

RESEARCH ARTICLE OPEN ACCESS

A Typology of Labour Agency in the Gig Economy: Gig Drivers' Experiences of Struggle in Indonesia During the COVID-19 Pandemic

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Received: 31 January 2024 | Revised: 9 September 2025 | Accepted: 30 October 2025

Keywords: gig economy | Indonesia | labour agency | labour geography | resistance | ride-hailing

ABSTRACT

This article explores how ride-hailing drivers, couriers, and food-delivery riders in Indonesia exercised labour agency to improve their working conditions during the Covid-19 pandemic. Drawing on a survey (N = 997) and in-depth interviews (N = 30) with gig drivers in Jakarta, it contributes to labour geography and employment relations literature by reconceptualizing labour agency in the gig economy. Four modes of agency are proposed: (1) Individual resilience, (2) Individual reworking and resistance, (3) Collective resilience, and (4) Collective reworking and resistance. This article further presents main obstacles that explain why not all workers may exercise these practices: Fear of potential platform counteraction and moral dilemma hindered workers from resisting the platform. Identity struggles concerning the 'driver-partner' status and the competitive nature of the platform work prevented workers' involvement in collective agency. Meanwhile, free rider problem, fragmented and leaderless movement, and collective frustration posed challenges for workers in translating collective feeling into active solidarity.

1 | Introduction

The global pandemic has significantly impacted the lives and well-being of millions of workers, especially individuals engaged in nontraditional work arrangements like the gig economy. Even before the pandemic, gig workers faced a significant risk of precariousness (De Stefano 2015), reflecting how labour power is commodified, isolated, and disembedded from society (Attoh et al. 2019; Wood et al. 2018). Without permanent contracts, gig workers primarily depend on earnings per task and are ineligible for benefits like paid sick leave, holiday, and health insurance. Amid the economic shock caused by the coronavirus, location-based gig workers—such as ride-hailing drivers, couriers, and food delivery riders—have been profoundly affected, particularly with the enforcement of mobility restrictions by countries aiming to contain the virus's spread. Moreover, in numerous emerging economies where formal job

opportunities have stagnated and labour are oversupplied, gig workers have been compelled to compete amongst themselves and engage in the gig economy on a long-term basis.

This article explores how gig drivers, whose tasks are mediated by digital platforms, employ labour agency as part of their daily practices to improve working conditions during the COVID-19 pandemic. The concept of labour agency is drawn from labour geography which views workers as active agents capable of shaping economic spaces (Herod 1997). Specifically, this study addresses two key research questions: (1) How do gig drivers collectively and individually exercise labour agency to enhance their working conditions? and (2) What are the key obstacles that constrain gig drivers from fully exerting various forms of labour agency? By addressing these questions, the study contributes to the literature on the global gig economy in three significant ways.

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First, it broadens the scope of labour agency beyond formal protests and mobilisations (e.g., Tassinari and Maccarrone 2019; Umney et al. 2024) by showing that collective practices also include more subtle forms such as community-based support networks. At the same time, it highlights that individual practices are not merely adaptive strategies for survival but can also take transformative forms that reshape everyday working conditions. In exploring how both individual and collective forms of agency interact, the study incorporates Katz (2004) classification of labour agency and considers the micro-level agency exercised by individuals in their daily routines (Rogaly 2009). The research proposes a typology based on two key dimensions: whether the objective is to transform the system or adapt to current conditions, and whether the practice is carried out individually or collectively. This expanded typology provides a comprehensive framework for analysing the emergence of struggles among gig workers, representing a key novelty of this study.

Secondly, rather than assuming all gig workers have equal capacity to resist or participate in collective action, this study shows that obstacles play a critical role in determining the forms of agency available to workers. While much of the previous research has focused on how and why gig workers exert specific forms of labour agency (e.g., Ford and Honan 2019; Umney et al. 2024), there is still limited understanding of the barriers that prevent them from doing so. The originality of this study lies in its focus on these obstacles to labour agency, emphasising that not all workers have equal access to or capacity for exercising different types of agency. By focusing on these obstacles, this study highlights the importance of understanding labour agency not just as what workers *can do*, but also as what they are *prevented* from doing.

Lastly, this article develops the framework by investigating agency practices among gig drivers in Jakarta, representing a busy metropolitan city in the Global South. It draws on a survey (N = 997) and in-depth interviews (N = 30) with ride hailing drivers, food delivery riders, and couriers. Previous studies focusing on labour agency within location-based gig workers have predominantly been conducted in cities in high income countries such as in the United States (Wells et al. 2021), Germany (Heiland 2021), and Australia (Veen et al. 2020). Nevertheless, it is crucial to conduct a more indepth exploration of the gig economy phenomenon in the Global South where local labour markets exhibit distinct characteristics. In these contexts, becoming a gig worker is often a response to longterm unemployment rather than a choice for flexible or supplemental income as is more common in the Global North (Valente et al. 2019). In Jakarta, with high rates of urbanisation and local migration, many gig workers are local citizens previously excluded from the formal employment sector (Permana et al. 2022). As a result, labour agency practices may differ significantly from those in high-income countries. Understanding these distinctions, shaped by specific economic and social contexts, is essential for advancing knowledge of the global gig economy.

The remainder of this article is structured as follows. The next section reviews the relevant literature. The third section explores the emerging gig economy and labour market conditions in Jakarta during the COVID-19 pandemic, providing the research context. The fourth section outlines the methodology,

followed by the presentation of findings in the fifth section, which focuses on the typology of agency and the obstacles workers face. Finally, the article concludes with a discussion and overall conclusions.

