
Impact of Gig Economy on Food Delivery Workers in Union Territory of Puducherry, India

Dr. H. Yasmeen Sultana¹, Ajmal Faiz V²

¹Assistant Professor, Department of Economics, School of Management, Pondicherry University, Puducherry – 605014, India. yasmin.sultana@gmail.com

²Ph.D Research Scholar, Department of Economics, School of Management, Pondicherry University, Puducherry – 605014, India. ajufaz.mcc@gmail.com

Abstract

In recent years, online food delivery has revolutionized the way that people buy and consume food, and there are now a huge number of businesses that provide on-demand takeaway services. However, the platforms that enable online food delivery have adopted business models where the couriers who deliver the food are employed in the so-called gig economy. The gig economy benefits employers, employees, and the entire ecosystem, which benefits the economy overall by giving various groups in this densely populated nation like India meaningful opportunities. India's workforce is evolving as a result of the growth of the gig economy. In India, there are currently between 8 and 18 million gig economy jobs, with an expected increase to over 90 million jobs in the non-farm sector over the next eight to ten years. The COVID pandemic has highlighted the importance of the service provided by those food delivery workers. In many countries, they have allowed restaurants to continue working during lockdowns. Although they provided valuable services, the status and remunerations of the food delivery workers have not changed. This present study made an attempt to find out the precarious nature of employment of online food delivery workers in Union Territory of Puducherry. The study was undertaken using mixed methods, through which quantitative and qualitative dimensions of the issues related to livelihood and working conditions of the online food delivery workers in the Union territory of Puducherry were explored. The data was collected from 200 online food delivery workers from two major cities in union territory of Puducherry, namely Pondicherry and Karaikal. These two urban areas chosen on newspaper reports about the plight of online food delivery workers in these cities during the lockdown period. Online food delivery workers belong to online food delivery companies like Swiggy, Zomato, Dunzo and Uber Eats are considered as sample respondents. The research follows a qualitative approach and primary data collected through structured questionnaire. The questionnaire for the survey data prepared using existing literature on food aggregator business and it has been finalized after two rounds of pilot surveys.

Keywords: Gig Economy, Online Food Delivery system, Food Delivery Workers.

I. Introduction

Globally, the gig economy began to take off in developed nations with the quickening pace of digitalization. Currently, a market that is predicated on a fixed term contract or it is paid on a project-by-project basis by a business, a third party, or an online marketplace is referred to as the "gig economy." The gig economy's influence at work today spans a wide range of industries and has fundamentally altered

how people are engaged at work. Workers in the gig economy frequently accept work that is arbitrated through digital platforms that pair them with clients for the completion of relatively short or lone tasks, known as "gigs" informally (Woodcock & Graham, 2019). There are currently more than 50 million platform workers worldwide, a significant increase from previous years (Fairwork, 2020). All platforms that employ independent contractors, consultants, and employees across a variety of industries,

including information technology, retail, content creation, social media marketing and communications, food and beverage, creative industries like art and design, and many more, are included in the gig economy. The gig economy benefits employers, employees, and the entire ecosystem, which benefits the economy overall by giving various groups in this densely populated nation like India meaningful opportunities. According to a Boston Consulting Group study from 2020, India's gig economy has the potential to support up to 90 million jobs in the non-farm sector alone, transact over \$250 billion in work, and contribute an additional 1.25 percent of GDP over time. Because of its importance and potential, the gig economy could add one million net new jobs over the next two to three years by coordinating the short-term incentives of both employers and employees. The global job structure has undergone a significant change as a result of technological development, rising demand for flexible work, and unemployment. The Central Government has made the decision to train state and centre officials on global practises relating to gig and platform workers, emerging forms of employment, technological change, rights, labour protection, policies, and these topics. Since they are not entitled to social security benefits, gig workers frequently upset this newly emerging class of workers.

II. Future of Work in Gig Economy – Indian Context

India's economic structure has changed, but not along the traditional lines of developed countries, which saw a transition from the agriculture industry to manufacturing-led growth and then to the service sector. While many workers are still employed in the traditional agriculture sector (49%), which accounts for only 14% of the economy, India's structural transformation immediately moved from agriculture to service-led expansion without an expansion in manufacturing. However, the service sector only contributes 27% of employment while making up 58% of the GDP (Ghose, 2016). Numerous multinational corporations have established operations in developing countries as a result of the rapid driven

by technological advancements (Thite et al, 2014). India is regarded as an emerging economic superpower in this regard because of its foreign language proficiency, low operational costs, demographic dividend, foreign language proficiency, intellectual capital, and diversity (Budhwar et al, 2019). The Indian government's think tank, National Institution for Transforming India (NITI), introduced a national programme on Artificial Intelligence (AI) and its enormous industrial applications in 2018, advancing the economy toward digitisation and AI. AI is expected to increase by \$975 billion or 15% of India's current gross value by 2035. (Jujjavarapu et al, 2018). The National Education Policy (NEP), which was released by the Indian government in July 2020, outlines specific procedures for distributing education, particularly in computer science and information technology, to students at all levels of education (Aithal et al, 2020). Individuals must be skilled in a variety of areas, including social, emotional, technological, and physical ones, in order to perform well or act appropriately depending on the circumstance. The COVID-19 pandemic highlighted the advantages and strengths of working remotely for Indian businesses, and one area that has benefited from this change in emphasis for Indian organisations is the gig economy, especially platform-based employment (Bricka & Schroeder, 2019). The process of digital transformation has already been ongoing for years, and most organisations feel secure enough to investigate digitally based strategies over a period of time that is manageable. Accelerated digital transformation can be compared to how COVID-19 changed business as a whole (Kudyba, 2020). To adapt to this disruptive environment, the majority of organisations have adopted an agile approach to digital and operational transformation. Due to COVID-19's restrictions, businesses were forced to switch to an operational model that relied heavily on technology. Organizations are quickly reskilling and upskilling their workforce in social and emotional competencies in addition to digital competencies. The future of work is heavily influenced by changing employment models in addition to the impact of new skills, including digital and emotional skills. Many organisations have had to adapt to new

employment models over the last few years, including side jobs, gig work, part-timers, and talent markets, due to the disruptive environment. The gig economy offers the possibility of limitless opportunities for flexible working arrangements marked by increased autonomy thanks to low entry barriers and ease of access to employment (Duggan et al, 2021). Employers must also work to advance the knowledge and abilities of gig workers. The basics of capability as well as skill building are not changing, even though the gig economy is altering the workforce. The organisation must institutionalise the process of developing future capabilities and skills if it chooses to take advantage of the versatility of the gig workforce.

