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Exploring the impact of COVID-19 on the taxi industry in the City of Johannesburg

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Abstract

The tourism sector is currently one of the hardest hit by the pandemic, with impacts on both travel supply and demand. The transport system forms a key part of tourism, including the tourist experience at a destination. This research sought to understand how the taxi industry operates within the City of Johannesburg under the government restrictions imposed during COVID-19.

The study adopted a qualitative research approach, based on interpretative phenomenological analysis (IPA) to explore the topic. Semi-structured individual interviews were conducted with participants who were purposively selected from the Johannesburg CBD taxi rank.

Insufficient sanitisation and the breaching of curfews were observed. Limited guidance was provided during the initial stages of the pandemic, with no formal training. Financial support was made available, but drivers did not receive funds, as they did not comply with the requirements for membership of the Unemployment Insurance Fund (UIF) and Temporary Employee Relief Scheme (TERS) (Melzer, 2020). Illegal full-capacity loading and price increases were also evident. All participants seem to have expressed some form of anxiety, loneliness and uncertainty. Few suggestions were proposed towards sustainable practices and innovative technological means to support the industry during the lockdown and going forward.

Key words

COVID-19, taxi industry, unregulated, economic and social impacts.

How to cite this article

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1. Introduction

COVID-19 has affected every business and tourism destination globally, including cultural tourism, mega sports events, religious pilgrimages and safari tours, as well as the transport industry that supports these destinations. Transportation plays an active role in the socioeconomic development of South Africa. The taxi industry empowers black South Africans at a time when they have few economic opportunities (McCaul, 1990; Carol, 2006). The taxi industry is a private, predominantly black-owned segment of the transport sector, and rooted in the informal sector (Van Dalsen, 2018). The South African taxi industry is noteworthy and extremely different from other taxi-transportation systems in the world.

Employment creation is the greatest challenge facing South Africa, requiring solutions from a social, economic and political angle (Altman, 2013; DoL, 2006). The taxi industry provides opportunities for self-employment, and thus contributes to the economic development and growth of the country. The minibus industry supports black South African commuters by offering a cheaper substitute for formalised public transportation. Minibus taxis are the norm in South Africa's metropolitan and suburban areas (Fobosi, 2019).

Even before COVID-19, many South African households experienced a lack of income or limited income, as well as uncertainty related to unemployment and retrenchments in a VUCA-world (Wakelin-Theron, Ukpere & Spowart, 2019), which made many of them even more vulnerable during the pandemic. The livelihoods of the vast majority of households continue to be threatened by the triple challenge of pervasive poverty, inequality and unemployment (South African Government, 2020; Ukpere, 2011). Given its labour-intensive nature, travel and tourism will be hard hit, with many jobs at risk, especially those held by women, youths and marginalised groups (UNWTO, 2020). No economy can experience growth without transportation.

2. Problem statement

The taxi industry has experienced mass disruption, which has led to a fight for survival amidst severe economic lockdown. In fact, the taxi industry, which operates within the City of Johannesburg, seems to have faced enormous challenges under the government-imposed restrictions during COVID-19 lockdowns.

2.1 Research Questions

The research questions of this study were:

- How has the COVID-19 pandemic impacted the taxi industry?
- What type of support has the industry received so far?
- Is there fear of COVID-19 amongst taxi operators?
- What possible changes could be implemented in the taxi industry in the near future?

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• What are the possible ways to ameliorate the impact of the COVID-19 on the taxi industry?

2.2 Research Objectives

The objectives of this study were:

- To determine how the COVID-19 pandemic has impacted the taxi industry;
- To identify the type of support the taxi industry received so far during this pandemic;
- To establish if there is fear of COVID-19 amongst taxi operators;
- To identify possible changes that could be implemented in the taxi industry in the near future; and
- To proffer mechanisms to ameliorate the impact of COVID-19 on the taxi industry.

3. Theoretical framework

The taxi industry operates within a system. It consists of a cohesive group of individuals whose operations are interdependent and interrelated. Systems theory describes this interdependence of relationships created in organisations. Growth depends on the degree of adaptation and how well the system engages with its environment. Adaptation of a system approach brings a single, unified framework that provides order and simplification, especially for entrepreneurs, small business enterprises and individuals. Nevertheless, COVID-19 has disrupted the taxi transportation system, and changing one part of a system may affect other parts or the entire system (Mochalin, Tyrnova, & Levkin, 2017). The present research looked at the general impact of COVID-19 on the self-regulated taxi industry, taking into perspective future considerations using the systems theory.