2 | Related Literature on Labour Agency in the Gig Economy

Labour control is the primary issue in the discourse around the gig economy. As an intermediary, the digital platforms serve as invisible managerial figures and indirectly control the workers through algorithmic management (Gandini 2018; Lee et al. 2015). Instead of offering a neutral marketplace, platforms shape gig workers' behaviour by incorporating various motivational and nudge techniques without coercive control (Van Doorn and Chen 2021; Parth and Bathini 2021). In the context of the ridehailing, courier, and food delivery business model, the term 'flexibility' is challenged by the platform's need to provide a reliable on-demand service to its clients. Thus, to keep the drivers 'just-in-place', their freedom must be 'aggressively managed' (Wells et al. 2021). The customer rating system, complex incentive scheme, information monopoly, and blind passenger acceptance allow the platform to manage its drivers under an asymmetrical power structure (Wu et al. 2019; Huang 2023).

Considering that gig workers are not only 'users' of the platform but also paid labour who indirectly controlled by the algorithmic management, Gandini (2018) urges scholars to involve more on studies that investigates labour conditions and their practices in the gig economy. By doing so, one could understand how algorithmic management is perceived by the gig workers themselves and how they may respond to the platform's spatial control. This study adopts the concept of labour agency that has emerged in labour geography literature, arguing that labour is a powerful agent that can shape the economic spaces and scales (Herod 1997). Labour geography is part of critical geography, which challenges the notion in neoclassical economic geography that assumes labour simply as a commodity and an intrinsic part of the production process (Coe et al. 2008). It perceives labour as active agents who intentionally and unintentionally produce and manipulate spaces through their actions (Herod 2001). Harvey (2000) reminds us that space is not only an arena shaped by capital but also a site where alternative futures can be imagined and enacted. Central to this is the idea of the spatial fix, initially used to describe how capital manages crises through geographical expansion. More recent scholarship, however, has extended this notion beyond capital to recognise how labour itself produces spatial strategies through everyday practices (Strauss 2017; Coe et al. 2019).

Labour geographers, in this context, reconceptualize agency as the ability to shape, contest, and re-make the economic land-scape to reform existing structures or improve their working conditions. As the starting point, this study follows Katz (2004) three classifications of agency: resistance, reworking, and resilience as everyday practices employed to 'shape opportunities and possibilities in the face of broader neo-liberal transformations' (Carswell and De Neve 2013). Resistance can be viewed as both the direct and indirect confrontation of workers against the capital. It requires a 'critical consciousness to

confront specific conditions of oppression and exploitation' by the hegemonic power (Katz 2004). Reworking involves efforts to improve working conditions, both inside and outside of work, while operating within current social relations (Coe and Jordhus-Lier 2011). Reworking practices do not explicitly attempt to challenge the hegemony but rather focus on recalibrating power relations and redistributing resources (Katz 2004). However, Hauge and Fold (2016) identifies both reworking and resistance as the two main dimensions of transformative capacity, referring to the ability of an individual to identify the need and means for changing the existing conditions intentionally. Furthermore, resilience is the lowest level of agency, concentrating on small acts of coping and adapting with the reality without changing the current social relations (Cumbers et al. 2008). The act of resilience is built on limited consciousness, maintaining the status quo to allow survival and preserve dignity (Carswell and De Neve 2013).

Labour agency may be neither collective nor formally institutionalised (Carswell and De Neve 2013). Scott (1985) showed, even subtle and hidden acts of resistance among rural workers can reshape socioeconomic life outside formal institutions. At the individual level, workers exercise agency in everyday ways, often at the microscale and within contexts where capital continues to shape their conditions (Rogaly 2009). Moreover, exploring labour agency among precarious workers is important for understanding worker struggles in modern world where the existing organisation of capital is not sufficient to explain the 'evolving forms of insecurity, vulnerability, and exploitation' (Strauss 2017). Extending this insight, Ağar and Böhm (2018) introduced the idea of a socio-spatial fix to capture how constrained grassroots struggles in Turkey both resist and reproduce capitalist accumulation. Together, these perspectives highlight the need for a pluralist labour geography—one that moves beyond worker- and union-centrism to recognise the multi-scalar, relational, and context-specific character of agency.

The rise of the gig economy has invited questions regarding how the new organisation of work shapes and constrains labour agency (Barratt et al. 2020). The absence of a physical office or traditional workplace, combined with the decentralised design of gig work, have promoted alienation and limited the ability of gig workers to build collective action with co-workers. Historically, active solidarity in the form of collective action is identified as the main form of labour agency practice. It refers to the condition where workers become aware of the collective nature of the labour process and develop consciousness to act collectively in the opposition to the management (Tassinari and Maccarrone 2019). However, in non-standard work arrangement, these practices are rare and cannot be drawn on equally by all workers.

Globally, gig workers have organised various forms of protest, which have been widely documented in academic literature (Rafélis de Broves et al. 2024). Yet, there are notable differences between collective actions in the Global North and Global South (Schmalz et al. 2023). In the Global North, gig workers often engage in more formal protests supported by established unions, legal challenges, and collective

bargaining. These efforts are usually aim to improve employment status, secure union representation, and enhance health and safety standards. In contrast, labour protests in the Global South—across Africa, Latin America, and Asia—are more grassroots, informal, and focused on immediate economic concerns like pay and basic working conditions (Bessa et al. 2022). Workers in the Global South tend to prioritise survival in their precarious employment situations, often lacking the institutional support available in the Global North (Umney et al. 2024).

The capacity for self-organised solidarity in the gig economy is thus highly dependent on local institutions and alliances. In Jakarta, for example, ride-hailing drivers have established neighbourhood-based associations and informal communities that provide social and economic support (Panimbang 2021). Although such organisations are characterised by strong social commitment, their movements are limited at neighbourhood level and not sufficient to be translated into large scale protest (Ford and Honan 2019). The prevalence of informal groups and community-based networks highlights the more fragmented nature of collective action in the Global South, where formal unions and legal protections are less common.