III. Previous Studies

The expansion of the platform economy has given rise to a new kind of employment arrangement. It has contributed to the rise of gig workers, who are described by sporadic employment and fictitious self-employment, in India. Gig jobs are frequently independent, adaptable jobs with higher pay. But in India, where most workers lack education and training, the situation is different as well as essentially precarious. Regarding on-demand employment, dependent labour and workplace circumstances that prevent people from actively taking part in society and the economy are blamed for the precarious employment market (Stewart & Stanford, 2017). The structure of dependent labour that includes low pay, contractual employment, erratic hours, a lack of a union, and primarily sedentary worker rights is referred to as the "precarization of work at platforms" (Johnston & Land-Kazlauskas, 2018). The first online food delivery company in the USA, "Grubhub," was founded in 2004 with the goal of completely replacing all paper menus with a single website. Since then, Grubhub has modified its business strategy to link customers and delivery services from those restaurants. Even grocery stores began offering online delivery in the early twenty-first century (Pozzi 2012; Relihan 2017). Food delivery personnel are unable to work from home and, in some cases, put their own health in danger by delivering to socially isolated customers (Amin, 2020). Online grocery and food delivery has altered

the last mile of delivery, changing the logistics and transportation system in important but frequently unnoticed ways. However, this innovative method of food delivery is also increasing traffic in urban areas and changing the backgrounds and characteristics of those who deliver food, especially those who work in the gig economy. Carolynne Lord et al. 2022 also highlight the perspectives of gig economy couriers, who are frequently disregarded in analyses of the online food delivery system, keeping in mind this broader understanding of sustainability.

Many restaurants lost billions of dollars as the COVID-19 pandemic spread, and some even had to close their doors. The restaurant industry will have lost about \$240 billion by 2020, according to a report from the National Restaurant Association (2020). For survival, restaurants that stayed in operation realised they had to adjust to recent industry changes and provide online food delivery (OFD) services (Brewer and Sebby, 2021). During the pandemic, many restaurants started utilising the services of outside food delivery companies. Online OFD businesses increased significantly all over the world as a result. For instance, Uber Eats noticed a significant increase in OFD orders after the rule banning dine-in service (Raj et al., 2021). In India, the platform economy in the food industry does not have a greater presence in terms of labour participation (Sundararajan, 2016; Pant and Shende, 2020). However, the OFD industry is expanding with a 25–30% annual growth rate thanks to the entry of some leading global OFD businesses like Uber Eats and some Indian businesses like Zomato and Swiggy (Boston Consulting Group, 2020). In India, the platform economy is anticipated to reach \$30 billion by 2025. (NASSCOM, 2018). The number of workers who participate in the platform economy has significantly increased in recent years. Around 15 million people are employed by the platform economy, 0.44 million of whom are in the food industry, according to the NITI Aayog (a policy think tank run by the Indian government) (Tiwari et al., 2019). Like in every other sector of the sharing economy, people who deliver food are not hired on a full-time basis. The majority of food delivery companies view these workers as interchangeable or "gig workers" (Sundararajan, 2016). We now have

more information about platform economy or gig economy jobs thanks to the 2020 study by Kavya Bharadkar and colleagues. It makes an effort to look into Bengaluru's platform workers' pay and work environments. According to the study, the majority of platform workers employed by different food delivery platforms in Karnataka reported low wages and frequently worked more than 8 hours per day on average. The study sought to define the nature of work in the digital platform labour market and evaluate the truthfulness of certain employment-related claims made by platform companies, particularly those relating to the prosperity enjoyed by workers, their unrestricted ability to engage with multiple platforms and work on multiple projects at once, and the part-time and flexible nature of their engagement. Parwez and Ranjan explore work precarity in the platform economy from the perspective of food delivery workers in their study from 2021. Furthermore, it makes an effort to integrate precarious employment into the COVID-19 era. As a result of the digital boom, food delivery workers in India now work for aggregators of food-based platforms. Anubha Singh and Tina Par (2022) conducted semi-structured in-depth interviews with food delivery workers on these two platforms to learn how they experienced the COVID-related changes on the two platforms. By concentrating on the experiences of food delivery workers, the paper seeks to examine how new regimes of care are created and justified using harmful.

After a careful study of the earlier research works, the following research gaps are identified. As far as India is concerned, a few studies have been conducted on the subject chosen for the study. The majority of studies in this literature review discuss how Internet-based alternatives to conventional goods and services affect consumers. Computers and electronic products are found to have relatively sensitive prices when purchased online versus offline. The effects of introducing online food delivery services are less clear in the context of restaurants. In fact, a sample of more than one hundred publicly traded companies generally finds that adding an online sales channel results in significant increases in sales, inventory, and return on investments, while costs decrease. Even less

research has been done specifically on online food delivery services. This present study would be considering the universality of the structural inequities faced by the food delivery workers and the significance of having a deeper understanding of the phenomenon in the context of the gig economy jobs, a study will give the comprehensive outline of the constraints faced by food delivery workers.