4. Literature Review

4.1 The self-regulated taxi industry

The South African minibus taxi industry is largely self-regulated (Van Dalsen, 2018). The taxi industry has become a form of public transport that collects and drops off passengers to and from various destinations that are also serviced by a rail network or official public transportation networks, but also in geographical areas not serviced by public transportation. Transportation routes are determined by the taxi drivers/owners, with no predetermined stops. Their stopping points depend on passengers' demands (Fobosi, 2019). Taxi fares are unregulated, and the taxis operate on a strictly cash-only basis (Shah, 2019). There is fierce competition for passengers, especially on lucrative routes. Taxi operators come together to form local taxi associations. Van Dalsen (2018) notes that, as there is no way to confirm the amount, revenue estimate can only

be an educated guess. The South African taxi industry's revenue is projected to be approximately R50 billion per annum.

The largely self-regulated taxi industry does not operate within the parameters of the labour law (Fourie, 2003). However, there have been renewed calls to urgently regulate the industry (Shah, 2019). Most taxis operate from very early in the mornings to late into the night. Workers in the taxi industry function within an informal employment structure, such as verbal agreements, with flexible wages. Drivers normally seek solutions to their individual problems; hence, there is no need for collective action.

The taxi industry is run privately because it is financed without state support. Thus, the industry lends itself to exploitative labour practices (van Dalsen, 2018). Drivers are often unaware of their rights as enshrined in the labour laws. They are given daily financial targets to meet. There is no way to establish the exact amount collected by drivers in fares, because the whole industry resists a smartcard payment system. In the absence of adherence to Occupational Health and Safety Act (OHSA) regulations and the Basic Conditions of Employment Act (BCEA), it is questionable how employees operate within the industry.

Figure 1

Commuters in a taxi at Johannesburg CBD Taxi Rank



Source: Fieldwork photos.

Indeed, the taxi industry has been inactive in complying with the requirements of the Unemployment Insurance Fund (UIF), and resists employees' attempts to register (UIF, 2018/2019). Yet, the taxi industry is also changing, as competition is intensifying. In fact, the industry has become more regulated, as evidenced by the existence of various taxi associations. The taxi industry is recognised as part of the public transport sector and requires formal permission to operate. Taxi owners have to be members of a recognised taxi association to be permitted to operate on certain routes. The South African National Taxi Council (SANTACO) is the umbrella governing body for the taxi industry, and more than 250 000 minibus taxis are registered in South Africa (Fobosi, 2020; Melzer, 2020). The industry employs about 300 000 taxi drivers and 100 000 taxi marshals at taxi ranks. It benefits 10 000 car washers and 150 000 vendors at various taxi ranks. Although SANTACO has no regulatory powers, it prides itself on being an association mandated to bring law and order to an unregulated industry (Van Dalsen, 2018). Given the high unemployment rate in South Africa, the importance of the taxi industry cannot be underestimated. Therefore, it is vital that taxi drivers have special skills, such as good

communication and interpersonal skills, since they deal with customers from various backgrounds. They also have to be competent drivers with good knowledge of the road and traffic systems, in addition to good knowledge of geographical locations.

4.2 The South African government's typology of interventions and risks

Currently, there is no proven formula to balance efforts to fight the pandemic with the imperativeness of sustaining livelihoods and ensuring more participation in the economy. Hence, South Africa faces the dual challenges of saving lives and the country's economy in the face of a range of intractable economic problems that include a high unemployment rate, low economic growth and a fall in per-capita income. All these are compounded by a complex set of risks associated with government measures towards containing the spread of COVID-19 (Van den Heever, 2020). In other words, within this pandemic, the economy and healthcare seem to be opposing fronts.

A risk intervention to fight COVID-19 (see Table 1, below) was enunciated by the South African government, which prescribed the economic activities during different levels of lockdown. This risk intervention identified five different levels, with Level 5 being the hardest lockdown. In other words, more activities (transportation of goods and services) and movement of people are permitted as the levels decrease.

A phased easing of restrictions offered some relief amid fears that the number of failed businesses and job losses will be far higher than the fatalities from COVID-19. The taxi industry was severely affected by the hardest lockdown restrictions under Level 5. Regulations were amended to accommodate the industry's concerns regarding the measures implemented to minimise the spread of COVID-19 during the Level 5 lockdown. Operational hours and the number of passengers who may be transported per trip were limited (no more than seven passengers in a 15-seater vehicle). This was in accordance with the social distancing requirements outlined at a news conference by the Minister of Transport, Fikile Mbalula (Mlamla, 2020). At first, the Level 5 lockdown standard operating time was 05:00 to 10:00 and 16:00 to 21:00. According to Mbalula (2020), this would accommodate commuters who needed to visit shopping centres, banks and pharmacies. The initial decision was revised to lessen the financial losses sustained by the taxi industry during the lockdown (Maeko, 2020).