Previous literature reveals various practices through which gig workers exercise individual agency to improve their working conditions. For example, a growing body of literature in transport geography exposes how drivers make spatial and temporal choices while working throughout the city to secure more tasks from the platform (Anderson 2014). Through their accumulated experiences, drivers develop tactical and operational decisions based on working shifts, relocation strategies, and ride acceptance (Ashkrof et al. 2020). On the other hand, gig workers can also exert resistance at an individual level, as they may recognise flaws in the system and attempt to challenge the platform by manipulating it to increase their potential income (Heiland 2021; Möhlmann and Zalmanson 2017).

Existing literature has documented multiple ways gig workers negotiate platform control, from subtle everyday tactics to large-scale mobilisations. Yet three gaps remain. First, research has often prioritised collective protest but overlooking the broader spectrum of everyday and community-based practices. Second, most analyses are grounded from the Global North, leaving less understanding of agency in highly informalized settings with weak union support. Third, the literature has rarely examined how constraints themselves shape which forms of agency become viable in specific urban contexts.

This article addresses these gaps by analysing how Jakarta's gig drivers exercise labour agency across everyday, community-based, and collective practices, and by examining main obstacles that constrain these practices and shape the forms of agency that become possible. By situating these dynamics within Jakarta's context of informality, labour oversupply, and weak union presence, the study extends debates on labour agency under platform capitalism. The focus on ride-hailing, courier, and food delivery work is particularly important, as these location-based forms of gig labour differ from crowdwork or online freelancing in their reliance on urban infrastructures and spatial constraints (Woodcock and Graham 2020).

3 | Research Context

This study is set in the Jakarta Metropolitan Area (JMA), the largest urban region in Indonesia, encompassing the capital city of Jakarta and the neighbouring. Jakarta spans an area of 6392 km² and had a population of 31 million in 2019, playing a significant role in Indonesia's economic development by contributing 20% to the national Gross Domestic Product (Statistics Indonesia 2019). The introduction of ride-hailing services in 2015 disrupted the traditional taxicab and informal motorcycle taxi (ojek) services in Jakarta and eventually resulting in a duopoly between Grab and Gojek after Uber's Southeast Asia business was acquired by Grab. These platforms have rapidly expanded in the JMA, serving an estimated 6.5 to 9 million active users in this region. Both Gojek and Grab are super-apps, offering a variety of services such as ridehailing, financial services, logistics, and merchant services. Motorbike drivers working through these platforms can offer ride-hailing, courier, and food delivery services simultaneously.

JMA housed approximately 480,000 full-time gig drivers, constituting over a third of Indonesia's gig driver population (Permana et al. 2022). Although their numbers are relatively small compared to the overall workforce, between 2015 and 2019, these drivers accounted for 22% of new jobs in the region. Jakarta's economy is severely characterised by informal employment, with almost 40% of the workforce engaged in the informal sector. This high proportion of informality reflects the failure of the formal sector to absorb the abundant labour force, a problem that has persisted for decades in Indonesia (Yasih 2023). The high level of informality has driven many workers into the gig economy, where platform work often serves as a primary source of income rather than a supplementary one, unlike in many high-income countries.

Despite the growing importance of gig work, these workers remain largely unregulated. Indonesia's existing employment regulations fail to classify gig drivers as workers, instead treating them as self-employed under the 'misclassified partnership' model (Izzati and Sesunan 2022). This lack of recognition leaves gig workers outside the formal protections of labour law, including minimum wage guarantees, health insurance, and job security. Platforms exploit this legal loophole, as drivers can be penalised, suspended, or have their accounts terminated without any legal protection. This employment ambiguity is central in understanding the agency of gig workers, as their unregulated status makes it difficult for them to collectively organise or demand better working conditions.

Trade unions in Indonesia have traditionally focused on formal sectors, particularly manufacturing, and have largely neglected the informal economy. The historical weakness of organised labour, especially since its suppression during the authoritarian New Order regime (1966–1998), has hindered unions' ability to encounter precarity in the gig economy and informal sectors in general (Yasih 2023). This institutional gap has left gig workers without representation, further weakening their collective bargaining power. As a result, gig workers in Indonesia have largely relied on informal, community-based networks rather than formal unions to voice their concerns and seek improvements in working conditions.

The COVID-19 pandemic had a devastating effect on gig workers in Jakarta. During lockdown periods, when many formal employees transitioned to remote work, gig drivers struggled to survive on a day-to-day basis. A comparative analysis of the Indonesia Labour Force Survey for 2019 and 2020 shows the severity of these disruptions, with 91% of drivers reporting income losses. However, recovery has been slow. Even after mobility restrictions were lifted, drivers have not been able to return to pre-pandemic income levels. Labour survey data of 2024 further indicate that in the past 5 years the number of gig drivers in Jakarta has increased by around 70%, while median monthly income fell by 18.8%. COVID-19 therefore forms an essential backdrop for this study, not only as a temporary shock but as a crisis that has left a lasting legacy of precarity.

These legal and institutional settings are crucial for understanding labour agency in Jakarta. The ambiguous employment status of gig drivers, the absence of union representation, and the prevalence of informality significantly constrain opportunities for active solidarity. At the same time, the density and centrality of the Jakarta Metropolitan Area, with its reliance on platform-based services and concentration of drivers, creates opportunities for everyday tactics and community-based solidarities to emerge. In this sense, the geographical particularities of JMA simultaneously constrain and enable agency. It shapes how gig workers navigate algorithmic management and negotiate the precarious conditions of platform capitalism.

4 | Methodology

This article employed an inductive case study design (Yin 2011) focusing on motorbike drivers who participate in the gig economy platform providing ride-hailing, food delivery, and courier services in Jakarta Metropolitan Area. Data collection involved an online survey and semi-structured interviews. The survey, conducted from March to April 2021, aimed to explore drivers' demographic profiles and their working conditions amidst the COVID-19 pandemic. It also included attitudinal questions concerning their involvement on social communities, their trust levels on the platform, and their perceptions of flexibility. The online questionnaire was distributed through social media groups of ride-hailing drivers in Jakarta. Following data cleaning, a total of 997 complete respondent records were gathered. Notably, the demographic backgrounds of the respondents closely mirrored the actual population of online transportation workers in Jakarta as per official labour statistics (Table 1). This confirmed the absence of significant sorting problem and selection bias in the data collection process.

