i>remind them that everything is confidential and that if he or she prefers, he or she can stop the interview or do it anonymously online.</i>		☐ Did the participant explain details of why the wages were sufficient or not? ☐ Did the participant give reasons why the participant's wage was/was not fair? ☐ Did the participant disclose any crimes linked to poor wages such as theft? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions?
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		☐ If not, which ones were not answered? List numbers here:
Physical accidents in the 'gig economy' <i>This is another crucial part that requires detailed explanations.</i> <i>Even here, participants may feel confronted by these questions. Be careful, because issues or crimes may be disclosed, maybe committed by others to them (like causing harm/serious harm, an accident caused by a vehicle). Always treat</i>	16. Did you have any accidents while working with the 'gig company'? 17. Do you mind telling me what happened? 18. How did it affect your life in Australia?	☐ Did the participant provide details of the accident, like location, time, context? ☐ Did the participant explain how that accident affected him/her? ☐ Did the participant disclose any crimes linked to accidents such as causing harm/serious harm, or a vehicle accident? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online?

<i>the participant with care and if he or she is worried, remind them that everything is confidential and that if he or she prefers, he or she can stop the interview or do it anonymously online.</i>		☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
Physical, mental, financial dangers/fears <i>A final crucial part is about any fear the participant has ever felt why working. This is related to any possible harm they may have dealt with, while working in the 'gig economy' and constitute</i>	19. Did you ever fear that something could happen to you? 20. Did you ever feel in danger physically, mentally or financially? 21. Did the work impact your physical or mental health? 22. Did you ever question whether this money was not worth it? 23. How did you manage your issues?	☐ Did the participant indicate any fear of harm? ☐ Did the participant indicate any of the following fears? ☐ physical ☐ mental ☐ financial ☐ Did the participant explain why did they feel in danger?

<i>the 'new' harms.</i> <i>Even here, participants may feel confronted by these questions. Be careful, because issues or crimes may be disclosed (this can vary, like wage theft, theft, causing harm, violence).</i> <i>Always treat the participant with care and if he or she is worried, remind them that everything is confidential and that if he or she prefers, he or she can stop the interview or do it anonymously online.</i>		☐ Did the participant give details of those fears? ☐ Did the participant give details of the impact/consequences of those fears? ☐ Did the participant explain the link between the fears and the wages earned while working in the 'gig company'? ☐ Did the participant give details of how he/she managed those fears? ☐ Did the participant disclose any crimes linked to these fears, like wage theft, theft, violence, harm? ☐ Did the participant feel confronted by questions?
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		☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
Protections from the 'gig companies' <i>Here the questions can be confronting and are based on information and/or opinions the participant has about the 'gig company'.</i> <i>These questions are very generic because the range of</i>	24. Did you ever contact the 'gig company' for any problem that occurred while working? 25. For what reason, if I can ask? 26. Was the 'gig company' available and helpful if you needed them?	☐ Did the participant explain why he/she contacted the 'gig company'? ☐ What were the responses of the 'gig company' on that matter? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the

<i>reasons that may require the participant to contact the 'gig company' can be several. Let them talk and explore better the facts, the reasons and the ultimate outcome. However, the researcher must be careful again if any sensitive issue arises and question whether the participants wants to stop the interview or complete it online.</i>		interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
Protections from the Australian Government and the Australian justice system	27. Did you ever contact a lawyer, a government body, a union or any professional for help for an issue about your work in the 'gig economy'? 28. For what reason, if I can ask?	☐ Which body was contacted (or bodies if more than one)? ☐ Did the participant explain why he/she contacted one or more bodies?

<i>Like for the 'gig companies', this part is based on information and/or opinions the participant has about protections for workers.</i> <i>Like before, these questions are very generic because the range of reasons that may require the participant to contact a governmental or non-governmental body can be several. Let them talk and explore better the facts, the reasons and the ultimate outcome. However, the researcher must be</i>	29. What did the body/bodies tell you?	☐ What were the responses of the body (or bodies if more than one)? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
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<i>careful again if any sensitive issue arises and question whether the participants wants to stop the interview or complete it online.</i>		
End of interview and what will happen next to their data <i>Once completed these topics the interview end. At this stage, the researcher must give the participant the opportunity to explain better any response, if he or she wishes.</i> <i>Otherwise the interview is concluded, and the researcher will</i>		☐ Does the participant want to say anything else? ☐ Did the researcher explain that the recording has ended and that now the researcher will type the information on a separate document which will be sent via email to the participant to check if it is correct? ☐ Did the researcher explain how the data will be stored at Flinders University?