Table 1

Typology of interventions and risks: Risk adjustment strategy for economic activity

Level	Sectors Permitted	Transport restrictions	Movement restrictions
Level 5: High virus spread, but low readiness	• Only essential services	Buses, taxis, and e- hailing vehicles can operate at restricted times, with limitations on vehicle capacity and stringent hygiene requirements (e-hailing is the use of alternative transportation, like Uber that has taken advantage of innovation, technology and marketing)	No inter- provincial movement of people, except for the transportation of goods and in exceptional circumstances (e.g., funerals)
Level 4: Moderate to high virus spread, with moderate readiness	 All essential services are operational, and food retail stores can sell their full range of products within existing stock All agriculture and horticulture: Export, including wool and wine, floriculture and related processing, forestry, pulp and paper Mining: Open cast at 100% and all others at 50% Financial and professional services All global business services for export markets Postal and telecommunication services Formal waste recycling (glass, plastic, paper, and metal) 	Buses, taxis, and e- hailing vehicles can operate at all times of the day	No inter- provincial movement of people, except for the transportation of goods and in exceptional circumstances (e.g., funerals)

 Licensing and permitting services, deeds offices, and other government services designated by the Minster of Public Service and Administration Take-away restaurants and online food delivery Liquor retail sales (restricted hours) Clothing and hardware retail Stationery, personal electronics, and production of equipment and retail Books and educational products E-commerce and delivery services Clothing and textile manufacturing (at 50% capacity) Automotive manufacturing Chemicals Bottling Cement and steel Machinery and equipment Global business services SANRAL construction and maintenance Transnet, at 100% 	Limited domestic air travel, restriction on the number of flights per day, subject to authorisation based on need	No inter- provincial movement of people, except for the transportation of goods and in exceptional circumstances (e.g., funerals)
 Construction All other retail sectors All other manufacturing sectors All mines, at 100% All government services Installations, repairs, and maintenance Domestic work and cleaning services Informal waste pickers 	Full domestic air travel and car rental services restored	Movement between provinces at Level 1 and Level 2 restrictions
• All sectors	All modes of transportation, with stringent hygiene measures in place	Interprovincial movement allowed, with restrictions on international travel
	 deeds offices, and other government services designated by the Minster of Public Service and Administration Take-away restaurants and online food delivery Liquor retail sales (restricted hours) Clothing and hardware retail Stationery, personal electronics, and production of equipment and retail Books and educational products E-commerce and delivery services Clothing and textile manufacturing (at 50% capacity) Automotive manufacturing Chemicals Bottling Cement and steel Machinery and equipment Global business services SANRAL construction and maintenance Transnet, at 100% All other manufacturing sectors All other manufacturing sectors All government services Installations, repairs, and maintenance Informal waste pickers 	deeds offices, and other government services designated by the Minster of Public Service and Administrationtravel, restriction on the number of flights per day, subject to authorisation based on needTake-away restaurants and online food deliverytiquor retail sales (restricted hours)authorisation based on needClothing and hardware retailStationery, personal electronics, and production of equipment and retailon needBooks and educational productsE-commerce and delivery serviceson needClothing and textile manufacturing (at 50% capacity)So% capacity)Automotive manufacturingChemicalsBottlingCement and steelMachinery and equipmentGlobal business servicesSANRAL construction and maintenanceFull domestic air travel and car rental services restoredAll other retail sectorsAll government servicesInstallations, repairs, and maintenanceErvices restoredDomestic work and cleaning servicesAll modes of transportation, with stringent hygiene

Source: Adapted from Truer et al. (2020).

4.3 Amendments to travel hours and numbers of passenger per taxi

After discussions with the biggest taxi association, SANTACO, and the National Taxi Alliance (NTA), an agreement was reached. The Minister of Transport amended the public transport regulations as follows:

- Public transportation vehicles must reduce their maximum number of passengers to 70% of the licensed capacity if commuters have no masks;
- A minibus taxi licensed to carry 10 passengers is now limited to a maximum of 7 passengers;
- A minibus taxi with a capacity of 15 passengers is now limited to 10;
- A minibus taxi permitted to carry a maximum of 22 passengers is now restricted to 15 passengers; and
- A vehicle licensed to carry a maximum of 4 passengers is now limited to 2.

Since the outbreak of the COVID-19 pandemic, the NTA has appealed for urgent measures to be taken. Initially, according to the NTA spokesperson, taxi drivers did not know what to do or how to proceed during the official lockdown (hard lockdown lasted from 27 March to 16 April 2020) and the extended lockdown announced later by President Cyril Ramaphosa.

Many taxi businesses were operating at a considerable financial loss. However, the NTA was very positive, and urged taxi owners to stay the course and act responsibly. The government, taxi industry and civil society were in agreement that the restrictions were necessary to limit the spread of the virus. The taxi industry is now experiencing significant challenges in the form of higher fuel prices, loss of commuters' fares and management of the COVID-19 pandemic.

