

Impact of Digital Exclusion on Migrant Workers under the Covid-19 Pandemic

Yijie Zhou¹, Leike Huang², Chenrui Yang³

1 Ningbo University, Ningbo 315211, China

2 The London School of Economics and Political Science, London WC2A 2AE, Britain

3 Gold Apple School, Shanghai 200120, China

ABSTRACT. *This paper seeks to comprehensively investigate the extent to which digital exclusion has exacerbated the negative impact on migrant workers amidst the COVID-19 Pandemic in financial and health aspects. The findings suggest that the digital divide has indeed exacerbated the negative impact on migrant workers in terms of financial loss and access to information. Nonetheless, in terms of health impacts, the relatively high infection rate among migrant workers is predominantly due to their other socio-economic conditions and the role of government rather than the digital divide.*

KEYWORDS: *Migrant worker, Digital divide, Covid-19*

1. Introduction

The rapid global spread of the COVID-19 pandemic has proven itself to be the single most disruptive event in the 21st century, severely affecting the societies and economies. Migrant workers, defined as peripatetic workers who work outside their hometown or home countries for a higher income, tend to take up jobs that are generally low skilled, physically-oriented and temporary. The nature of their work has made them especially vulnerable to the crisis caused by the COVID-19 pandemic. On the other hand, digitalization in modern society has led to a greater reliance on devices and digital information in every aspect of modern life, from sending to receiving information. This shift towards digitalization has arguably made migrant workers more susceptible to the negative impact of the pandemic as a result of the digital exclusion. The results examine two potential negative effects of the pandemic on migrant workers due to their digital exclusion: 1) the loss of income due to inability to work from home (WFH); 2) health risks because of the lack of knowledge due to information lag. While there is no similar research published to investigate the impact of this new disease on migrant workers, drawing on the experience of past pandemics would help us examine whether the low income, temporary workers are most susceptible to negative impacts. This is due to three reasons: Firstly, migrant workers working out of their city or country of origins do not enjoy the same social provision such as healthcare or unemployment benefits, therefore making them vulnerable to incur financial losses in a pandemic; Secondly, migrant workers typically have limited skill sets and little ability to acquire new skills due to the lack of financial ability, therefore prone to the risk of structural unemployment amidst economic downfall. Thirdly, migrant workers' ability to protect themselves from the pandemic often rest on the local government's policy, rather than their own decision, making them vulnerable to the danger of irresponsible government. Hence making them extremely vulnerable to higher health risk should there be a nonchalant government. Based on the experience of SARS in 2003, Lee, G.O.M. and Warner, M have argued that migrants' institutionally marginalized position, such as the lack of universal healthcare provision and a stable source of income has rendered them most vulnerable to the social and economic disruptions resulting from the epidemic[1]. Xiang Biao further compared the impact of SARS and COVID-19, deriving the conclusion that since the scale and impact of the COVID-19 is disproportionally higher than that of SARS in all realms, the negative impact felt by the migrant workers is similarly much more severe[2]. On the other hand, the United Nation Conference on Trade and Development (UNCTD) has highlighted that inequalities in digital readiness will hamper the ability of people, especially among lower income workers to take advantage of technologies that help them cope with the coronavirus pandemic[3]. This is because the digital exclusion will significantly hinder the ability of the excluded group to receive information and updates of the pandemic, leading to ignorance to the danger of the virus. Furthermore, being excluded from the digital world could also lead to the inability to purchase adequate personal protection equipment such as masks as economies are becoming more virtual. Therefore, it is worthy to investigate the extent in which digital exclusion has exacerbated the negative impact for migrant workers amidst the COVID-19 Pandemic.

2. Research Methodology

This paper adopts a two-way-approach in investigating the extent in which digital exclusion has exacerbated the negative impact for migrant workers amidst the COVID-19 Pandemic.

1.This work has conducted a survey consisting of 13 multiple-choice questions. The aim is to conduct the survey with at least 100 migrant workers in the city of Shenzhen and Shanghai, the two economic centers of China, to provide a better understanding on their ability to access digital devices and their life under the pandemic. By 12th May 2020, 152 survey results are included in the analysis.

2.This work further complements the primary data through the use of secondary data such as the latest news articles, research papers and interviews done by other agencies on both the COVID-19 Pandemic as well as other pandemics. This will help us to develop a holistic understanding of how digital exclusion amidst the pandemics affect the life of migrant workers through multiple angles.

