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Risks and Risk-Mitigation Strategies of Gig Economy Workers in the Global South: The Case of Ride-Hailing in Cape Town

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Abstract. Fast growth of the gig economy in the global South has brought with it both hopes and concerns about this new form of digitally-enabled employment. Relatively little work has so far looked at the risks of such work; risks shaped by the particular context of developing countries. This paper undertakes an inductive, interpretive study of risks endured and risk-mitigation strategies adopted by ride-hailing drivers in Cape Town, South Africa, drawing from the perspective of ride-hailing drivers working for Uber and Bolt in Cape Town. A thematic analysis of eighteen (n = 18) semi-structured interview data shows three main perceived risks; inadequate income, personal safety, and deactivation from the platform. The severity of these risks means most drivers seek to mitigate them and we identify three types of mitigation strategy; initiated by the platforms (e.g. panic buttons), by the drivers individually (e.g. techniques for handling risky riders or locations), or by driver groups (e.g. rotating savings schemes). Platform design and business decisions mean it is individual workers who bear the majority of risks and individual workers who have to take responsibility for the majority of riskmitigation strategies. Based on these new insights into digitally-enabled work, we suggest some directions for improved risk mitigation and for future research.

Keywords: gig economy, platform economy, ride-hailing, risk, South Africa

1 Introduction

Gig work – tasks done for money and managed via digital platforms that are market-places bringing together buyers and sellers [adapted from 12] – already employs up to 40 million people in the global South – some 1.5% of the workforce – and growth rates are rapid [15]. Alongside high hopes around job creation and worker perceptions of benefits of such work, there have also been concerns that such work is precarious and risky [10,14]. While there has been some research on gig work risks [4,8] little of it has

focused on developing countries, and we found no research yet focused on risk-mitigation strategies. Yet such strategies are vital given the dangers with, for example, riders and drivers dying in the global South on a regular basis [7,26].

To investigate these issues in more detail, the research reported here undertook an inductive, interpretive study of risks endured and risk-mitigation strategies adopted by ride-hailing drivers in Cape Town, South Africa. Following a short literature review, and an explanation of case methodology, the paper presents two sets of findings – on risks and on risk-mitigation strategies. We end with some recommendations and ideas for future research.

2 Literature Review

As noted above, the gig economy in the global South is already sizeable, providing work for tens of millions of workers with employment growth rates estimated at up to 30% per year [14]. There are many benefits brought by the growth in gig work: it seems likely to be increasing the quantum of employment in the global South; it is improving services and reducing costs for clients; and it can provide work for those excluded from other forms of employment [16].

But there have also been many concerns about the rapid growth in this form of employment; especially in comparison to traditional, formal-sector employment [13]. In particular, that the mediation of digital platforms exacerbates labour market inequalities; notably those between capital (i.e. the platforms) and labour (i.e. the workers) [14]. These inequalities can be understood in various different ways: for example, inequality in capture of the financial benefits of gig work, or information inequality comparing the panopticon-style understanding of the platform compared to the porthole-style understanding of workers.

We could also see a potential inequality of risk, if the risks of work are being loaded by platforms onto workers, and if platforms are taking few responsibilities for mitigating risks or for responding when risks materialise [14]. This is something of an issue for digital gig work, defined as location-independent digitally-centred activity such as data entry, translation and web development via platforms such as Amazon Mechanical Turk, Upwork and Freelancer. Risks reported by global South digital gig workers include discrimination by clients who prefer to employ workers from the global North, over-work, or clients refusing to pay for work [12,18].

Risks are much greater, though, for physical gig work, defined as location-bound physical activity such as taxi driving, food delivery and house cleaning via platforms such as Uber, Deliveroo, Rappi and GoJek. As noted above, at its most extreme, physical gig workers in developing countries are at risk of dying during their work. Other risks identified include "accidents, breakdowns, robbery, traffic tickets", lack of income and being stuck in traffic [11] and "fatigue, stress, hunger and sleep deprivation" [17]. These risks are undoubtedly greater within developing countries; impacted by a context of, for example, greater insecurity and crime in terms of personal risk; and a context of lack of unemployment benefits and other protections in terms of financial risk. One must take care when enumerating the risks of gig work in developing countries to ask what the comparison is – the alternative for many gig workers is not well-protected

formal employment but equally-risky work in the informal sector or even black economy. However, this does not reduce the risks of gig work or the need to do something about them.