4.4 Issues and challenges during the hard lockdown (Level 5)

The taxi industry voiced its grievances, which included heavy-handed law enforcement and illegal profiteering by drivers of trucks and other private vehicles that were used to transport passengers. They also noted insufficient personal protection equipment (PPE) such as sanitisers, gloves, masks and aprons/gowns, as well as difficulty related to adhering to social distancing. Some taxis exceeded the mandatory 70% capacity, breached the curfew, and increased the taxi fare by almost 100% in some areas. In an article, Mlamla (2020) indicated that the Minister of Transport, Mr Mbalula, had raised concerns about insufficient sanitisation, random incidents of overloading and the breaching of travel time restrictions.

National Health Laboratory services conducted mass screening and testing to prevent transmission and to assist with treatment. The minister urged the taxi industry to adhere to the directives on sanitisation of vehicles and the implementation of social distancing measures at all times (Mlamla, 2020). At the onset of the outbreak, commuters stated that they did not witness any washing or sanitisation of hands, or the wearing of masks (Obuseng, 2020). Some commuters were of the view that the taxi industry was gambling with their lives, as there were no precautions taken by drivers and no PPE for commuters (Obuseng, 2020).

4.5 Financial aid

SANTACO established an independent relief fund for the taxi industry to cushion the effect of the pandemic on its members, who were losing income and whose livelihoods were thus severely impacted. This interim repayment assistance would help members to honour their financial obligation during Level 5 lockdown restrictions. Taaibosch, (2020) president of SANTACO, estimated that the taxi industry required R3.5 billion to provide relief to about 250 000 registered taxi owners. The relief was to assist taxi owner, taxi drivers and rank marshals. Members of taxi associations had to apply for the relief fund through a formal portal. Taxi drivers were expected to receive around R250 per day during the period of the hard lockdown. SANTACO indicated that they survived during lockdown (Mlamla, 2020). Taaibosch (2020) called upon all stakeholders in the taxi industry, namely food retailers, vehicle dealers, tyre companies, vehicle parts manufacturers and other role players to unite and contribute to the fund.

Inter-governmental departments were also prepared to assist. These included the Competition Commission, Labour, Small Business, the Department of Trade and Industry (DTI), as well as the National Treasury and Transport. However, they were still reviewing various assistance modalities (Evans, Gerber, Buthelezi, Cowan, & Burnard, 2020). SANTACO spokesperson Thabisho Molelekwa stated that the public would be notified once the fund's application process opened.

5. Research methodology

The study was conducted in the greater Johannesburg CBD, located in the Gauteng province of South Africa. As the country's financial hub, the area is characterised by vast amounts of commuters, many served by minibus taxis. The researcher adopted a qualitative research approach. Semi-structured interviews were used to uncover the views held by participants from the taxi industry of the impact of COVID-19 on their business activities.

The research strategy adopted in this study was phenomenology. According to Creswell (2013), phenomenology is an approach to qualitative research that focuses on the commonality of a lived experience within a particular group. Phenomenological strategy was use in this study to understand the experiences of those who operated within the taxi industry during the different levels of lockdown.

The research study was anchored within the interpretative paradigm. Hence, interpretative phenomenological analysis (IPA) was considered appropriate, as it is a useful approach to explore topics that are complex, ambiguous and emotionally laden, where the fundamental objective is to arrive at a description of the nature of a particular phenomenon (Creswell, 2013). The aim of the study was to explore how participants made sense of the world during the Level 5 lockdown. The participants were purposively selected based on their understanding of the impact and extended implications of COVID-19 as it related to the taxi industry from the supply side. Prior to the interviews, participants had to sign an informed consent form that contained a description of the nature of the investigation and the scope of their involvement in the study. We also sought their approval to do an audio-recording of the interviews, which lasted between 25 and 45

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minutes. The researcher ensured that the lockdown regulations in terms of wearing of masks and social distancing were strictly adhered to.

5.1 Sample

A total of 12 participants who were taxi driver, taxi owners, or queue/rank marshals were selected for the study, as reflected in the table 2 below.

Table 2

Occupation		Years in the taxi industry	Gender
Taxi owner	TO1	25	Male
	TO2	18	Male
	TO3	19	Male
	TO4	22	Male
Taxi driver	TD1	20	Male
	TD2	24	Male
	TD3	19	Male
	TD4	12	Male
Queue/Rank	RM1	7	Male
marshal	RM2	10	Male
	RM3	3	Male
	RM4	2	Male

Study participants and codes allocated

Source: Own elaboration.

5.2 Analysis

The audio-recordings of the interviews were transcribed, followed by reading and re-reading of the contents, and were then analysed via cool and warm analysis (see De Guzman & Tan, 2007). Cool analysis involved the extraction of anchors and phenomenal referents from the texts, while warm analysis facilitated the formulation of the data categories and, eventually, themes (Ryan & Bernard, 2003). Phenomenological reduction (see Strassers, 1977, cited by DeRobertis, 2016) guided the distinguishing of meanings into those that were essential to the phenomenon and those that were only incidental.