IV. Gig economy and Online Food Delivery System

The platform-based gig economy is emerging at a time when larger discussions about the future of work are taking place. This work is digitally organised, and piece rates are frequently used for payment. Online food delivery has transformed the way that people purchase and consume food in recent years, and there is now a huge variety of companies offering on-demand takeaway services. The platforms facilitating online food delivery, however, have taken on business models where those delivering the food are employed in what is known as the gig economy. Despite the fracturing of working conditions, gig work is sometimes positioned as an environmental solution to some aspects of the last-mile with little mention to how these solutions impact on the social and economic sustainability of the online food delivery system. This omission does, however, make some sense given the predominant focus on demand in transport and logistics, over how that demand comes to be serviced. But even when an assessment of the sustainability of gig economy courier work is made these tend to separate the notions of economic, social and environmental sustainability with little work to date having fully incorporated an understanding of how these “factors” influence, interact and are, sometimes, in conflict with one another (Galati et al., 2020; Li et al., 2020).

India's workforce is evolving as a result of the growth of the gig economy. In India, there are currently between 8 and 18 million gig economy jobs, with an expected increase to over 90 million jobs in the non-farm sector over the next eight to ten years. While gig jobs provide more freedom and discretion for professionals, there are multiple issues

like low wages, lack of social security, working conditions and employee rights that need active governmental intervention. The workforce in the gig economy is based on the segment of the industry that they belong to, we may see more participation in the fast moving consumer goods, retail and consumer segments than those in Banking, financial services and insurance. Some of the key pain points for workers working in the gig economy revolve around the formalization of the workforce. They have no job security, they are not covered under any labour codes, they have no bargaining power and there is no formal pay structure. Earnings may vary based on your engagement as there is no ceiling on potential income and formal structure in place. Flexibility in engagement is a major cause for concern, and there is pressure on workers to complete difficult targets, risking their lives, for a nominal amount of incentive. With no stable income to show for, the workers find it difficult to get any loans from financial institutions for emergencies, marriage expenses, hospitalisation expenses etc. Workers are not eligible for social security benefits, maternity benefits, accident and health benefits, and there is no mechanism in place to cover their family members. The workers have to ensure the health and other facilities for their family members their own cost. Gig workers have to invest in upgrading their skills at their own cost. The market is unregulated and offers no legal protection and workers are treated as independent contractors not employees.

The COVID pandemic has highlighted the importance of the service provided by those food delivery workers. In many countries, they have allowed restaurants to continue working during lockdowns. Although they provided valuable services, the status and remunerations of the food delivery workers have not changed. In recent years, online food delivery has revolutionised the way that people buy and consume food, and there are now a huge number of businesses that provide on-demand takeaway services. However, the platforms that enable online food delivery have adopted business models where the couriers who deliver the food are employed in the so-called gig economy. Online food ordering is the process of placing an order for takeout or delivery from a nearby restaurant or food

cooperative using a website or mobile application. Many young people are now drawn to the incentive-laden job of food delivery, where some of them earn on average Rs.1500 per day, with nothing more than a bike and a smartphone. They are encouraged to work harder by each delivery-based incentive, and some of them end up putting in more than 12 hours straight. The vast majority of people who deliver consumer goods to your door are only a small portion of the informal economy. The work is typically undertaken for a brief period of time or on a project basis and consists of unconventional income-generating activities that are not related to traditional, long-term employer-employee relationships. Gig work includes both online and offline tasks, such as temporary freelancing or job searching on mobile applications. The way we traditionally think about work has changed as a result of the Gig economy. A different pattern is followed by the larger platform economy, which includes physical services that are now a part of urban life. Even though platform economy employees provide their services on behalf of other successful startups, they are still regarded as self-sustaining entrepreneurs. Initially, gig employment provided part-time or full-time food delivery workers with respectable pay. However, this is no longer true. Employers hire and fire platform economy workers, providing little to no social or health insurance guarantees. This comprehensive analysis of the platform economy in India is set against this background. Hence, this present study aims to evaluate the precarious nature of employment of online food delivery workers in Puducherry. As a new-age phenomenon, there are many aspects of platform work that have yet to be explored.

V. Methods and Materials

This present study made an attempt to find out the precarious nature of employment of online food delivery workers in Union Territory of Puducherry. The study was undertaken using mixed methods, through which quantitative and qualitative dimensions of the issues related to livelihood and working conditions of the online food delivery workers in the Union territory of Puducherry were explored. In order to do the same both secondary and

primary data have been used. Secondary information has been collected from published books, articles, reports and websites, while primary data have been collected from the sample respondents from the Union Territory of Puducherry. This region includes four parts viz. Pondicherry, Karaikal, Yanam and Mahe, in this study the geographical scope is confined to only two regions such as Pondicherry and Karaikal. Pondicherry is an important region, which has the cosmopolitan nature and encompassed by administrative offices, major tourist points, and development of business environment is substantial particularly in the recent past. The data was collected from 200 online food delivery workers from two major cities in union territory of Puducherry, namely Pondicherry and Karaikal. These two urban areas chosen on newspaper reports about the plight of online food delivery workers in these cities during the lockdown period. Online food delivery workers belongs to online food delivery companies like Swiggy, Zomato, Dunzo and Uber Eats are considered as sample respondents. This study focused on socio-demographic details, working conditions, employer-worker relationships, impact of the pandemic on livelihood and family conditions, health care and state support systems for the workers during the pandemic situation. The research follows a qualitative approach and primary data will be collected through structured questionnaire. The questionnaire for the survey data prepared using existing literature on food aggregator business and it will be finalised after two rounds of

pilot surveys. The basic protocol developed for the survey team to meet with the delivery partners when they first arrived in each location, explain the research, describe the surveys, and obtain permission to proceed with the structured interview. Data analysis done by using SPSS package and descriptive statistics presented using figures and tables.

VI. Results and Discussion

The data analysed here include the general socio-economic profile, working conditions, and livelihood of the online food delivery workers in the union territory of Puducherry, India.