It is the "do something about them" that has been little researched to date: we were unable to identify any previous work focused on gig work risk-mitigation strategies. It is this knowledge gap that motivates the current study.

3 Case and Methods

We chose to focus our study on ride-hailing in South Africa for two reasons. The gig economy in the country is relatively important. One estimate puts the number of physical gig workers at 30,000 [15] with up 100,000 active digital gig workers [14,25] While many of the latter will not be full-time, this still suggests gig work touches at least 1% of the workforce and, as noted above, growth rates are high. Second, this sector reflects wider patterns of the global South gig economy with risks and materialised dangers being a constant theme [2,6]. At the time of research, there were two main platforms operating in South Africa: Uber which has nearly three-quarters of the market with just over five million registered users and Bolt which has just over a quarter of the market with around two million users [9]. There was also a recent arrival – In-Driver – which was in process of trying to break into the market.

Because of the lack of prior work on risk mitigation and of understanding risks from a worker perspective, it was decided to follow a relatively inductive and interpretive research design. While sensitised to typical gig work risks and to some of the key issues to understand when identifying risk and mitigation strategies [27], this allowed drivers to represent their own lived experiences and for the researchers to then analyse and structure those experiences. The research complied with the University of Cape Town's prescribed code of ethics and obtained the necessary permission. Eighteen (18) semi-structured, face-to-face interviews were conducted with a random / convenience sample of drivers, contacted through a combination of Uber/Bolt ride-booking and snowballing. The interview method was chosen because the objectives of this research centred on understanding experiences, opinions, attitudes, values, and processes relating to driver risk mitigation strategies. Data analysis followed a thematic analysis protocol: familiarisation with data, searching for and review of emergent themes (in this case, both risks and risk-mitigating strategies), definition and naming of themes [1].

All drivers were men, reflecting the gender-skewed profile of ride-hailing in South Africa (and most of the global South). As summarised in Table 1, two-thirds were from Zimbabwe, three were from South Africa, and three from other African countries (DRC and Zambia); reflecting the heavy presence of immigrant workers as riders and drivers in South Africa's gig economy. Seven of the eighteen owned their vehicle; two were on a rent-to-own financing deal; the remaining nine were renting from an owner. The great majority (14 of the 18) said they were the main breadwinner for their household. Ten drivers worked only for Uber, three only for Bolt, and five worked for both platforms. Two drivers had registered with In-Driver but the novelty of the platform and lack of work meant it did not impinge on their responses. On average, they had worked for a ride-hailing platform for two years (the range was two months to four years).

Platform No. Country of Origin Ownership Uber In-Owner Renter Rent Zimdriver to own **~** ~ **~** 2 **~** 3 ~ 4 **~ ~** ~ 5 6 **~** 8 **~ ~ ~ /** 9 **~** 10 11 12 **~ ~** ~ 13 ~ **~** 14 ~ 15 ? 16 **~ ~** 17 18

Table 1. Overview of interviewees

4 Findings

4.1. Risks

We categorised the risks identified by drivers into three main themes/issues: income, safety and deactivation.

Income

Given their role as main breadwinners for their households, drivers felt a strong need to earn a certain level of income. This was exacerbated for many because they had other required payments: financed loans in the case of some of those who owned cars; weekly payments to owners of R2,000-R2,700 (c.US\$130-180) in the case of those who were renting their vehicles. Meeting these multiple demands was jeopardised in various ways. Though not a risk but an integral part of ride-hailing, drivers resented the percentage of client payments taken by the platforms: 20% by Bolt plus a 5% booking fee; 25% by Uber plus a 3% booking fee at the time of writing [19]:

"we feel like Uber is ripping us off; 25% is too much. I feel like they are taking advantage of the situation in South Africa about unemployment and then now they just dictate it's going to be 25% ... if you don't want the 25% to be taken what else are you going to do?" $(D10^1)$

Dynamically, and because of their ability to control entry into the marketplace, platforms have increased the supply of cars/drivers on the platform over time. This has led to over-supply compared to demand, and drivers have thus faced falling income [3] and

¹ This refers to driver interview no.10; other interviewee references in the text follow a similar format.

concerns that platforms should stop adding cars in order to enable drivers to make enough income (D14). Further growth of supply and competition is a key part of income risk.