<i>explain how the research will be transcribed, sent to the participant to read and amend if necessary and how it will be stored.</i>		
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APPENDIX 7 INTERVIEW GUIDE WITH STAKEHOLDERS

Theme	Questions	Checklist
Greetings and ice breakers <i>Say hello to the key informant and thank warmly for participating.</i>		☐ Is the participant feeling comfortable? ☐ Is the participant ready?
Explain the study objectives <i>Explain to the informant that the scope of the research is to understand better 'gig workers' in Australia, but the main interest of the study is temporary migrants. Tell the informant that by participating in</i>		☐ Has the scope of the research been explained? ☐ Has the contribute of the participant been explained? ☐ Has the participant any questions to ask?

<i>the study he or she is contributing in exploring the lives of these workers. Be clear of the objective of the study: how wage theft affects 'gig workers', in particular temporary migrants, better if Italian on WH or student visas, what is their opinion/role in relation to criminalisation of wage theft in Australia and, if he or she agrees, the information may be used for other projects.</i>		
Explain what is expected from them <i>Re-emphasise the voluntary</i>		☐ Has the voluntary nature of the interview been stated?

<i>nature of this interview. He or she will be told to answer a series of questions, which will be recorded with a device. Whatever is said remains confidential, stored securely and that once they finish, the researcher will provide a transcript for them to review and amend in the following weeks.</i> <i>Pause and ask if the participant wants to go over this part again, if he or she has any questions before moving on.</i> <i>Tell the participant that if they have questions</i>		☐ Has the interview process been explained? ☐ Has the researcher explained to the participant about the interview being recorded with a device? ☐ Has confidentiality and storage of the data been explained? ☐ Has the researcher explained about providing a transcript of the interview after it has been transcribed? ☐ Does the participant have any questions about the interview? ☐ Has the researcher explained that they can stop or not answer any interview questions?
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<i>The informant will ask to provide, if possible, any background information they have about any temporary migrants (if Italian better) that they dealt with and worked in the 'gig economy'. This may include any data on gender, age, nationality, city where the migrant worked, visa status (e.g. Working Holiday Makers or international students), for which company they worked. This is broad and the informant can provide whatever they can.</i>		☐ Are there sources that include Italians? ☐ Can the participant provide links or the documents via email?
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Labour experiences in general <i>As before, this is more background information if key informants have this available. The scope is to explore if they were made aware of 'gig workers' they dealt with who also worked in other traditional occupations and which ones.</i>	2. Do you know if these gig workers were also employed in other occupations?	☐ Did the participant provide the industry/work/employer? ☐ Does the participant have documents/sources that can be used? ☐ Can the participant provide links or the documents via email?
'Gig work' experiences in detail <i>Here the informant will be asked more detailed questions specifically</i>	3. When did they approach the 'gig economy'? 4. Under which visa? 5. In which sector/company? 6. What were their duties?	☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:

<i>about temporary migrants' work as 'gig workers'</i>	7. How does the platform actually work? 8. Did the 'gig company' control them? 9. How does a person get in these kinds of jobs? 10. Why did they work in the 'gig economy'? 11. Where they autonomous and flexible and why? 12. Did they depend on this work or did they have other jobs?	
Wages in the 'gig work' <i>This is one of the crucial parts as it relates specifically to the issue of 'wage theft' in the 'gig economy'. The</i>	13. How much were they paid? 14. Was the wage deemed sufficient for their living expenses in Australia? 15. Can you develop your response better?	☐ Did the participant indicate the wages per task completed? ☐ Did the participant explain details of why the wages were sufficient or not? ☐ Did the participant disclose any crimes

<i>participant will be asked details about the wages they earned by 'gig workers'.</i> <i>Be careful, because issues or crimes may be disclosed (such as theft).</i>	16. Are you aware of distressful or precarious consequences in the lives of these 'gig workers' due to these wages? 17. If YES, can you give more details? 18. What is the organisation's view about the issue of 'wage theft' in the 'gig economy'?	linked to poor wages such as theft? ☐ Did the participant disclose any distressful or precarious consequences from poor wages? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
Physical accidents in the 'gig economy'	19. Did migrants have any accidents while working with the 'gig company'?	☐ Did the participant provide details of the accident, like location, time, context?