3. Financial Impact

During the COVID-19 pandemic, while the white-collar workers are advised to Work From Home (WFH) via the internet, it is considerably much more difficult for migrant workers to transform their work online. This is due to the nature of their work which mainly involves reported labor, thus leading to temporary unemployment and a relatively higher percentage of financial loss. In the survey this work conducted targeting at Chinese migrant workers in Shanghai and Shenzhen as shown by Figure 1 below, more than 70 percent of the 152 interviewees admitted that they cannot WFH via the internet as the majority of them are construction workers.

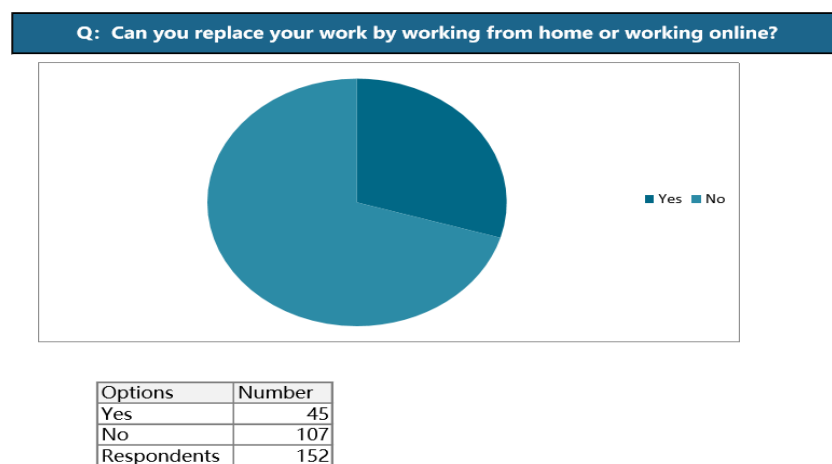


Fig.1 Question in Terms of the Feasibility of Wfh for Migrant Workers

Source: Self-designed survey targeting migrant workers in the city of Shenzhen and Shanghai

Furthermore, Figure 2 and 3 below indicate that the average monthly income before the pandemic for the interviewees was between 5001-8000 RMB while the approximate average income after the pandemic started is 2001-5000, equivalent to merely half of the pre-pandemic average monthly income. Peng Ge attributes part of the loss of income could be due to the Chinese New Year (CNY) holiday, as most of the migrant workers would take this opportunity to return to their city of origins and enjoy the holiday. Based on the statistics from the National Bureau of Statistics of China, most migrant workers experience a 53% fall in income in the month of February which coincides with the fall of income stated in the survey. Hence it is likely that the fall of income is not caused by the digital divide, but rather the CNY holiday.

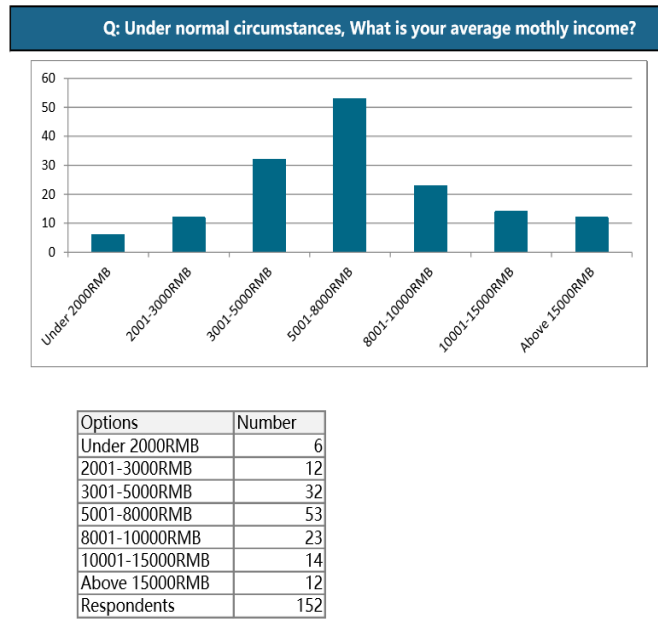


Fig.2 Question Relates to Migrant worker's Average Monthly Income in Normal Situation

Source: Self-designed survey targeting migrant workers in the city of Shenzhen and Shanghai