A central element of platforms' strategy has been to avoid regulation [16] and part of this has been to allow drivers to work without a taxi license, which the majority of drivers do: "You see I'm operating this car; it has no taxi operating license as you can see it only has one disc there for the vehicle" (D12). This therefore opens the drivers up to police impounding their vehicles and fining them. We estimate at least a 20% chance of being caught each year in Cape Town, with fines for repeat offences escalating up to R15,000 (just under US\$1,000) and with drivers then unable to work while the police hold their car.

Safety

By far the main safety-related risk is the danger of robbery, including violent robbery:

"I was robbed. Someone requested when I was in Bellville and those guys were good looking; you can't even think that they can rob you. So their requesting was saying they are going to Bellville South, there were three; I drove them to Bellville South. So when we were almost close to the place of destination so they said don't mind that map we will direct you to the place we want to go, so they kept on saying turn right, turn left and go straight this and that until we got to a place which is a bit quiet and dull and the next thing they started pulling off their guns and they said I should with my phone give us the password so myself I had no choice I have to give them, bring that pocket and bring the next pocket pull it out and ... then they took everything which I had." (D15)

Drivers explained why they face these risks. When ride-hailing first launched in South Africa, it followed a global North model of payment via credit card but client demand led to cash payment options then being added, meaning criminals assume drivers carry cash. By definition, gig work also requires that they have a phone:

"So they just want the money; they know every Uber driver has a smartphone and they think we carry money all the time." (D4)

"Like I have a nice phone, I'm risking again because if you have a cheap phone it doesn't work here. Because this phone costs R1,800 and the thief will sell it for R500." (D14)

Like many global South cities, Cape Town is heterogeneous in terms of its areas, with a number of high-crime locations that drivers may be asked to pick up from or drop off to, increasing the risk that they will be victims of crime:

"You see on Bolt, most of the Bolt clients use cash trips so and normally they go to those dangerous locations; Mitchells Plain, Hanover Park." (D4)

The concern over cash-paying clients arises because the level of client identification is lower than for those paying via credit cards; making it possible for criminals to more-easily create fake accounts. This was even more of a problem on Bolt because the platform provided few details:

"I mean you get a request and you don't know whom you are picking ... where they want a ride, or they want to rob you. You can't tell." (D5)

A secondary safety risk arises from the danger of altercations with traditional meter taxi drivers who have been vehemently and sometimes violently opposed to the arrival of ride-hailing platforms in South Africa [21]:

"I also faced another that I was in Kuils River and I wanted to pick a rider ... The moment the rider came to my car a taxi driver came to me he threatened me: 'Hey you Uber, who told you can pick up people here I am going to kill you' ... I quickly picked up the rider and drove away ... he was following me, but I just drove quickly off the place." (D12)

Deactivation

Very much related to concerns about earning enough income, drivers were concerned about the risk of deactivation from the platform which of course would mean they would be unable to work or earn. This could typically occur if their rating on the platform fell below a certain level and/or if a client made a complaint against them. This puts a lot of power into the hands of the client:

"I should exercise my rights as a driver; I can be an Uber driver and I'm still human, I have the right to express myself. But with this Uber app everyone who requests automatically becomes my boss or dictator or something. Someone comes into my car they start telling me can you do this, do that; they call it service but to us, on the other hand, it's a form of abuse and people take advantage of and tell us if you don't do this I will rate you and Uber will deactivate you." (D10)

It also puts a lot of power and information in the hands of the platform, as the same driver related:

"Whenever a client is treating you badly, they know they have Uber at their back. Tomorrow Uber is going to support the client, of course they don't say that but that's the issue. We find our riders are becoming abusive to the drivers, they become rude, they don't treat us well, of course, we have no choice. For example, this is the only job that I have so now I'm forced to take what I don't want. I have an example one of the days they send me an email and they tell me that a rider complained; that a rider said I behaved in an inappropriate manner. Because that didn't go well with me I wrote an email back asking okay fine I got the email and they tell me that they can deactivate my account. I asked them if they could provide the details like which details were that, so that I take legal action if there's need. For me this was like defamation of character that client has taken advantage of me; because I'm not there and I have no room to defend myself they said whatever they liked about me, because now my job is at risk I don't know what you think about me also one thing that if tomorrow there's another complaint that means they are two and I might get deactivated. They told me because of their policy they don't provide details. These are things that we face. This was the end of the story there is nowhere I can go; I cannot face them if they can just block me and that's the end of my job. ... My man, I feel like being oppressed; I have no more rights I can say ever since I joined Uber it's difficult for me to express my rights especially when I'm doing the job." (D10)

4.2. Risk-Mitigation Strategies

Before discussing risk-mitigation strategies, we must first note the number of drivers who do not adopt such strategies. In particular, the pressure to earn income – exacerbated by the platform's management of the market to create an excess of supply (drivers) over demand (riders) – has led drivers to engage in high-risk behaviours. Some simply hope or believe that nothing bad will happen to them; others turn to higher powers: "Like I said its God who protects me" (D1). But this is not enough: as an example, drivers still go to Nyanga at night: a district notorious as the "murder capital" of South Africa [23]. Predictably, there have then been repeated incidents of drivers murdered during robberies and hijackings [5,24].

Of the risk-mitigation strategies reported by the drivers, we identified three different themes/types: platform-initiated, driver-initiated, and driver group-initiated.

Platform-Initiated Risk Mitigation

Platforms may mandate certain risk-mitigation strategies. For example, "You can't drive on Uber without insurance" (D4): there is a check to ensure that all cars registered on the platform have vehicle insurance to avoid major financial loss in case of an accident

Platforms may also provide risk mitigations themselves. Both Uber and Bolt provide a panic button as part of their app: interviewees were able to demonstrate its presence but were somewhat dubious about its value: "That one [panic button] doesn't work because in a robbery that's [phone] the first thing they will grab before you do anything in the car" (D4). Uber, alone, provides two other mitigations against loss of income. "If this car gets impounded by the traffic cops, Uber, they pay the amount to get back the vehicle but Bolt doesn't pay the amount" (D12). Uber will also pay the driver to cover the costs of riders who run off at the end of a journey without paying.

Individual Driver-Initiated Risk Mitigation

By far the largest number of strategies identified were the responsibility of individual drivers.

Income Mitigation

To mitigate the risk of not achieving the required level of income, drivers work very long hours:

"It's not easy; the thing is like if you're working for someone, you need to pay the R2,500 a week [to the vehicle owner]. For you to pay that, to get that R2,500 a week you must be working; so you need R2,500 to pay the car first, money for your petrol, and money for yourself, so you must be on the road for long. That's why you see so many of the guys don't even go home, that's why they stay on the road." (D8)

The average working day for drivers was just over 12 hours. Given they typically work six days a week, that means on average more than 72 hours per week; 60% longer than the maximum 45-hour working week set out in the country's Basic Conditions of Employment Act [28]. Another platform-mandated risk mitigation is the imposition of a

12-hour maximum working day. However, workers get around this by registering on, and working for, more than one platform: hence D5 reported working up to 17 hours per day. Workers also register on multiple platforms in order to avoid the risk of underearning; taking rides on one platform if business is slack on the other.

There are also very situation-specific strategies. On Bolt, which does not compensate for rider non-payment, drivers reported "we sometimes take their [rider's] belongings so that we can recoup the money we used for our petrol" (D9) if the rider says at the end of the journey that they cannot pay. The intention is that the items are just held temporarily while the rider goes to get money for payment, to reduce the risk of non-payment.