<i>This is another crucial part that requires detailed explanations.</i> <i>Be careful, because issues or crimes may be disclosed, maybe committed by others to them (like causing harm/serious harm, an accident caused by a vehicle).</i>	20. Do you mind telling me what happened? 21. How did it affect their lives in Australia?	☐ Did the participant explain how that accident affected temporary migrants? ☐ Did the participant disclose any crimes linked to accidents such as causing harm/serious harm, or a vehicle accident? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
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Physical, mental, financial dangers/fears <i>A final crucial part is about any fear the migrant may have dealt with, while working in the 'gig economy' and constitute the 'new' harms.</i> <i>Even here, participants may feel confronted by these questions. Be careful, because issues or crimes may be disclosed (this can vary, like wage theft, theft, causing harm, violence).</i>	22. Did the migrants ever fear that something could happen to them? 23. Did they ever feel in danger physically, mentally or financially? 24. Did the work impact their physical or mental health? 25. Did they ever question whether this money was not worth it? 26. How did they manage your issues?	☐ Did the participant indicate any fear of harm? ☐ Did the participant indicate any of the following fears? ☐ physical ☐ mental ☐ financial ☐ Did the participant explain why did migrants feel in danger? ☐ Did the participant give details of those fears? ☐ Did the participant give details of the impact/consequences of those fears? ☐ Did the participant explain the link between the fears and the wages earned while working in the 'gig company'?
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		☐ Did the participant give details of how migrants managed those fears? ☐ Did the participant disclose any crimes linked to these fears, like wage theft, theft, violence, harm? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
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Protections from the 'gig companies' <i>Here the questions can be confronting and are based on information and/or opinions the participant has about the 'gig company'.</i> <i>These questions are very generic because the range of reasons that may require the migrant to contact the 'gig company' can be several. Let them talk and explore better the facts, the reasons and the ultimate outcome.</i>	27. Did the migrant ever contact the 'gig company' for any problem that occurred while working? 28. For what reason, if I can ask? 29. Was the 'gig company' available and helpful if they needed them?	☐ Did the participant explain why the migrant contacted the 'gig company'? ☐ What were the responses of the 'gig company' on that matter? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
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Protections from the Australian Government and the Australian justice system <i>Like for the 'gig companies', this part is based on information and/or opinions the participant has about protections for gig workers.</i> <i>Like before, these questions are very generic because the range of reasons that may require the migrant to contact a government or non-government body can be several. Let</i>	30. Do migrants contact you for help in relation to wages/harms/fears that occur while working in the 'gig economy'? 31. For what reason, if I can ask? 32. What were your responses to those issues? 33. Do you have documentation available about their issues and responses?	☐ Did the participant explain why migrants contacted them? ☐ What where the responses given to migrants? ☐ Can the body provide documents or links via email? ☐ Did the participant feel confronted by questions? ☐ If confronted, does the participant want to stop the interview/complete it online? ☐ Did the participant answer all questions? ☐ If not, which ones were not answered? List numbers here:
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<i>them talk and explore better the facts, the reasons and the ultimate outcome.</i>		
End of interview and what will happen next to their data <i>Once completed these topics the interview end. At this stage, the researcher must give the participant the opportunity to explain better any response, if he or she wishes.</i> <i>Otherwise the interview is concluded, and the researcher will explain how the research will be</i>		☐ Does the participant want to say anything else? ☐ Does the participant want to cite or refer to sources before the end of the interview? ☐ Did the researcher explain that the recording has ended and that now the researcher will type the information on a separate document which will be sent via email to the participant to check if it is correct? ☐ Did the researcher explain how the data will be stored at Flinders University?

<i>transcribed, sent to the participant to read and amend if necessary and how it will be stored.</i>		
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APPENDIX 8 ONLINE SURVEY

Italian 'gig workers' in Australia

Thank you for your interest in participating in this project on Italian 'gig workers' in Australia.

The survey is divided in several sections:

- Section 1: Study Details and Consent
- Section 2: Personal Details
- Section 3: Gig work in Australia and SUBMIT

Before continuing, I would like to you read carefully the following information about this study.