5.3 Findings

This section presents the findings of the study, in line with the research questions and supported with verbatim excerpts from the interviews.

Theme 1: Impact of the Covid19 pandemic on the taxi industry

When participants were asked how the COVID-19 pandemic had impacted them and the taxi industry, the following sub-themes emerged:

- Affected well-being,
- Loss of income,
- Shortage of food, and
- Loss of job security.

The responses underpinning the above themes are provided based on the interviews with participants and reflected in the narratives below:

With regards to the above, Taxi Driver 1 (TD1) noted:

"This virus is getting worse. The uncertainty is killing us. Outside, I am looking after my passengers, I tell them to wear their masks, 'Put the sanitisers, let's go.""

In a like manner, **TD2** stated:

"I only load ten people, I sanitize my passengers. After that, social distance; they must keep their social distance. You can't get in my taxi if you do not have a mask. I tell them they must go and buy a mask before they get into my taxi."

TD1 seemed to support **TD2**'s position, stating:

"No mask, no cloves, you cannot get into this taxi."

However, **TD2** was of the opinion that social distancing was naturally being observed:

"Social distancing is being met. People do it themselves."

In terms of the impact on operators, Taxi Marshal 2 (RM2) remarked:

"It is getting worse. We don't know who are affected. I am scared. If everything is open, how will we operate in the future? We don't take money home now; business will never be the same."

Rank marshal (**RM3**), who is responsible for long-haul trips from Johannesburg responded in this way to the question:

"Normally, we have two trips, as it is long distance. COVID-19 has severely affected our industry. No business is occurring during lockdown. The people are not allowed to travel to different provinces."

From another vintage point with regard to how the pandemic affected them, **RM2** stated:

"Owners take combis off the rank. We only have 200 combis on the rank, the others are parked, they don't run. We have too few customers travelling."

RM2's assertion was confirmed by **TD1**, who avowed:

"I am working every third week. We rotate, so that all the drivers get the chance to work. ... business is very slow, so that nobody go hungry. I will save money today to support my family next week, thanks to my chairman, as he is a man that can think." In addition to the above, **TD1** stated:

"My taxi were always full, now I can only load ten people. I come out at four o'clock in the morning, and I only make R120 per load, wait the whole day until the afternoon to pick up again. I need to pay the taxi owner R300 to R350 per day. Now, with this virus ... I make R240. I still need to put petrol, oil, need to eat. It is affecting me, the driver. I am going home without money. At the end of the day, the owner is going to say, 'You are steeling my money'."

In similar vein, **TD2** noted:

"We need to pay the owner R600 to R700 a day. We only work for petrol during the lockdown; we are making nothing per month."

Almost in line with other participants, **RM3** commented:

"I get R550 per week, and per month is R4 200. This virus has affected us very bad — one load in the morning and one load in the afternoon, now with lockdown."

Similar to **RM3**'s comments, **TD4** remarked:

"I transported more than a 1 000 passengers a day, my taxi are full. A combi (taxi) now makes a R1 000 per week, and, before, R4 000."

Participants posited that precautionary measures had to be taken to protect themselves. In this regard, **TD1** noted:

"I am looking after my family. I got masks for my family. My kids stay at home, it is only my wife that goes out and buys bread, and I work, but my kids stay at home. Nobody is running around in the streets. I must protect myself and my kids, I must protect my grandkids, I have to look after them. This sickness is killing everybody. I stay a distance with my colleague, and we have to look after one another."

Another participant seemed to show some gratitude to the Lord for keeping him safe, in addition to precautionary measures observed. In his words, **TD2** maintained:

"...by the grace of the Lord, the goodness, that I have not been affected yet. We take care — we sanitise, we use our masks."

RM3 seemed very emotional when he stated:

"I am protecting my family — I am adhering to the lockdown regulations, yet I think government can do more. Life is on a standstill. I struggle to continue, and poverty is at the front door."

All participants expressed some form of anxiety, loneliness and uncertainty. They were not sure who to turn to, and were all concerned about the economic impact and the effect on their personal finances, as well as the devastating effects on their immediate family and the taxi industry. Many of them were afraid of retrenchment, the loss of their livelihood, and their inability to pay for living expenses. The majority of the participants experienced profound worry. Some travel routes were closed completely and passenger capacity was limited. The majority of participants had lost more than half of their income. Some of the taxi drivers who participated in the study indicated that they were hungry and had to travel far to purchase food, as local hawkers were not operational, since they were not deemed essential service providers. Food insecurity thus added to their perception of loss of well-being. They now incurred more financial

costs to buy food from remote geographical areas. Upon probing, some participants mentioned that the government had promised to issue food vouchers, but that these had not materialised.