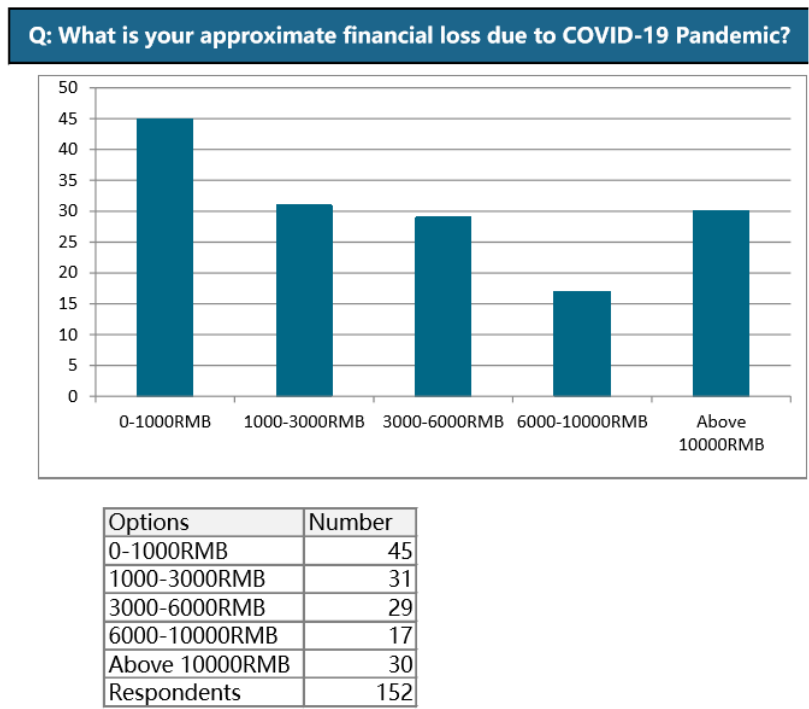


Fig.3 Question Relates to the Approximate Financial Loss under the Pandemic

Source: Self-designed survey targeting migrant workers in the city of Shenzhen and Shanghai

However, while the CNY does partially explain the decrease in income for the month of February 2020, it could not explain the continued fall in monthly income into the month of March and April 2020 when the legal holiday has ended. It was indeed the delay of work resumption even after the holidays that led to the significant income loss for the migrant workers as compared to the white-collar workers due to the lack of ability to WFH. In addition, only 18 percent of the respondents choose to spend the rare leisure time on self-upgrading activities, acquiring new skills to compensate for the loss of income due to the lack of knowledge of the existence of platforms. More than half of respondents admitted that socializing, online shopping and entertainment were the major purposes of using digital devices. Hence, financial loss suffered by the migrant workers can be due to both the nature of their work and lack of awareness to upgrade their skills through digital platforms. Therefore, the digital divide does exacerbate the negative impacts suffered by the migrant workers amidst the pandemic. With the continuous upgrading of information and tele-communication technologies, the digital divide is likely to further intensify and make migrant workers more susceptible to public emergencies in the future.

4. Health Impact

Physical impact in terms of infection rates across different groups in the society is one of the most important indicators used to measure the extent of digital divide negatively impacting the living condition of the migrant workers in the pandemic.

Kundan Pandey has argued that the digital divide has significantly increased the difficulty for migrant workers to receive updates on the development of the coronavirus, making them ignorant of the danger of the virus condition. Hence, this has resulted in a lack of awareness to protect themselves from the epidemic, leading to a higher infection rate as compared to other groups of workers^[4] This is further supported by data from the Indian Express which shows that Indian migrant workers based in rural areas suffer from a 38.3 percent higher infection rate as compared to urban workers across India^[5]. This coincides with Figure 4 below which indicates that the penetration rate of digital devices among migrant workers is 44 percent lower than that of urban workers. Hence, this shows that the digital divide is a key factor exposing migrant workers to a higher risk of infection, thus negatively affecting their physical health^[6].