Section 1: Study Details and Consent

This study investigates recent temporary Italian migrants in Australia under a Working Holiday Visa or are international students that work or have worked in the 'gig economy', a form of online work, for example Uber, Deliveroo, Airtasker, etc. The project aims to explore the how 'gig work' is carried out by these groups of migrants, the advantages, and the disadvantages of being a 'gig worker' in Australia, and how it affects their lifestyle and opportunities. The survey will take 10 minutes. To participate, you must give your consent.

Please read the Consent Form here (<https://sites.google.com/view/gig-economy-ita-au/important-information-informazioni-importanti>)

This project is supported by Flinders University, College of Business Government and Law. The project has been approved by Flinders University's Human Research Ethics Committee (project n. HEG2554- 1). If you have any queries, please contact Mr Sinopoli at elvio.sinopoli@flinders.edu.au or for the ethical conduct of this study, you may contact the Flinders University's Research Ethics & Compliance Office team via telephone 08 8201 3116 or email human.researchethics@flinders.edu.au.

1. Have you read the Consent Form and do you accept all conditions in the Form?

☐ Yes

Section 2: Personal Details

You are asked here to provide some information about yourself for statistical purposes and to understand more about the characteristics of Italian 'gig workers'. You are NOT required to disclose your identity.

2. Gender - Mark only one oval.

- ☐ Female
- ☐ Male
- ☐ Prefer not to say
- ☐ Other:

3. Your age range - Mark only one oval.

- ☐ <20
- ☐ 20-30
- ☐ 31-40
- ☐ >40

4. Your current location - Mark only one oval

- ☐ Italy
- ☐ Australia
- ☐ Other:

5. Your current visa (if applicable)

Section 3: Gig work in Australia

Here you are asked to answer questions about your work with 'gig companies' like Uber, Deliveroo, Airtasker, etc. Your answers can include different companies.

6. When did you work in the 'gig economy' while in Australia?

7. In which State or States of Australia did you work for a 'gig company'? - Tick all that apply.

- ☐ New South Wales
- ☐ Victoria
- ☐ Queensland
- ☐ Western Australia
- ☐ South Australia
- ☐ Tasmania
- ☐ Northern Territory
- ☐ Australian Capital Territory (ACT)

8. Which 'gig company' did you work with? You may indicate more than one company, if needed. Tick all that apply.

- ☐ Uber
- ☐ Uber Eats
- ☐ Deliveroo
- ☐ Airtasker
- ☐ GoCatch
- ☐ Ola
- ☐ Taxify
- ☐ Zoom2u
- ☐ Other: _____

9. How were/are the wages of the 'gig work'? - Mark only one.

0 1 2 3 4 5 6 7 8 9 10

10. Were/are the wages sufficient for your living expenses? - Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Average

11. Did you ever have an accident while working with the 'gig company'? - Mark only one oval

- ☐ Yes
- ☐ No

12. Did you ever feel physically in danger when working in the 'gig economy'? - Mark only one oval.

- ☐ Yes
- ☐ No

13. Did you ever experience one of more of these dangers while working in the 'gig economy'? - Tick all that apply.

- ☐ Physical
- ☐ Financial
- ☐ Psychological
- ☐ Other: _____

14. Do you think the 'gig companies' protected you and other workers? - Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Maybe

15. Do you think the Australian Government or any body, agency, or union protects you and the other 'gig workers'? - Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Maybe

16. From 0 to 10, how much do you evaluate your overall experience of working in the 'gig economy' in Australia? - Mark only one.

0 1 2 3 4 5 6 7 8 9 10

17. Do you have any further comments you want to make about your answers? Please write them here

18. Do you want to conduct an interview with the researcher?

Please click [HERE](https://forms.gle/tBNmE28WmAY7fNv59) (<https://forms.gle/tBNmE28WmAY7fNv59>) and complete the Form that will open or send an email to elvio.sinopoli@flinders.edu.au. The researcher will contact you and discuss a time appropriate for the interview.

APPENDIX 9 VERBAL SCRIPTS AND EMAILS FOR RECRUITMENT OF PARTICIPANTS

Dear [name of person],

My name is Elvio and I am a PhD student at Flinders University. I am conducting a study on Italian workers in 'gig companies' like Uber, Deliveroo, or Airtasker. I am interested in collecting information about these workers who are on Working Holiday Visas and Student Visas.

The study includes an online survey and possibly a Skype interview with the researcher.

Would you like to participate? To access more information, click here [information sheet; consent form links]

If you want, you can email elvio.sinopoli@flinders.edu.au for more information.

Kind regards,

Elvio