Theme 2: The type of support received by the taxi industry

When participants were asked about the type of support they received during the lockdown, the sub-themes that emerged from data were:

- Limited communication and guidance,
- No formal training, and
- Lack of PPE.

With regard to support received from government, **TD1** lamented:

"We did not ever receive anything from the government. The government said they will pay us until the end of this lockdown... I didn't receive money. Who can we depend on? They said they will give us food vouchers ... nothing, nothing, we are still waiting. Eish, ja, the government promised us to get food vouchers. We received nothing yet."

In similar vein, **TD2** remarked:

"I received no support from the association, but communication has been occurring. Communication is not effective though, since the association repeats what the president is saying, without any form of innovative thinking. I am scared that I will lose my job here. I am tired."

From another angle, in terms of support from taxi owners, RM2 observed:

"Taxis were taken off the rank. We only have 200 taxi."

TD1 stated:

"Certain owners will come and see us at the rank. Not all owners come out to the rank, some owner do... We did not receive any masks up to date. No, we did not receive training. We do know where to go, but we are scared".

With regard to support received, **RM1** noted:

"I only received information in my personal nature from government and over the TV. I received no training to combat the virus."

In concordance with **RM1**, **TD1** noted:

"I only received general information — radio, TV. That is how we understood what it entails."

In addition, TD1 lamented:

"The government has done nothing for me regarding masks, sanitisers, etcetera. Sanitisers were provided when commuters would embark on a trip."

In relation to the above, **TO1** noted:

"If we want to continue with our business, we need better support how to keep our passengers safe. Maybe we can sanitise them before they make use of our services. Cloths, handbags, shoes, this virus sticks on everything."

It seems that miscommunication contributed to misunderstanding and ambiguity in terms of the structures to follow during the lockdown. Some taxi owners mentioned that they removed their

taxis from the rank and left drivers unemployed, while some taxi associations allowed drivers to work on a rotational basis. There were no clear indications regarding provision of PPE, but taxi drivers insisted that commuters wear masks. Participants also indicated they did not receive any formal training, but had to equip themselves with the necessary information and knowledge, gained through television- and radio programmes. However, some taxi associations did provide hand sanitiser, as it was easier for them to buy it in bulk (News24, 2020, April, 6).

The majority of participants received no financial support. Taxi owners found it very hard to cover their costs, and risked vehicles being repossessed by the banks in the absence of payment. Upon probing, some participants mentioned that they adhered to regulations set out for the public transport industry in order to protect themselves and passengers. However, it was noted that illegal full-capacity loading and price increases occurred to sustain the business, and operational hours were extended.

Theme 3: Fear of COVID-19 held by taxi operators (marshals, drivers and owners)

When participants were asked if there was any fear of COVID-19 amongst them, the following sub-themes emerged:

- Afraid of the virus, and fear of infection,
- Afraid to die,
- Concerned about their family and customers,
- Inappropriate skills to transfer to other sectors, and
- Taxi owners absconded due to fear.

While expressing fears about the possibility of being infected, **TD1** noted:

"If I stay negative, I will stay at the rank. If I am tested positive, I will go away from my family, where the government tells me to go. I cannot make my family sick, I am very afraid of coronavirus."

TD1 further indicated that, the more he educated himself, the more concerned he became, stating:

"I am scared of my phone and my shoes; the virus is sticking to everything. It makes me uncomfortable."

In similar vein, **TD2** noted:

"Yes, ja... I am concerned about the customers. We don't know who is getting into the combis and who has a virus. If they are affected, and ... do you understand?"

Some participants expressed a fear of dying. **TD1** stated:

"I don't want to die. What is going to happen to my kids and family? I have eight grandkids. What is going to happen to them? I am the father and the grandfather to those kids. I am the only one working in the family. If I die, the grant my wife gets from government is too small. What is going to happen to my family? Who will pay school fees for my children?

A participant mentioned that taxi owners went into hiding. **TDI** noted:

"When I contact one owner, he asked me, 'Are you mad? Do you want me to get sick?' Now they want us to get sick for their business ... some taxis were taken away from the rank and are not operating."

The majority of participants feared Covid-19 and were scared of being infected or dying. Upon probing, some participants mentioned that they were not aware of friends and family who had been infected at this early stage, but that the virus made them nervous and anxious. Taxi drivers did not know who to turn to for immediate help and guidance. Some had concerns about being able to pay school fees. Some participants indicated that they only had driving skills and knowledge of the taxi industry, and no additional skills to support and sustain them. When probed further, participants maintained that they would continue to work to support their families and serve their community. It seems as if the taxi drivers were left on their own, while taxi owners absconded due to their fear of COVID-19.

Theme 4: Foreseeable changes in the taxi industry in the near future

When participants were asked about possible changes in the taxi industry in the near future, the following sub-themes emerged:

- Continuation of social distancing,
- Continuation of wearing of facemasks,
- Continuation of the use of sanitisers,
- Employees searching for new forms of employment to avoid risk,
- Price increases, and
- Lack of government support.