General Profile of the Respondents

In the caste-based categorization, 46% of the population belonged to communities that were classified as Scheduled Castes (SCs), 27.5% as Backward Classes, 23% as Other Backward Classes (OBC), and 3.5% as Scheduled Tribes (STs). The remaining respondents fell into the age brackets of 18–30 years (72.5%), 31–40 years (19%), and 40–plus years (8.5%). 17.5% of the online food delivery employees had completed elementary school, 65% had completed high school, 14% had completed a graduate programme, and 3.5% had completed a postgraduate programme. 82.5% of the respondents to the survey who were married and 17.5% who were not married.

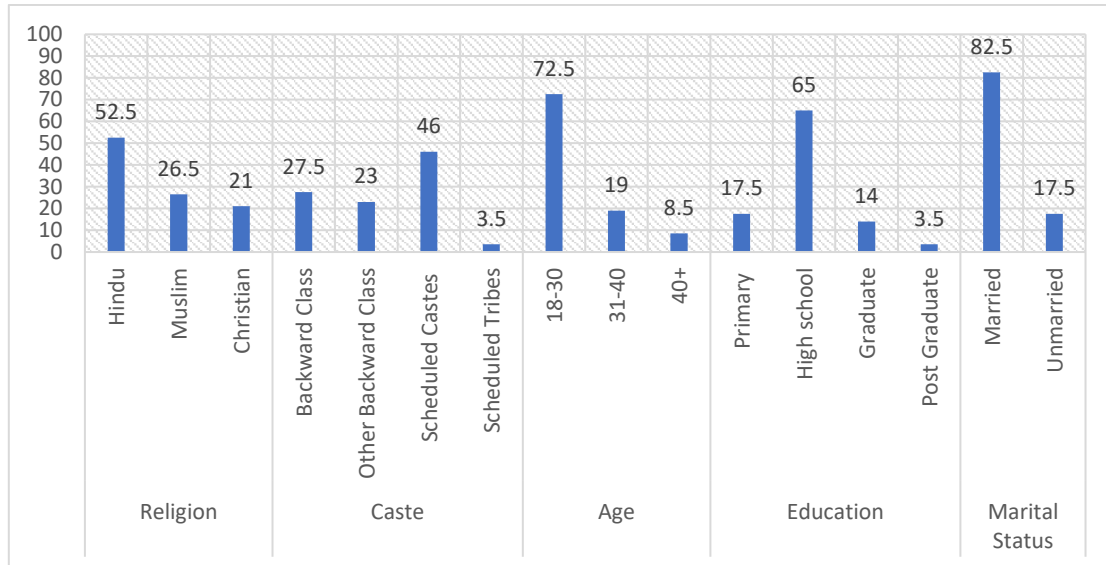


Figure I. General Profile of the Respondents

Working Status of the Online Food Delivery Workers

The COVID pandemic has brought attention to how crucial the work done by those food delivery personnel is. Restaurants have been permitted to operate throughout lockdowns in many nations. The status and compensation of the food delivery workers have remained the same despite the fact that they rendered valuable services. Between the two towns' total respondents, 42% were

immigrants (mostly from a rural village to the city), while the remaining 58% were locals. When counting the number of years worked as online food delivery workers, it was discovered that 72% of them have been doing so for the last one to three years, 16.5% have worked for four to five years, 7.5% have worked for six to seven years, and 4% have worked for more than seven years (See Figure 2). 35% of the workforce was employed full-time as food delivery workers, while 65% worked part-time.

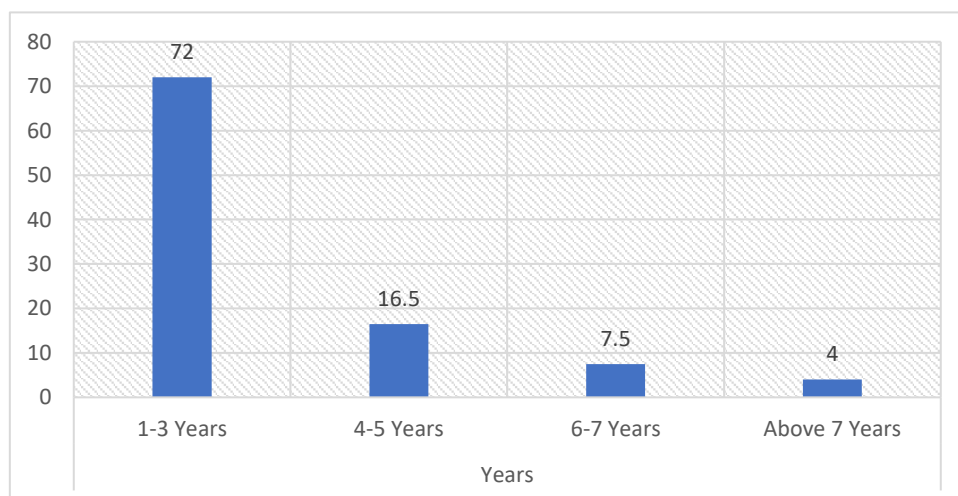


Figure II. Number of years spent as online food delivery workers

It was found that 22% of people who delivered food worked full-time and 78% worked part-time. Table 1 displays the number of hours that full-time food delivery employees worked. The ILO's recommended working hours per day are in categories "0-8 hours" and "12 hours/day," respectively. The piece rate and incentive-based nature of the wage system forces online food delivery workers to work longer hours in order to

earn more money. In actuality, 30.8% of full-time online food delivery employees put in between 8 and 12 hours per day, and 30.8% put in just 8 hours per day. On the other hand, we found that 25% of part-time online food delivery employees work between 8 and 12 hours per day, and 56.8% of them work between 5 and 8. Due to the incentive-based income system, which encourages employees to work longer hours, only 11.4% of employees actually work during the designated part-time hours.