This online survey was utilised as the basis for a purposive sampling approach to recruit interview respondents at the next stage. From the records of nearly a 1000 respondents in the online survey, essential features that vary from one driver to another were identified. On this basis, the maximum variation sampling technique was applied. This meant that a thorough view of the phenomenon could be captured by considering the variation in drivers' demographic backgrounds and working conditions. The different perceptions of drivers regarding their involvement in social communities and their trust in the platform were also considered when selecting respondents.

TABLE 1 | Comparison of demographic backgrounds of respondents across labour statistics, research survey, and in-dept interviews.

Variables	Labour Force Survey 2019 Gig workers in transport and logistics sectors in Jakarta Percentage	This Survey <i>N</i> = 997 Percentage	Interview $N = 30$ Number of respondents
Female	3	6	3
Married	69	73	26
Age Group			
18-29 y.o	29	32	4
30-39 y.o	32	46	13
40-49 y.o	27	20	10
≥ 50 y.o	12	2	3
Education level			
Less than high school	26	19	5
High school	65	70.0	20
College degree	9	11	5
Migration Status			
born in Jakarta	76	74	20

Due to social distance measures during the pandemic, the interviews were conducted via telephone during the period February-March 2022. Drivers were approached by a WhatsApp message, and an appointment was made to conduct a telephone call. The length of phone interviews ranged from 30 to 120 min. The conversations were recorded and then transcribed using interview ID to maintain anonymity. Semi-structured interviews followed an evolving script of critical questions related to drivers' historical background before participating in the gig economy, their working conditions during the pandemic, and the everyday practices they engage in to survive and improve their working conditions.

A total of 30 drivers were interviewed. With these numbers, theoretical saturation was achieved, as no new concepts have emerged from a larger number of interviews (Bauer and Gaskell 2000). The sample was sufficiently representative of all essential demographic features. Three of the respondents were female. Their ages varied between 22 and 53, with an average of 37 years old. Moreover, two-thirds were high-school graduates, and the majority were married. They lived and worked in various geographical regions in the JMA, including Jakarta province as the city centre, and secondary cities surrounding the central area (i.e., Bekasi, Depok, Bogor, Tangerang, and South Tangerang). More than half of the respondents were born and grew up in Jakarta, demonstrating how the gig platform provides opportunities for nonmigrant citizens who were previously underemployed and worked in informal sectors. The interviews were coded thematically. An open-ended inductive approach was conducted for the first-order analysis, resulting in the identification of hundreds of emerging categories. These categories were reorganised, reduced, and regrouped into second-order aggregate dimensions based on their similarities and differences (Gioia et al. 2013; Strauss and Corbin 1998).

5 | Findings

Through an in-depth analysis, this study has identified four key themes encompassing labour agency practices within the gig economy. To conceptualise these practices, a model of a typology of labour agency categorised in a 2-by-2 table is proposed. The vertical axis distinguishes between individual and collective agency. Although the distinction is often blurred, organising actions into both categories is essential given that the platform promotes atomisation of work and impedes the sense of collectivism among gig workers. Meanwhile, the horizontal axis differentiates the purpose of agency, whether it is related to the capacity to cope or adapt within the existing reality (i.e., resilience) or the capacity to transform the current conditions (Hauge and Fold 2016). The empirical evidence reveals that transformative capacity might directly challenge the labour-capital relationship (i.e., resistance) or simply aim for incremental adjustment by recalibrating the unequal power relations (i.e., reworking). From this perspective, four modes of agency are possible: (1) Individual resilience, (2) Collective resilience, (3) Individual reworking and resistance, and (4) Collective reworking and resistance.

It is important to note that the platform's control regime plays a crucial role in shaping these labour agency practices. Algorithmic management limits workers' autonomy and perpetuates precarity, pushing them to response these challenges through both individual and collective agency. Labour agency is not a static concept but shaped by temporal and spatial dimensions (Coe and Jordhus-Lier 2011). These practices may converge, overlap, and mutually reinforce one another, indicating that the suggested typology is not mutually exclusive for each worker. For instance, a gig worker might exhibit individual resilience in one instance and then utilise collective resistance in another situation. The evidence shows that while all respondents engaged in individual resilience, the other forms of labour agency were not universally

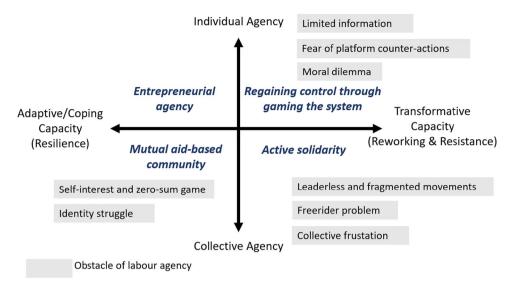


FIGURE 1 | A framework of typology of labour agency in the gig economy and their obstacles. [Color figure can be viewed at wileyonlinelibrary.com]

employed. The model therefore highlights obstacles that limit some drivers from exercising these expressions of labour agency. It should be noted that agency is shaped not only by workplace conditions but also by demographic backgrounds, personal attitudes, and social connections. Taken together, these factors reveal that institutional, cultural, and geographical contexts matter in understanding labour agency practice. Figure 1 summarises the model, integrating the four agency modes on two axes and their respective obstacles (in the grey box).

5.1 | Individual Resilience: Entrepreneurial Agency

The most common form of agency employed by gig workers is individual resilience, where workers adapt to survive within the existing social relations. All interviewed drivers reported engaging in this form of agency with minimal obstacles. Following Barratt et al. (2020), this article uses the term entrepreneurial agency to capture how gig workers frame themselves as microentrepreneurs, employing strategies to maximise their income by optimising work allocation.