RM1 remarked: "I will make sure I sanitise the passengers, make sure they all wear masks and they keep their distances here and on the taxi. That is my job. I will do that."

TD4 confirmed: "*I* am only equipped to drive a taxi. *I* have been driving my taxi for twelve years of my life."

TM4 commented: *"I think we need to keep ourselves just safe, be responsible and keep us here safe and the passengers coming in."*

In similar vein, **TM1** remarked:

"My biggest fear is that the taxi industry will not go back to normal. We will never be able to stop this virus. It will be like Ebola in other parts of Africa, will come back regularly... I wish to get another form of employment to support my family, as I am the sole breadwinner for my family."

In concordance with **TMI**, **TO2** stated:

"I think we will have to look at alternatives collectively with SANTACO, as this virus will not stop. We need to change our business — to what, I don't know." Maybe work longer hours and drop passengers of right in front of their homes and work. I don't know. I just want to support my family.

RM4, with regard to taxi owners, noted:

"I don't think we will ever recover from this... I need money to support myself and my family, I need help from the government, and I don't know if I will get..."

All participants indicated that they followed the sanitation protocol and acted responsibly towards passengers. They agreed to regularly sanitise their vehicles as part of mitigating the threat of the virus. Participants were deeply concerned about their finances, as they would be the ones buying sanitisers, which would increase their financial burden. Some participants alluded to the possibility of searching for alternative jobs, but were concerned about their lack of a variety of skills. Participants were not sure what the future held for them, due to unemployment being rife in the country. The reality of this uncertainty seemed quite concerning to them. Some participants were scared that the industry may not return to normal again, due to the requirement for social distancing and low passenger turnout, which had adversely affected the sustainability of the industry. Some taxi drivers were of the opinion that taxi fares needed to be increased to compensate for low passenger turnout, in order to ensure the viability of their businesses.

Theme 5: Ways to ameliorate the impact of COVID-19 on the taxi industry

When participants were asked about possible ways to ameliorate the impact of COVID-19 on the taxi industry, the following sub-themes emerged:

- Adoption of new technology in handling passengers,
- More support during a crisis such as pandemic,
- More care and empathy from taxi owners, and
- More passenger patronage for sustainable businesses.

When asked what technologies could make their lives easier, one of the taxi marshals indicated:

"I think it will help if all of us use a pay system. Then we will not deal with money directly, and we can serve passengers better by providing information. I think taxis would become safer, as drivers will focus on the road more." (**TM3**).

However, from different perspective, **TD2** revealed:

"We in the taxi industry do not have to be controlled, we can look after our own income. We only need support during the pandemic."

Another driver, **TD4**, was of a different opinion, and stated:

"I think that partitioning such as Perspex screens should be inserted between driver and passengers".

With regard to new technology, one taxi owner, **TO1**, noted:

"I have telematics in two of my vehicles, which assist with vehicle location and safety..."

However, **TO3** was quite frank with regard to anticipated changes in the taxi industry, and stated:

"I am not aware of any alternative suggestions by the taxi industry to change the future of the taxi business."

In similar vein, **TD1** noted:

"What business for the future? We have no business. The owner is getting the money. We appreciate the chairman, and he is looking after us. No owners is looking after us. I wish the government supports us. We need to stay at a distance in the future, I don't want to die until government finds a cure for the coronavirus."

TD1 lamented:

"...passengers use us less now, they travel with others. They don't want to get COVID-19. People avoid us and they will use public transport as it is bigger and can transport more people one time."

While some policies were implemented to limit the spread of the virus, limited support was offered by government. Participants indicated that they required additional support. No innovative technology was considered to limit the use of cash during the pandemic; no mention was made of a smart travel card or a tap-and-go card. Such options should be explored in the near future. However, one of the taxi owners indicated the use telematics to detect unsafe conduct by drivers. There have also been few discussions around future initiatives to sustain and develop the industry and its infrastructure. Renewed effort should be made in that direction, as there is indeed a need for more environmentally friendly and comfortable ways to move from one destination to another. Vaccination will probably become mandatory in order to travel in the future.

5.4 Discussion of findings

In spite of the challenges, the taxi drivers and rank/queue marshals were extremely grateful that they still had a job, even if the patronage was limited and on a rotational basis. The taxi industry, by its very nature, makes it difficult to protect passengers and drivers. The virus has been reported to spread as a result of close contact or through coughing and sneezing (Consumer Report, 2020). According to Van Dalsen (2018), taxi drivers are responsible for keeping their vehicles clean. This now includes sanitisation of the vehicles. However, drivers seem to have received no PPE and limited information on proper methods of managing the threat of the virus. Van Dalsen (2018) further notes that the industry is informal and unstructured, and pays little attention to legislation related to conditions of employment.