Table 1. Working hours of the online food delivery workers

Working Hours	Frequency	Percentage
Full Time online delivery workers		
0-8 hours/day	48	30.8
8-12 hours/day	92	59
12-15 hours/day	10	6.4
Above 15 hours	6	3.8
Total	156	100
Part Time online delivery workers		
0-5 hours/day	5	11.4
5-8 hours/day	25	56.8
8-12 hours/day	11	25
Above 12 hours	3	6.8
Total	44	100

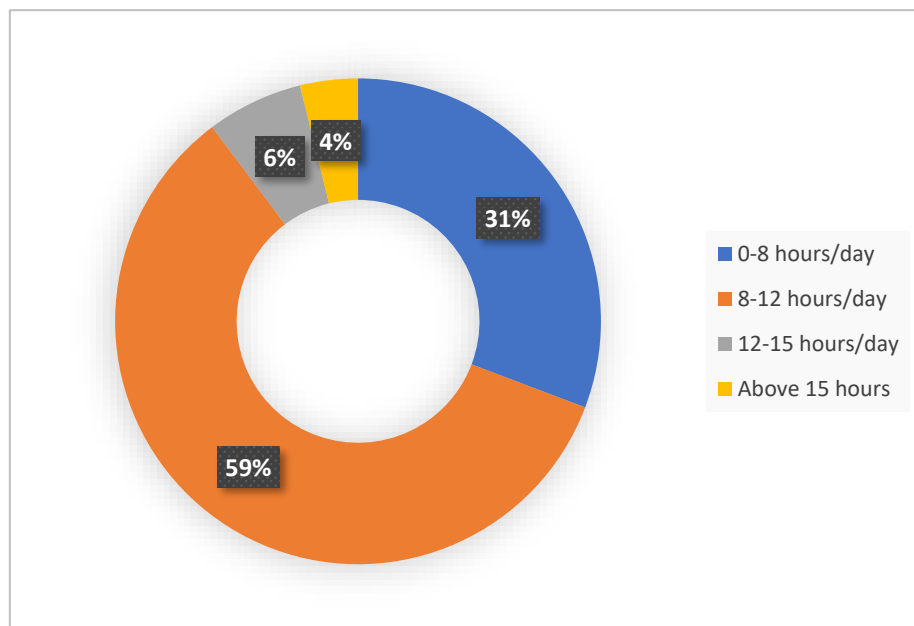


Figure III. Full Time working hours of online food delivery workers

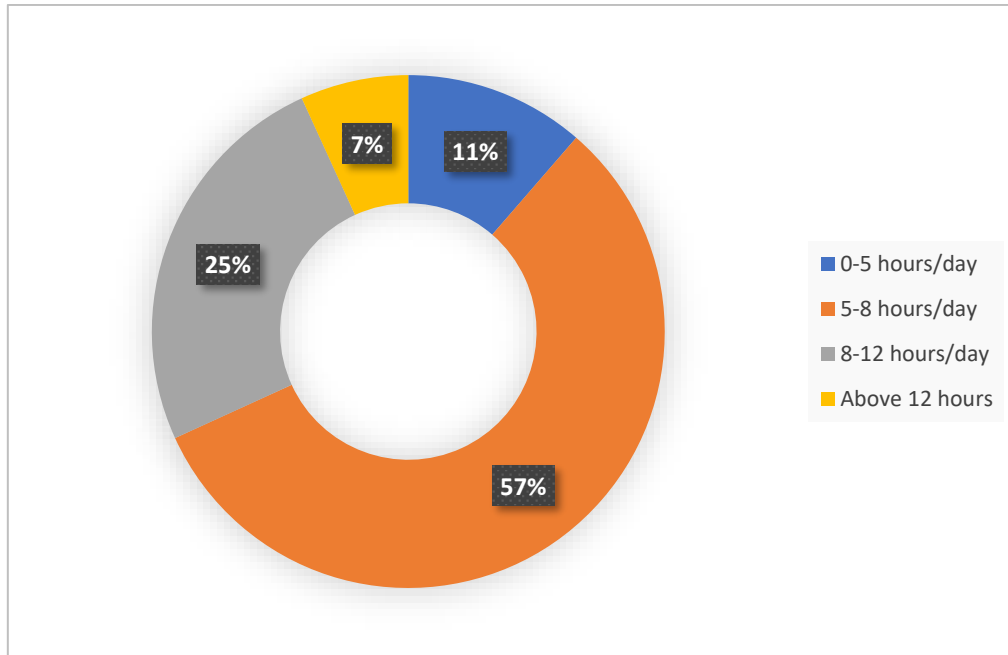


Figure IV. Part Time working hours of online food delivery workers

The source of income for an online food delivery worker in this position consists of a combination of price rate wages and bonuses. According to Table 2, there is little difference between the average net income of food delivery workers who work full- or part-time shifts. Because the workers who are enrolled part-time continue to work past their allotted five hours per day, even the range of income

does not vary significantly. The majority of respondents, according to the report. The majority of respondents (45.5%), who are full-time delivery workers, make between `10000 and `15000, and 26.3% make between `15000 and `20000 per month. More than half (56.8%) of the respondent in the case of part-time food delivery workers earn between `10000 and `15000 monthly.