A key aspect of this entrepreneurial agency is the spatiotemporal strategy that all drivers use in their daily routines. Drawing on their spatial knowledge of the city, they attempt to predict demand and place themselves at the right location at the right time. During the pandemic, this required adapting to shifting consumer behaviours: as the government imposed mobility restrictions, drivers moved away from the office districts in the city centre and instead concentrated around residential neighbourhoods and essential businesses, where demand for food delivery and courier services was higher.

Another common resilience strategy is asset upgrading, as many drivers invest in improving their motorcycles and mobile phones. Some drivers were still making instalment payments on newer bikes while also saving for regular maintenance. Phones are seen as equally crucial. Describing its importance, one worker suggested, 'You must have a reliable phone; do not use low power mode for your battery because it affects GPS performance; remove unimportant apps and free up your storage; make sure you have sufficient RAM and always carry a power bank', (Interview 1). Upgrading asset aligns with the fact that workers in the gig economy have the responsibility and autonomy to provide their own tools of production (Fleming 2017).

The empirical findings also shed light on emotional labour, show-casing how drivers manage their true feelings and expressions to ensure a positive customer experience. The purpose is twofold: (1) to earn tips for supplementary income, and (2) to secure high ratings that impact their future bonuses and task allocation. One food delivery driver mentioned the importance of contacting customers while waiting in the restaurant, 'I call the customer to ask whether her order is accurate, and to tell her about the expected waiting time in the queue. This is essential because I do not want to be blamed if the delivery takes more time', (Interview 9). Additionally, one ride-hailing driver described going the extra mile by providing masks and hand sanitisers to passengers (Interview 15).

Lastly, multi-apping emerged as a widespread response to declining demand. According to the survey, 26% of drivers worked across more than one platform. While this strategy allowed them to mitigate risks of suspension, drivers reported that platforms discouraged it through complex incentive systems and 'soft punishment' for refusing tasks (Interviews 8, 11, 17, 20). Such practices were believed to reduce opportunities for bonuses and task allocation (Interviews 24, 25). Consequently, most drivers relied primarily on a single platform and use another platform merely as a backup in case the main account is suspended (Interviews 8, 13, 20, 25, 26).

Taken together, these practices illustrate how drivers enact entrepreneurial agency by positioning themselves as microentrepreneurs: using spatio-temporal tactics, asset upgrading, emotional labour, and multi-apping to sustain their livelihoods. Yet, following Barratt et al. (2020), such practices are inherently limited. While they may generate short-term gains, in the medium term they reproduce precarity by shifting risks onto

drivers and reinforcing fragmentation. Importantly, this agency is not fully autonomous: it reflects adaptive responses that are actively channelled through the entrepreneurial framing forced by platforms, which describe workers as independent contractors responsible for their own survival. In this sense, entrepreneurial agency both demonstrates drivers' capacity to adapt under algorithmic control and simultaneously constrains the possibilities for more transformational and/or collective forms of labour agency.

5.2 | Individual Reworking and Resistance: Gaming the System

The second form of agency practice is individual reworking and resistance which often captured in what drivers call 'gaming the system' (Möhlmann and Zalmanson 2017). These are everyday tactics through which drivers, as an individual, attempt to build autonomy under algorithmic management. Over half of the interviewees acknowledged engaging in this form of agency. While the immediate goal is often to increase income, these expressions go beyond simple adaptation: they recalibrate unequal power relations (reworking) and, at times, express defiance toward the platform in response to perceived exploitation and unfairness (resistance). As one driver expressed: 'The system has cheated on us, so it is fine if I cheat on them', (Interview 2). Another explained that his decision to game the system stemmed from feelings of injustice, complaining that the platform deliberately withheld orders when he was close to reaching the performance threshold for daily bonuses (Interview 11). Such stories reflect what Cumbers et al. (2008) describe as an 'oppositional consciousness': a sense of disobedience that shapes how workers frame their struggles, even if the practices themselves do not directly challenge capitalist structures.

Some drivers gamed the system by manipulating GPS to appear in high-demand areas (Interviews 1, 2, 21, 22), creating fake orders to meet bonus requirements (Interviews 1, 21, 24), sharing accounts with relatives or colleagues (Interviews 4, 27, 30), and even renting out apps to other drivers (Interview 25). One driver admitted to waiting at a food kiosk while making it appear that he was parked in front of a mall (interview 2), while another explained how he and a colleague used the same account in shifts to maximise bonus earnings (interview 20). Survey data suggest that drivers with tertiary education are more likely to engage in these oppositional practices, while interviews revealed that longer experience in the platform economy also increased the likelihood of gaming the system. This pattern indicates that both education and accumulated experience shape the capacity to rework and resist.

Following Coe and Jordhus-Lier (2011), many of these practices can be read as reworking strategies, embedded in specific institutional and spatial contexts and aimed at securing better terms within unequal relations. However, the narratives of disobedience, and the willingness of some drivers to frame their acts as 'cheating back', show that elements of resistance do emerge. For this reason, the typology used in this paper does not treat reworking and resistance as sharply separated

categories, but as overlapping and equally transformative expressions of labour agency.

Most individual reworking and resistance practices did not sustain in the long term. The temporary success of hacking the system led to more effective counteractions from the platforms. Both Gojek and Grab regularly updated their software to improve security; for example, by applying face recognition to verify drivers' identities. Some drivers even claimed that the fake GPS was no longer advantageous with respect to work allocation because the algorithmic management had improved (Interviews 6, 24, 30). Those who were still able to hack the system usually paid monthly services to local hackers who routinely upgraded their tools to breach the system (Interview 2, 26). A driver claimed that the information about the hacker community was limited only to a small number of experienced drivers (Interview 16).