Safety Mitigation

To mitigate risks to personal safety, drivers undertake rider screening. Some of this is platform-assisted: drivers will look at the rider's rating on the platform and may refuse those with low ratings:

"You know we have this rating. When I see a 3 that person is in trouble and when I see 4 I don't doubt until 4.9. If it's 3, I doubt especially their attitude, 5 stars they are probably new, I don't trust them also." (D17)

They may also refuse those seeking to travel to or be picked up from locations with high-crime reputations; and they may refuse those who are seeking to pay cash, particularly when travelling at night. In addition, on arrival at the pick-up, drivers assess the rider(s): and may drive off if they perceive the rider is drunk, or if the riders are a group of men. Again, these rider-refusal behaviours are more likely at night. Of course this all comes at a cost: not just loss of income but also algorithmic downgrading due to turning down rides; but those costs are seen to be outweighed by the benefits of risk mitigation.

Drivers also undertake various location-specific risk-mitigation strategies if they are driving in an area they consider to be dangerous. If picking someone up from such a location, they may avoid stopping until the rider is ready to quickly jump into the car:

"For me when I gets to the dangerous places, I don't stop my car when I get to the pick-up point. I just patrol there like someone patrolling while I inform the rider." (D11)

When picking up someone to go to these areas, they may agree only to take the client to a safe place:

"If he or she is going to Gugulethu ... I don't mind going there but at this time I don't feel safe so I give the client options ... either I take him halfway down when I get to this point or I drop you near the police station." (D5)

They may share details of the trip with family members or with other drivers, and they may get riders to pay prior to reaching the destination so that at the drop-off, the driver can just drop them very quickly and leave immediately.

Lastly in terms of safety, drivers adopt various personal protection measures. They avoid wearing seatbelts at night so that they can quickly turn around or get out of the vehicle if necessary. Platform policy is that "we are not allowed to carry any weapon in the car" (D4) but one did admit to having a can of pepper spray, and another stated that, while he himself did not have a weapon, others did:

"maybe they have weapons in their cars: that's the best way they can protect themselves. If you attack them [the driver] then they attack you if they have a chance to." (D5)

There are certainly reports of drivers using weapons they were keeping their cars [22].

Deactivation Mitigation

The main strategy that drivers adopted here was 'making nice' with clients. As D10 noted above, when a rider says "do this, do that" then drivers feel obliged to comply in order to avoid getting a bad rating and risk being deactivated: "we have no choice".

Driver Group-Initiated Risk Mitigation

To help address some of the income challenges they faced, some drivers had joined what is locally known as *Stokvels* - rotating savings and credit schemes [20]. These have a general intention to encourage drivers to save their earnings, enabling them to make more effective use of their income and therefore reduce the need to accept highrisk trips or riders. They have also been used more specifically to help drivers buy their own car; something which increases income relative to having to rent a car, and thus addresses both income and safety risks, again by reducing the need for high-risk trips:

"Yah especially us Zimbabweans, that's how we bought our own cars. We always do the groups like Stokvel; put the money together until its fine for one person to buy and then the next [time] we buy for someone else." (D7)

On a more day-to-day basis, drivers share information either via WhatsApp groups or by meeting up in some set locations in-between trips or when waiting at the airport. Information shared includes locations where the police are impounding license-less vehicles, or where crimes have been committed, or other experiences which can alert drivers to implement risk-mitigation strategies. As well as being a mechanism for 'horizontal' sharing between peers, this was also acting in a more 'vertical' manner to help new drivers learn quickly about key risks and ways to avoid them.

5 Discussion and Conclusions

Clients face risks in using ride-hailing services: there are occasional reports of robbery or attack or they may be caught up in accidents. Likewise, platforms themselves also face risks such as lawsuits or bankruptcy. However, overall, and as proposed in the literature [14], this research exposed a strong asymmetry of risk between the stakeholders of gig economy platforms in the global South. It is the workers who bear the lion's share of the risks; many of which arise from the specifics of the South Africa context: risks of not earning enough to cover necessary outgoings; risks to personal safety up to and including death; risks of losing their job through deactivation. While these are risks identified in the literature, it is valuable to receive bottom-up corroboration from gig economy workers.