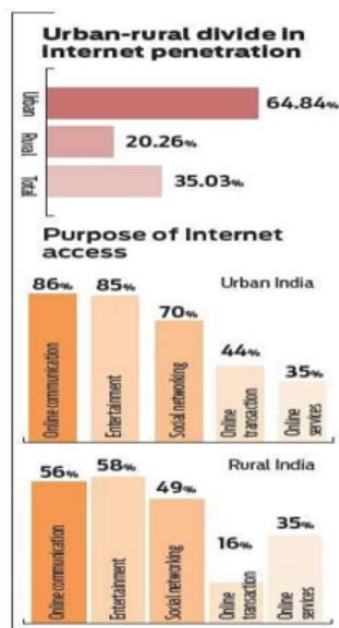


Fig.4 Digital Divide between Rural and Urban India

(Source: The India Express)

Au contraire, the above view could be faulted when this work corroborate data with Singapore, the epicenter of the coronavirus in Southeast Asia. According to the statistics from the Aljazeera, more than 85% percent of

Singapore's 20000 confirmed cases to date come from the migrant workers dormitories as shown in Figure 5 below.

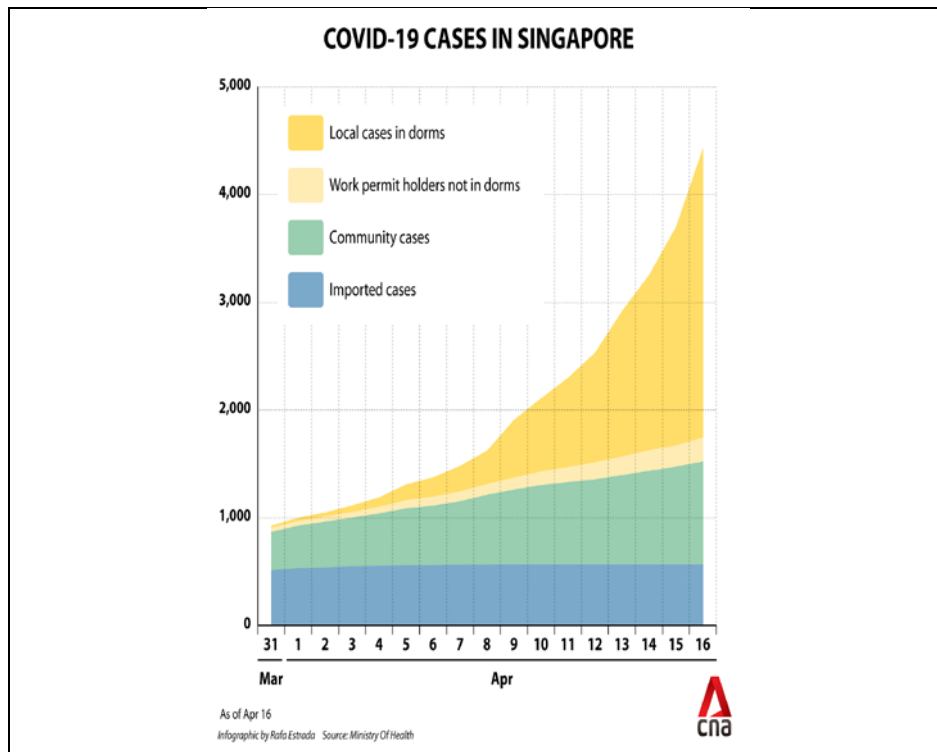


Fig.5 Breakdown of Coronavirus Cases in Singapore

(Source: Channel News Asia)

However, contrary to India's migrant workers, interviews conducted by the Channel 8 News Singapore to a group of Singapore's migrant workers indicated that they have full access to news updates and developments of the Covid-19 epidemic and suffer no digital divide^[7]. Furthermore, as a large portion of Singapore's migrant workers come from China, having observed the spread of the pandemic across China since January, many migrant workers even indicated that they have more awareness about the epidemic as compared to local Singaporeans in the interview. Research done by Andrain Liem et al has also shown that most of the migrant workers own a smartphone and are able to receive informational and social support during the epidemic^[4]. This paper thus agrees with Kirsten Han who argues that other factors, namely government policies, are the more crucial factor leading to the higher infection rate amongst the migrant workers as compared to the digital divide^[8]. In the case of Singapore, while most migrant workers interviewed stated that they have access to daily updates on the coronavirus, the poor living condition, such as the lack of isolated rooms and enough social distance in their dormitories, has severely increased their exposure to the virus. This can be seen from Alex Au who argues that "When the government of Singapore, governments all over the world, issued safe distancing advice, they overlooked the fact that safe distancing cannot be possible when construction workers and other blue-collar workers are housed ten men, 20 men, in a room with shared toilets for hundreds," he said. "The failure, I think, to see clearly the risks and to take measures to mitigate the risks, left them with a very bad situation right now"^[9].