As the system continually upgraded and became smarter, drivers worried that it was easier for the algorithm to identify those who attempt to cheat. This study found drivers who were temporarily banned or permanently lost their account because of such actions (Interviews 7, 9, 10, 17). Counteractions from the platform also brought fears to drivers who never been involved in cheating (Interview 6, 23, 28). Theoretically, punishment and fear are well known as the main approach of managers to control behaviour and install obedience among their subordinates (Appelbaum et al. 1998). These mechanisms made some drivers reluctant to employ individual resistance despite the presence of distrust and a feeling of being exploited by the platform (Interviews 6, 12). With limited bargaining power, drivers could not appeal when their jobs were terminated. One driver said that his partnership was once terminated even though he did not know precisely what his mistake was. 'It was high risk. If the system recognises the actions, I will be suspended. If so, I do not have other sources of income', (Interview 12).

Another significant challenge to individual resistance is the moral dilemma, where drivers must choose between two equally undesirable options (Kvalnes 2019). Despite recognising the platform's exploitation and unfair treatment, some felt that cheating the system was morally unacceptable. One driver framed this through a religious perspective: 'For me, cheating is a sin. Even though we earned more money, cheating will adversely affect our wellbeing' (Interview 5). Others argued that hacking the system was improper because it harmed those who worked honestly without resorting to such practices (Interviews 3, 10).

5.3 | Collective Resilience: Mutual Aid-Based Community

Resilience practices are not exclusive to individuals but can also be collectively employed. Even though the nature of decentralised work organised by the platform undermines the ability to develop social connections, gig workers in Jakarta found various ways to exchange information and support each other. The analysis confirms the presence of neighbourhood-based communities among drivers as a unique feature of the gig economy in emerging economy cities. This strong social cohesion is driven by the fact that the

majority of gig workers in Jakarta are local residents, unlike in metropolitan cities in high income countries where gig drivers are predominantly migrants (Van Doorn et al. 2023).

Echoing Ford and Honan's work (2019), this study refers to this collective resilience agency as a mutual-aid based community. These communities typically established a physical meeting place known as a 'basecamp' where drivers could rest, charge their phones, and hold informal gatherings while awaiting tasks (Interviews 7, 8, 12, 13, 20, 21, 26). These 'basecamps' might be small kiosks, rented houses, or simply particular spaces on the side of the road in high-demand areas. The presence of such meeting points was vital in fostering a sense of belonging through regular face-to-face interactions in the absence of a physical office or traditional workplace. Many communities regularly organised social events, charity programmes, and family gatherings for their members (Interviews 7, 13, 17, 20, 21). Some even established informal organisational structures, appointed leaders, and set rules for their operation. For instance, a 'basecamp' leader initiated a selforganising social protection system for their local community (Interview 20). Every driver contributes a monthly fee, dedicated to helping families affected by COVID-19-related sickness or assisting those with damaged vehicles and mobile phones that need repair.

Drivers extensively utilised social media for communication. Almost all drivers were part of Facebook groups, consisting of thousands of members and serve as a source for work-related updates. At the same time, they actively participated in smaller WhatsApp groups, which were vital for overcoming feelings of isolation and loneliness. At a community level, these digital channels facilitated connections between different groups. This network became valuable in times of need, like when a community member encountered an accident or faced difficulties on the road. For instance, a driver residing in South Jakarta found himself needing to drop off a passenger in Cikarang, a 2-h drove from his local area. He shared his experience, It was late at night, and I knew that the area was dangerous for strangers. I asked my local community in Jakarta to connect me with the local community in Cikarang so that I could visit their 'basecamp' and stay awhile there after finishing my trip. I also shared my live location on the WhatsApp group so that my friends could track my position', (Interview 10).

Although building social connections and networking were important for most drivers, the survey indicated that 28% of workers are not actively involved in driver communities. The large sample size of the survey allowed us to identify which demographic factors and backgrounds are associated with drivers' community involvement. First, involvement is negatively correlated with age: the older the driver, the less likely they are to participate in social activities. For instance, only 27% of drivers over 40 are highly active in communities, compared to 39% of drivers under 30. Second, education level also plays an important role. Only 27% of drivers with higher education are very active in communities, compared to 37% of those with a secondary school education or below. Meanwhile, there is no correlation between community involvement and gender or migration status, indicating that women and migrants are just as likely to participate as men and local drivers.

In interviews, some drivers referred to themselves as 'single fighters' and showed little interest in participating in neighbourhood-based

communities and online groups (Interviews 2, 4, 6, 11, 19, 23, 29). They struggled to reconcile their individual roles as independent workers and their social identities as part of a (gig) workers' group. One driver with a diploma background did not recognise the presence of co-workers as he said, 'We are not friends, we just met on the street. We are unlike traditional employees who work together in a factory', (Interview 1). Another older driver, perceiving himself as a 'driver-partner', negatively stereotyped other drivers involved in the community, labelling them unproductive and lazy (Interview 6). The issue with these 'single fighters' is their lack of belonging and emotional attachment to specific social groups. Previous research in organisation and psychology literature has emphasised the role of collective identity and group identification as the determinants of workers' willingness to participate in collective agency (Kelly and Kelly 1994; Veenstra and Haslam 2000).

This phenomenon presents how the platform's identification of drivers as 'partners', rather than 'employees', and the use of slogans like 'be your own boss', significantly influence identity regulation. This represents a less obtrusive but more effective means of organisational control compared to more direct methods such as reward and punishment (Alvesson and Willmott 2002; Sveningsson and Alvesson 2003). One driver shared his concern: 'Our status is driver-partner, not an employee of the platform. Our type of work is unregulated; hence, establishing a labour union is not allowed. What is the point of involving ourselves in driver's informal community?' (Interview 29).

The second obstacle to collective resilience practice is rooted in self-interest among the drivers themselves. The platform's competitive nature promotes drivers' reluctance to participate in collective activities. Some drivers felt the costs of collectiveness outweigh the benefits because they felt that gathering in a similar place with other drivers tend to diminish the income potential (Interviews 25, 30). The algorithmic management black box system made them worry that the time allocated to participate in collective agency would affect future working allocation on the platform (Interview 3). They believed that the task allocation is not only assigned according to their distance to the customers, but also related to their historical performance (Interviews 16, 22, 26, 30). Another driver revealed the lack of algorithmic transparency,

When I stayed together with another driver in a "base camp," he cancelled a work assignment offered by the system. However, the assignment did not come to me after his cancellation even though I stayed close with him. It was strange and unfair.