Table 2. Income of the online food delivery workers

Category	Average Net Income (₹)	Minimum Income (₹)	Maximum Income (₹)
Full Time	15354	4000	28500
Part Time	15148	3000	27000

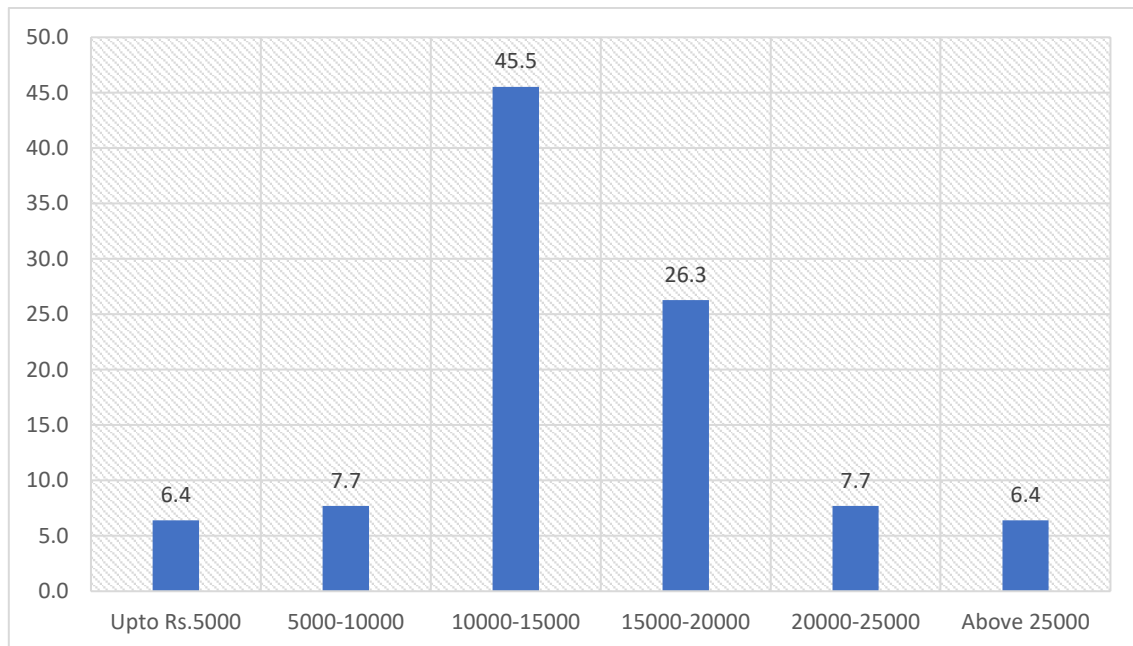


Figure V. Income of Full-Time online food delivery workers

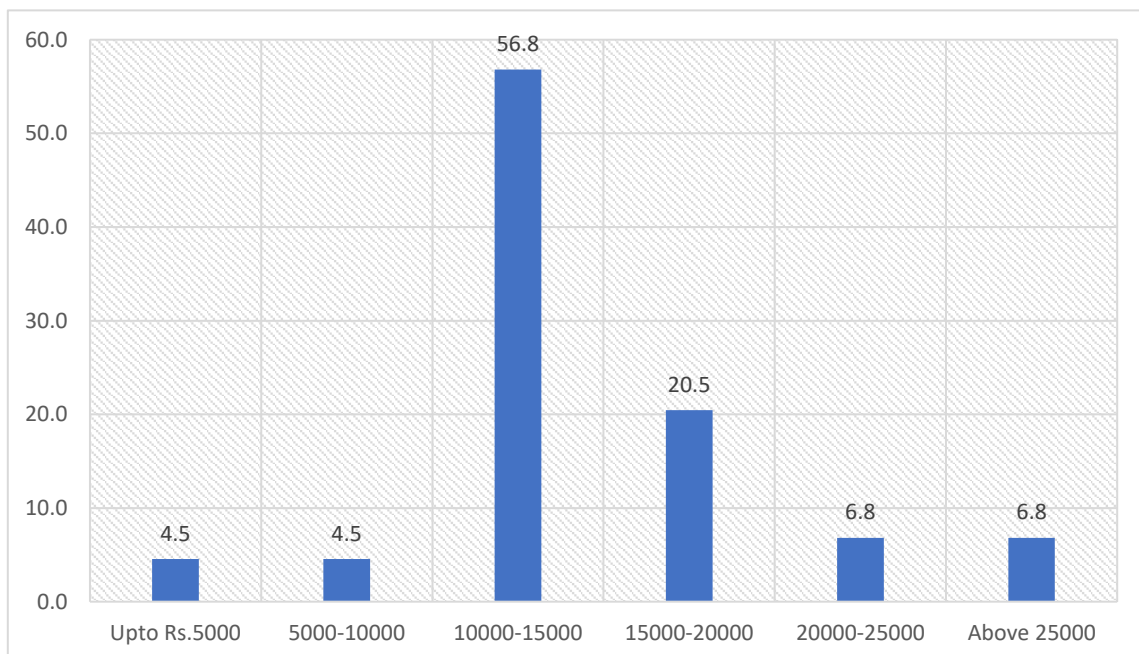


Figure VI. Income of Part-Time online food delivery workers

According to numerous delivery partners whose experiences were investigated, the pressure to deliver timely food raises the risk of a traffic accident. Despite the fact that these food delivery

apps list health coverage as one of the benefits, the majority of the food delivery staff are not aware of how to access insurance. The following statistic illustrates the impact of this since only 4% of health coverage claimants actually receive it.

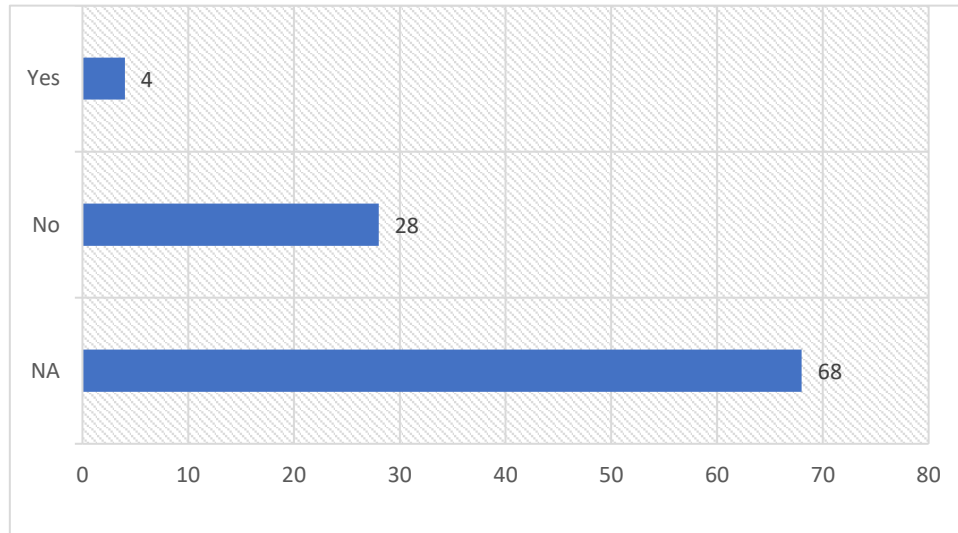


Figure VII. Insurance benefits for online food delivery workers

Figure 8 shows that when asked if they intend to continue this work, the delivery partners' responses are almost evenly split between Yes (71%) and No (24%). While some of the employees who responded in the affirmative are content with their jobs, others decide to stay because there aren't