Fig.6 Residents At Cochrane Lodge 2, a Dormitory for Migrant Workers in Singapore.

(Source: The Cable News Network)

In addition, Alex Au's argument is further strengthened when this work refer to the case of China, the original epicenter of the epidemic where the government has taken extremely harsh measures to prevent the spread of coronavirus in migrant communities. According to the South China Morning Post, policies such as mandatory closure of non-essential factories, forcing migrant workers to return to their cities of origin, 14 days quarantine for those returned from home to work and strict enforcement of social distancing in workplace have successfully kept the infection rate amongst migrant workers at the same level compared to other workforces at 56.1 per one million even as digital divide arguably persist as shown in our survey that some 40 percent of migrant workers do not receive the first-hand update on the coronavirus.

Lastly, this paper further disputes Pandey's argument that digital divide led to the higher infection rate between migrant workers when cross-referred to Nirmala Ganapathy who observes that while digital divide plays a part in the higher infection rate in the rural migrant workers, it was precisely the irresponsible government policy of locking down the cities and forcing migrant workers to leave within 3 days with no policy to ensure safety during long distance travel that led to the outbreak of coronavirus in the migrant worker community[10].

Hence, the digital divide has not significantly affected the physical health of the migrant workers amidst the pandemic.

5. Conclusion

In conclusion, while digital divide can well be held fundamentally responsible for the financial losses incurred by the migrant workers worldwide due to the inability to WFH, it can hardly be argued the same for the health impact displayed by this paper. This is because of the difference in the fundamental ways how the digital divide has affected the migrant workers. In terms of financial impact, as their jobs typically evolve around manual works such as construction and banquet service, the shutting down of economies will undoubtedly result in a direct loss of income, as in this work cannot expect the construction of bridges and houses to be virtually done. Hence the nature of their works has determined that a direct loss of income will occur. On the other hand, digital divide in health aspect mainly affects the ability to receive information about the pandemic. With the rapid development of telecommunication technologies, information, messages and ideas are being transmitted instantly across the world, there is hardly a barricade hindering people from receiving information as long as one is able to access the internet. This is especially so given the severity of this pandemic, information of the virus is inundating the media outlets globally. However, their ability to protect themselves does not rest much on their knowledge about the seriousness of the virus, but the local government's will as afore explained. Ultimately, migrant workers are at the mercy of local government's policy in a pandemic as they are merely a disenfranchised group with little political rights or influence the legitimacy of the local government and thus can only rely on the government regulations to protect themselves in the face of profit seeking companies. In short, who are they to demand for better accommodations from their employers if the government has kept their eyes closed?

In as much as this work tried to provide a comprehensive analysis of the impacts of digital exclusion, the results could have overlooked other factors that could similarly contribute to what the migrant workers have suffered. One potential area the results would explore in the future is the social implication that may have contributed to the difficulties they faced. For example, the loss of financial income could also be due to the local resident's xenophobia towards migrant workers, especially those coming from the various epic-centers of COVID-19, hence leading a further loss of income even when economies resume operation.

References

- [1] Lee, G.O.M. and Warner, M (2006). The impact of SARS on China's human resources: implications for the labor market and level of unemployment in the service sector in Beijing, Guangzhou and Shanghai. Cambridge Judge Business School.
- [2] Biao Xiang (2020). From Chain Reaction to Grid Reaction: Mobilities & Restrictions during SARS & Coronavirus. University of Oxford, March.
- [3] United Nation Commission for Trade and Development (2020). Coronavirus reveals need to bridge the digital divide.
- [4] Adrian Liem et al (2020). The neglected health of international migrant workers in the COVID-19 epidemic. The Lancet, University of Macau.
- [5] Virnda Shukia (2020). India's digital divide makes the state distant from those who need it most. The Indian Express.
- [6] Annie Kelly (2020). Digital divide 'isolates and endangers' millions of UK's poorest. Humanity United, the Guardian.
- [7] Bai Yun Tao (2020). Investigating the situation in migrant workers dormitories. Channel 8 News Singapore.
- [8] Kirsten Han (2020). Singapore is trying to forget migrant workers are people. Foreign Policy.
- [9] Alex Au (2020). Saving Singapore's Migrant Workers. The Asian Post.
- [10] Nirmala Ganapathy (2020). Coronavirus: India's migrant workers pose major challenge to country's lockdown. The Straits Times.