(Interview 23)

This perception prevented them from active participation in collective agency and kept them working alone and isolated.

5.4 | Collective Reworking and Resistance: Active Solidarity

The fourth and final type of agency is collective reworking and resistance expressed through active solidarity. The survey indicates that women, older workers, and those with tertiary education background is underrepresented in these actions. According to the interview, approximately a third of the drivers had participated in such activities, which included large-scale protests and mobilisations during the pandemic. These actions encompassed both reworking and resistance: reworking when the purpose of the strike was about demanding higher pay, and resistance when the protest focused on directly challenged the employment relationship in the gig economy.

Without the presence of a physical office or traditional work-place, strikes were promoted through social media groups, local communities, and basecamp leaders. Active solidarity, however, was not limited to visible street protests. It also included lower-risk forms, such as logging off from the platform during a strike, or indirect resistance where some drivers refrained from working on protest days (Interviews 6, 11, 21, 22). In a few cases, communities even invited company representatives to their basecamps and expressed complaints directly to management (Interviews 1, 20, 30).

Some interrelated obstacles help explain drivers' reluctance to sustain active solidarity. The first is collective frustration. Many drivers who had engaged in past large-scale protests were then disinterested in future collective actions (Interviews 8, 9, 12, 14, 17, 24). They felt tired because the protest was ineffective and there were no changes. Repeated frustration may result in an attitude of resignation, apathy, and surrender (Shorkey and Crocker 1981). This lack of motivation implies a complete loss of hope and, therefore, an attitude of non-involvement.

The second issue is the free-rider problem, as noted by a driver, 'There are too many drivers. If we decide to log off and boycott the app, but some of them remain at work, our action is useless', (Interview 30). Another driver admitted that he had never participated in a labour protest since he prioritised family income over solidarity (Interview 29). Addressing free-riding requires a strong sense of collective identity, often built on an 'us versus them' distinction with management (Kelly and Kelly 1994). While this is clearer in factories or traditional workplaces, platform work blurs such boundaries: the managerial figure is algorithmic and largely invisible, making it harder for workers to recognise themselves as a unified group against an identifiable opponent.

Some gig workers who are part of local communities decline to exert active solidarity because of their weak bargaining power in the gig economy. Fear of being replaced prevent them from participating in labour protests. They worried that platforms would terminate their contracts, especially given the labour oversupply during the pandemic. These concerns were commonly experienced by less-educated workers who previously held low-paid informal jobs. For them, the gig economy appeared to be a way to escape from unattractive informal jobs and offered a significant livelihood opportunity. As one driver noted, 'The platform companies still recruit new drivers excessively... the number of drivers is considerably more than the demand size. Consequently, we compete against each other' (Interview 15).

The final obstacle involves the absence of cohesive leadership and the prevalent mistrust among workers in the gig economy. Historically, the success of large-scale mobilisation has relied on effective leaders who can resolve coordination problem among individuals and sub-groups (Kelly 2012). Drivers expressed their distrust of other social groups and suspicion of hidden agenda (Interviews 3, 8, 18, 25, 28). Distrust and suspicion arose when individuals question the credibility or sincerity of such actions. Without the presence of strong leadership and an institutionalised labour union, transforming fragmented communities, based on mutual aid, into widespread solidarity became challenging. One driver convincingly argued that 'Each community has its own interest. We cannot guarantee that such movement has no political motive. Does the initiator of the mobilisation really represent us as drivers? I doubt it' (Interview 18).

It is also important to note that these obstacles are interconnected. If labour protests were better coordinated and less fragmented under a strong established union, the free-rider problem could be mitigated. Drivers acknowledged that without any pressure to participate in protests, everything remains voluntary (Interviews 3, 18, 24, 25). Moreover, a well-structured and consistently maintained movement could prevent collective frustration among drivers, which often arises from incidental actions that lack follow-up.

Prior study found that a few driver communities in Jakarta were linked to traditional labour unions in formal sectors (Ford and Honan 2019). However, this study found no respondents actively engaged with those unions. One driver, who previously worked in a factory, admitted that while unions played a central role in negotiating minimum wages in the formal sector, they failed to extend their influence to informal workers (Interview 24). This confirms that after the New Order regime, trade unions in Indonesia have gained strength but were divided into numerous competing federations, making it difficult to extend union influence on informal sectors (Yasih 2023). This stands in contrast to gig workers protests in the Global North, where established union have played a crucial role in supporting mobilisation (Bessa et al. 2022; Schmalz et al. 2023; Umney et al. 2024).

These obstacles resonate with the framework of constrained labour agency (Coe and Jordhus-Lier 2011; Coe and Jordhus-Lier 2023; Jordhus-Lier and Coe 2024). Rather than being simple absences of resistance, they highlight how structural and relational conditions push workers into limited forms of collective action. For instance, the oversupply of labour creates conditions where workers comply to secure livelihoods even while recognising unfairness. Similarly, the invisibility of management under platform control complicates the formation of clear 'us versus them' boundaries, constraining identity-building that is critical for collective mobilisation. These insights suggest that constraints on agency are not static but change over time and across space. It might be shaped by Jakarta's crowded labour market, weak union traditions, and the informal nature of the gig economy.