many other options for work and don't view gig work as a long-term source of income. Those who do not intend to remain view it as a turning point in their professional lives. The majority of delivery partners' responses, when further questioned about them, are summarised in the responses listed below.

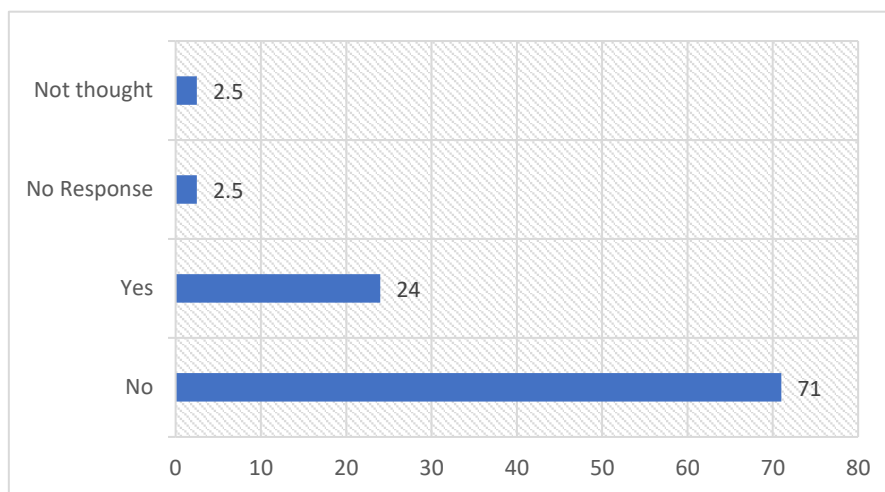


Figure VIII. Continuing the job response of online food delivery workers

Conclusion

It is difficult to avoid the intersections of caste, class, and region that contribute to the invisible marginalisation faced by online food delivery, especially in the post-pandemic scenario, and they need to be addressed through both short-term and long-term measures. Distribution of temporary compensations, such as food vouchers, PDS rations, and cash transfers for an extended period of time, should be included in the short-term measures for social protection of the online food delivery workers. Mechanisms for ensuring temporary relief or extending the time for rent and utility bill payments should be developed. Local organisations or the law enforcement agencies may monitor or coordinate this. Long-term policy initiatives should be developed with an emphasis on interventions to ensure the social security and welfare of the individuals responsible for online food delivery. Given that the informal sector employs the vast majority of the labour force, budgeting for its welfare needs to take gender equality into account. To ensure a rights-based and intersectional approach to the developmental issue, it is necessary to strengthen the current state support systems from the central to local levels (state agencies for labour welfare, human rights, women's rights, minority welfare, migrant welfare, SCs and STs welfare, law and order, and local self-government). Community intervention programmes for promoting awareness of labour rights and employer responsibilities as well as formal job registration for ensuring social security measures can be developed through a collaborative effort of the state, nonprofit organisations, and grassroots people's platforms. It is necessary to implement evidence-based interventions in policy and practise, which can be facilitated by fostering funded research through academic and research institutions on various developmental issues affecting individuals who deliver food online.

The Social Security Code, 2020 was passed by the central government with the goal of bringing at least 250 million unorganised workers, including gig workers, into the social security net over the course of the following five years. According to the

Indian government, a gig worker is someone who works "outside the traditional employer-employee relationship," while a platform worker is someone who offers services through an online platform. Through this, the government increased old-age pensions, health insurance, disability aids, and other benefits to all groups, including gig, platform, and migrant workers (Ministry of Law and Justice, 2020). A person who works in the unorganised sector and is not already protected by the Industrial Disputes Act of 1947 or other laws, such as provident funds and gratuities, is referred to as an unorganised worker. Aggregators like Zomato, Uber, and Ola would be required by the Code to contribute 1% to 2% of their annual revenue to employee social security accounts, with a maximum contribution of 5% of the total amount paid to employees. According to the Code's rule 50(2), "every gig worker or platform worker... shall be required to complete the form on the portal's Aadhaar registration page, using the self-declaration method as prescribed by the Central Government. The number of gig workers in the nation is currently not a subject of data collection by either the federal or state governments. The 2021 Union Budget suggests creating a portal to compile pertinent data on gig economy workers (Aryan,2021).

Traditional representations of employer-employee relationships are likely to be disrupted as gig work becomes more commonplace, perpetuating further informalization of work on platforms like Uber Eats, Swiggy, and Zomato. Delivery workers will continue to be pushed to the limit by the reorganisation of labour relations through service delivery apps as long as the architecture of the platforms is opaque to them, the incentive systems are arbitrary, the working conditions are unregulated, collective bargaining power is inaccessible, and the working conditions are unregulated. A more right-based framework for the formalisation of gig/platform workers needs to be the focus of policymakers, administrative organisations, and other stakeholders. The future of online food delivery is exciting, and we must continue to evaluate what is occurring and consider whether things could be done more effectively if we

are to guarantee that the sector develops in a sustainable manner that serves the interests of all stakeholders involved.