Just because it is workers who must face the greatest risks, there is no necessity for workers to have to undertake most of the risk mitigation; a topic about which the literature has so far told us little. Yet this was the situation here. Digital platforms could take on more risk and more responsibility for risk mitigation, but they do not do so

because their business model requires them to treat workers as 'independent contractors' and not as employees:

"Uber does not want to come as an employer, it comes out as a service provider by providing us with the application. For example, when it comes to an accident, Uber does not involve itself, they do not compensate hospital or funerals as there are a lot of drivers who have passed away from this." (D18)

Similarly, it could easily design away the current information asymmetries between clients and workers; for example, requiring more details from clients when they register, and providing drivers with full information about clients. Both of these would reduce risks. It could also 'red-line' certain areas of the city where drivers have been repeatedly attacked and stop drivers having to travel there. Again, this would reduce risks. It does none of these things because they would potentially reduce business, and platforms themselves are under the pressure of high levels of debt to maximise income and profit.

The result, then, is that responsibility for risk mitigation is laid largely at the door of the individual worker; consistent with the gig economy view of an atomised, individualised workforce, and with the idea of risk inequalities between platforms and workers. To some extent, workers accept this, trading off the risks against the benefits of an income and the autonomy and flexibility they perceive such work to offer [see also 8]. But this should not be seen as a free choice. The developing country context shapes not just risks and, hence, risk-mitigation strategies but also acceptance of risk and adoption of risk mitigation. As noted, many of these workers are immigrants who move to South Africa due to lack of employment opportunities in their home countries but then find a similar lack of options other than gig work, as two of the Zimbabweans commented: "there are no jobs here in South Africa" (D12); "It's not just like all about that Zimbabweans will just accept any rate that comes up, but the situation is the one that can force us" (D15). Once within the sector, and notwithstanding risk-mitigation strategies, the way in which platforms have constructed the market creates pressure from supply demand imbalance and leads drivers to undertake high-risk strategies; sometimes at the cost of their own lives.

In terms of recommendations, one would say that there should be more risk-bearing and risk-mitigation by the platform. With workers literally dying for Uber and Bolt there is at least a moral argument for this. Yet there are dangers of things moving in the opposite direction: in early 2020, the South African platforms were under fire for increasing their commission rates, continuing to add new cars and drivers to the platform, and removing driver access to advance rider and trip details [19]. Each of these will increase not decrease risks. This creates an urgent need to place a greater emphasis on workers and their perspective, as outlined in this paper. That, for example, is the aim of the Fairwork Foundation, which has been active in South Africa for the past two years. It rates platforms against decent work standards that include their risk-mitigation actions, and seeks to use public, client and government pressure to make platforms improve [10]. Similar initiatives are needed to pressurise platforms to do more to reduce worker risks.

A second recommendation would relate to worker groupings. It is notable that one time-honoured group-initiated risk-mitigation strategy is not much in evidence in South Africa: the formation of trade unions or even of worker associations. The South African e-Hailing Association in Cape Town and The Movement in Johannesburg have both sought to collectivise workers, but with only limited success. One problem – reflected in views of those interviewed here – is that many drivers have bought into the 'independent contractor' identity and regard themselves as entrepreneurs or proto-entrepreneurs; an identity at odds with membership of any formal worker association. Sadly, it may take greater materialisation of the risks to change this.

Finally, we can note some directions for future research. The first will be a more general repetition of this work in other cities, countries and gig economy sectors to get a broader and more systematic understanding of risk and its mitigation; perhaps using the categorisation of risks presented above as a basis for deductive enquiry. The second would arise from some sense of differentiation that emerged in the interview data e.g. that younger drivers may take more risks, or that Bolt drivers faced more risks than those driving for Uber. Future research could therefore investigate various possible dimensions of difference in terms of risk profiles and risk-mitigation strategies: older vs. younger workers; men vs. women; immigrant vs. local workers; owners vs. renters; and between different platforms.

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