6 | Discussions and Conclusion

The COVID-19 pandemic presented significant challenges for gig drivers who faced a sharp decline in daily task allocations and earnings. Despite the high risk of exposure due to constant interactions with people, most drivers had little choice but to continue working. These difficulties were further compounded

by a decline in demand and mobility restrictions set by governments. More importantly, the effects of the pandemic have persisted beyond the immediate crisis. Even after restrictions were lifted, many drivers have struggled to regain pre-pandemic levels of income and stability. In this study, COVID-19 is therefore treated not as the exclusive focus but as a critical backdrop that intensified existing pressures of precarity. The typology developed here—resilience, reworking, and resistance across individual and collective practices—captures forms of labour agency that are broadly applicable to platform work under conditions of insecurity, while the pandemic provides a particularly sharp lens through which to observe them.

This study bridges labour geography literature and employment studies by offering empirical evidence from the Global South, where location-based gig workers face unique structural challenges that reshape how agency is exercised under platform capitalism. Unlike in the Global North, where formal unions and collective bargaining often play a central role, gig drivers in Jakarta—and in many other parts of the Global South—operate in contexts marked by high informality, weak institutional support, and legal loopholes that exclude them from formal labour protections. These conditions shape the forms of labour agency that emerge and highlight the importance of grounding theorisation in specific geographical settings.

Drawing on Katz (2004) classification of labour agency, the typology elaborated here comprises entrepreneurial agency (individual resilience), gaming the system (individual reworking and resistance), engaging in local communities based on mutual aid (collective resilience), and active solidarity (collective reworking and resistance). Katz's framework is particularly useful in showing not only noticeable transformative practices but also subtler, everyday adaptations of resilience. Both are crucial for understanding how gig drivers navigate the precarious realities of platform work. The contribution of this fourfold typology lies in systematising a spectrum of labour agency. It provides a tool for scholars to compare how agency explains across different contexts, to trace the obstacles that prevent certain strategies, and to analyse how everyday practices can scale into more organised forms of contestation. In this way, the study advances a pluralist labour geography (Ağar and Böhm 2018) highlighting how workers' expressions of labour agency function as spatial fixes that are continually shaped by the urban environment, institutional settings, and everyday dynamics of platform work.

Specifically, this article sheds light on the individual level of agency as an everyday practice, a dimension that has received limited attention in previous research. It resonates Rogaly (2009) who highlights the significant role individuals play in seeking and achieving incremental changes within the micro spaces of their work and living environments. This study demonstrates how gig workers actively shape their own spatial strategies in response to platform control over the spaces. These can take the form of direct opposition to platform control, aimed at transforming the existing conditions and regaining autonomy. Alternatively, responses can manifest in subtler forms, as drivers develop their own spatial visions to cope with the existing socio-spatial relations through individual resilience (Barratt et al. 2020).

At the collective level, this article highlights the potential for exerting active solidarity within the gig economy. While the decentralised structure of gig platforms have constrained workers' capacity to foster collective action, gig workers have found ways to leverage digital spaces while also create physical ones that strengthen interpersonal networks. The presence of basecamps and neighbourhood-based communities is a distinctive feature of the Indonesian context, providing not only as coping spaces for mutual support but also arenas for reciprocal interactions that nurture shared consciousness and the construction of the 'community of struggle' (Tassinari and Maccarrone 2019; Però 2020). These findings emphasise that collective action is always an organising process rooted in face-to-face interactions (Heiland 2021) which in turn form the basis for active solidarity.

Additionally, this paper uniquely emphasises the obstacles that prevent gig workers from fully exercising these forms of agency. By focusing on these barriers, the study provides new insights into the constraints shaping labour agency in the Global South. Fear of platform counteraction and moral dilemmas restricted workers from gaming the system. Ambiguities around 'partnership' status and indirect competition for orders hindered participation in mutual aid-based communities. At the collective level, free-riding, fragmented leadership, and accumulated frustration weakened the translation of resilience into active solidarity.

In this sense, the typology developed here should be read in dialogue with Coe and Jordhus-Lier's theorisation of constrained labour agency (2011). Instead of seeing obstacles merely as a lack of agency, this study shows that constraints actively shape the kinds of agency that become possible. In Jakarta's gig economy, high informality and labour oversupply push workers' strategies into individual resilience, while making other forms of agency far less viable.

The findings also underline the value of a horizontal approach (Carswell and De Neve 2013) in analysing the uneven capacity of workers to act. Survey evidence indicates that workers with lower education and less experience are less likely to engage in individual resistance, while older and more educated drivers are less represented in collective resilience and resistance. These demographic variations highlight how agency is not only structurally constrained but also socially differentiated. It stresses the need for context-sensitive accounts of labour agency under platform capitalism.

Several practical implications merit further comment. While individual agency plays a crucial role in ensuring workers' survival during the pandemic, collective action is essential for improving the overall conditions of gig workers as a unified group. Yet sustaining collective mobilisation in the gig economy is challenging without institutional support from well-resourced trade unions, as bottom-up initiatives alone are rarely sufficient (Inversi et al. 2023; Anwar and Schäfer 2023). In the meantime, enhancing the institutional capacity of driver communities is necessary. This includes strengthening leadership and governance structures, building trust and engagement among members, developing negotiation skills, and cultivating public support. Engagement with external stakeholders can also provide

legitimacy and resources to help transform fragmented groups into more durable and effective collective actors.

Another critical consideration is that labour agency is always shaped by its specific context. This study focuses on location-based platform work—ride-hailing, courier, and food delivery—which involves distinct labour processes and spatial dynamics. The findings, therefore, should not be generalised to other forms of gig work, such as online freelancing or crowdwork, which operate under different conditions. Future research could compare how labour agency emerges across these different segments of the gig economy, or examine how institutional and geographical contexts form the scope for workers to exercise agency.

Acknowledgements

This study was supported by the Indonesian Endowment Fund for Education (LPDP) under the EQUITY Program (Contract No. 4298/B3/DT.03.08/2025). Previous drafts of this paper had been presented in the Global Conference on Economic Geography 2022 in Dublin and in workshop of Governing the Gig-Economy in the Global South organised by LSE Southeast Asia in London. In particular, the author would like to thank Riccardo Crescenzi, Nancy Holman, and the anonymous reviewers for their valuable feedback.

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