References

1. Aithal, P. S. and Aithal, Shubhrajyotsna (2020). Analysis of the Indian National Education Policy 2020 towards Achieving its Objectives, *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), 19-41.
2. Amin, M. (2020). Food delivery riders say employers not doing enough to protect them from coronavirus. Australian Broadcasting Corporation. Retrieved from <https://www.abc.net.au/news/2020-04-04/food-delivery-riders-not-being-supported-incoronavirus-response/1212048>
3. Aryan, A. (02 February 2021). ESIC, other social security safety nets to cover gig economy workers. Indian Express. Retrieved from <https://indianexpress.com/article/india/budget-2021-esic-other-social-securitysafety-nets-to-cover-gig-economy-workers-7170725>
4. Bharadkar, K., Medappa, K., Mani, M., Taduri, P., & Tiwari, S. (2020). Is platform work decent work? A case of food delivery workers in Karnataka.
5. Brewer, P., & Sebby, A. G. (2021). The effect of online restaurant menus on consumers' purchase intentions during the COVID-19 pandemic. *International Journal of Hospitality Management*, 94, 102777.
6. Bricka, T. M., & Schroeder, A. N. (2019). What's the gig deal? Examining contemporary work issues in the gig economy. *Industrial and Organizational Psychology*, 12(4), 491-494.
7. Boston Consulting Group, 2020. India's online food delivery industry to touch \$8-bn mark by 2022: Report. Business Standard. Accessed from. https://www.business-standard.com/article/current-affairs/india-s-online-food-delivery-industry-to-t-ouch-8-bn-mark-by-2022-report-120012800822_1.html.
8. Budhwar, P. S., Varma, A., & Kumar, R. (Eds.). (2019). *Indian business: Understanding a rapidly emerging economy*. Routledge.
9. Carolynne Lord, Oliver Bates, Adrian Friday, Fraser McLeod, Tom Cherrett, Antonio Martinez-Sykora & Andy Oakey. (2022). The sustainability of the gig economy food delivery system (Deliveroo, UberEATS and Just-Eat): Histories and futures of rebound, lock-in and path dependency, *International Journal of Sustainable Transportation*.
10. Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2021). Boundaryless careers and algorithmic constraints in the gig economy. *The International Journal of Human Resource Management*, 1-31.
11. Fairwork. (2020). About fairwork. Retrieved 2021, July 21, from <https://fair.work>.
12. Galati, A., Crescimanno, M., Vrontis, D., & Siggia, D. (2020). Contribution to the sustainability challenges of the food-delivery sector: Finding from the Deliveroo Italy case study. *Sustainability*, 12(17), 7045
13. Ghose, A. K. (2016). India employment report 2016: Challenges and the imperative of manufacturing-led growth. Oxford University Press Catalogue.
14. Thite, M., Budhwar, P., & Wilkinson, A. (2014). Global HR roles and factors influencing their development: Evidence from emerging Indian IT services multinationals. *Human Resource Management*, 53(6), 921-946.
15. Jujjavarapu, G., Hickok, E., Sinha, A., Mohandas, S., Ray, S., Bidare, P. M., & Jain, M. (2018). AI and the Manufacturing and Services Industry in India. *The center for Internet and Society, India*.
16. Li, C., Miroso, M., & Bremer, P. (2020). Review of online food delivery platforms and their impacts on sustainability. *Sustainability*, 12(14), 5528.
17. Kudyba, S. (2020). COVID-19 and the Acceleration of Digital Transformation and the Future of Work. *Information Systems Management*, 37(4), 284-287.
18. Johnston, H., & Land-Kazlauskas, C. (2018). Organising on-demand: Representation, voice, and collective bargaining in the gig economy,

- Conditions of work and employment series (Vol. 94).
19. NASSCOM, 2018. Catalyzing the ecosystem for a trillion-dollar digital economy. Hyderabad: Natl. Assoc. Software Serv. Co. from <https://nasscom.in/sites/default/files/NASSCOM-annual-guidance-fy-2018.pdf>. (Accessed 21 December 2021).
20. National Restaurant Association (2020). Coronavirus information and resource. Accessed from. <https://restaurant.org/Covid19>.
21. Pant, B., & Shende, U. (2020). The Impact of COVID-19 on the sharing economy in India. *Available at SSRN 3653008*.
22. Parwez, S., & Ranjan, R. (2021). The platform economy and the precarisation of food delivery work in the COVID-19 pandemic: Evidence from India. *Work Organisation, Labour & Globalisation*, 15(1), 11-30.
23. Pozzi, A. (2013). The effect of Internet distribution on brick-and-mortar sales, *The RAND Journal of Economics*, 44(3), pgs 569-583.
24. Raj, M., Sundararajan, A., You, C., (2021). COVID-19 and Digital Resilience. Evidence from Uber Eats NYU Stern School of Business, 2021. <https://doi.org/10.2139/ssrn.3625638>.
25. Relihan, L. (2017). Is Online Retail Killing Coffee Shops? Estimating the Winners and Losers of Online Retail using Customer Transaction Microdata, PhD Dissertation, The Wharton School University of Pennsylvania.
26. Singh, A., & Park, T. (2022). Automating Care: Online Food Delivery Work During the CoVID-19 Crisis in India. In 2022 ACM Conference on Fairness, Accountability, and Transparency (pp. 160-172).
27. Stewart, A., & Stanford, J. (2017). Regulating work in the gig economy: What are the options?. *The Economic and Labour Relations Review*, 28(3), 420-437.
28. Sundararajan, A. (2016). *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. MIT Press, Cambridge.
29. Tiwari, S., Ram, S.G., Roy, S., 2019. 'What is it like to work in a gig economy job'. Indiana. Available from. <https://timesofindia.indiatimes.com/india/what-it-is-liketo-work-in-agig-economy-job/articleshow/69371217.cms>
30. Woodcock, J., & Graham, M. (2019). *The gig economy: A critical introduction*. Polity Press.