The mandatory lockdown hit the taxi industry particularly hard (Taaibosch, 2020). The findings of this study confirmed that taxi drivers and marshals exhibited intense fear of the virus, and some feared for their family's well-being and financial survival. Clearly, a state of business unusual appears to be the new normal, with high taxi fares and operations that exceed the curfew hours (Mlambo, 2020), as well as additional charges for spot drop-offs, which seem to offer the best option for the industry to remain viable. In relation to the taxi industry challenges, the Organisation for Economic Co-operation and Development (OECD) has warned that global growth could be cut in half, to 1.5%, in 2020 if the virus continues to spread. Many economists have predicted a recession, and no one knows how long this pandemic will last or when a cure for the virus will be found (OECD, 2020).

The taxi industry has so far received limited and haphazard support. Although there was some financial relief through compensation for taxi industry employees and taxi owners, not everyone

qualified for this aid (Melzer, 2020). Some employees were not able to access financial relief from the Temporary Employee Relief Scheme (TERS) or the UIF, due to a lack of compliance with the rules by their employers (Melzer, 2020). Participants were of the view that it may take a very long time before all workers return to work. Movement seems to have been restricted, as there are fewer commuters, perhaps due to rising unemployment.

The taxi industry has called on the government to assist them in protecting passengers from the COVID-19 virus. However, the industry itself has not made much effort to transform in terms of their responsibility towards passengers in the area of safety. Awareness campaigns in the industry should be improved, but there have not been discussions around implementing interactive communication technology. Technology to maintain social distancing to make the industry services more efficient and user-friendly is lacking. It is definitely time for the taxi industry to re-think and reshape its operational delivery model during this disruptive period. SANTACO and the government should support the implementation of tap-to-pay devices. More could be done to implement telematics in taxis to identify safety issues, including reckless driving.

Given the critical role played by the taxi industry, more interventions to protect the industry should be made a priority. Taxi SA, which is a key strategic partner in the taxi industry, as well government, should relook financial support for the industry (Evans, et al., 2020; Fobosi, 2020). Although, as noted earlier, there has been some financial relief for taxi owners and taxi employees, not everyone qualified for the aid (Mlamba, 2020). This is as a result of limited compliance by their employers, as well as resistance to registering with the UIF and TERS. Overhauling and reshaping the taxi industry for the future is indeed indicated. The taxi industry should become a central concern for the government of South Africa, as the country has a large number of passengers who require safer transportation, particularly during the pandemic.

6. Practical implications of the study

When normality returns and commuters return to work, there should be a much higher awareness amongst commuters with regard to safe social distancing and personal hygiene when using taxis.

6.1 Originality/Value of the study

The study provides a good foundational understanding of the taxi industry within the COVID-19 pandemic, the impact of pandemic on stakeholders within the industry, as well as opportunities for the implementation of sustainability initiatives in the taxi industry.

6.2 Limitations of the study and future research directions

The study was limited by various logistical factors, such as limited access to the broad taxi community during the Level 5 lockdown. Data were therefore gathered from a limited number of participants from one taxi rank. The findings may therefore not be representative of all taxi operations in South Africa. This limitation could be addressed by future researchers gathering data over an extended period and expanding the research to other taxi ranks in other provinces

of South Africa. Studies can also be conducted post-COVID-19, to determine changes in the experiences participants shared in the industry.

7. Conclusion

The taxi industry is a key player in the economic development of South Africa. As such, its continued existence should be a national priority. The study contributes to understanding the impact of COVID-19 on the taxi industry in the City of Johannesburg. The outbreak of the pandemic sent waves of fear across the taxi industry, followed by job losses and severe economic challenges. Support was extended, but it was not sufficient to meet the challenges confronting industry. No training was provided to taxi drivers and marshals on how to manage the crisis from the onset. PPE was not provided to taxi drivers and rank marshals. The government needs to assist in this regard, to enhance compliance with safety regulations. Taxi ranks should be sanitised regularly. There is a need for taxi owners to install screen dividers in the taxis to create a physical barrier between drivers and passengers. In other words, it is imperative to devise new safety interventions within the industry. More than that, efforts should be made towards implementing innovative and greener technology for sustainable safety practices in the industry. There is an urgent need for government to regulate the industry for an efficient and safer service to commuters. Workers within the industry should be well catered for and supported. There is an urgent need to generate alternative means of earning an income by members of the industry. Efforts could also include variations in services, such as on-demand transport. There is indeed a significant gap between the understanding of what is needed between SANTACO, taxi owners, and those on the ground, namely taxi drivers and marshals. Going forward, taxis will have to operate less on their routes and in smaller numbers, due to customers' demand for more hygiene, as well as capacity regulations. Thus, a fare increase seems imminent as the only viable option to ensure the sustainability of the industry.

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