

THE PROS AND CONS OF LIVING IN A GLOBAL CITY DURING A PANDEMIC: THE COVID-19 EXPERIENCE OF ISTANBUL

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Abstract

Living in a global city during a pandemic is somewhat different from living in other cities. Based on this hypothesis, this empirical paper reports on a wide-ranging survey to provide a comprehensive analysis of the diversified impacts of the coronavirus on global city dwellers. To this end, it examines the social, economic, and psychological changes that the residents of Istanbul, the global city of Turkey, have experienced during the pandemic, and how these experiences differ from the remainder of the country. On a national scale, the findings indicate that the effects of coronavirus have been more deeply felt in Istanbul than in other cities. On a local scale, strong evidence indicates that poorer, lower educated Istanbulites have been more exposed to the negative impacts of the pandemic than other inhabitants of the city.

Keywords: Pandemic, global cities, Istanbul

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Introduction

As Richard Florida (2020) reminds us, “Cities have been the epicenters of infectious disease since the time of Gilgamesh.” Indeed, from the Black Death to the Spanish Flu to SARS to COVID-19 all pandemic diseases have been both inevitable consequences and key shapers of urbanization processes. However, today, in a world where more than half of the world’s population lives in cities and urbanization has occurred on a planetary scale, these two social realities are more intertwined than ever before (Ali and Keil, 2008; Wolf, 2016). What is perhaps newer and more interesting is that the dynamics of viral transmission, the number of confirmed cases, and the consequences, indicate that pandemics are mostly a global city phenomenon;

“A number of significant features of both global cities and of contemporary neoliberal globalization indicate a renewed potential for the emergence and re-emergence of infectious diseases: the speed and ease of global travel; flows of international migration; rapid and uneven urbanization; increasing population density [and so on]” (Harris and Keil, 2008; 36).

Until now, there has been relatively little engagement between global/world cities research and the pandemic. However, following its emergence during late-December 2019 in Wuhan, the COVID-19 crisis has shown that global cities and pandemics are much more closely related than the literature has discussed. First and foremost, global cities, where diverse cross-border flows are centralized (Taylor, 1995), are more vulnerable to global diseases than other cities in many ways (Ali and Keil, 2006; Ruan et al., 2006; Heng, 2013). No matter where they first emerge, pandemic diseases mostly circulate among and through global cities such as New York, London, Singapore, Toronto, etc. (Ali and Keil, 2006). This tendency increases infection risk and means the number of cases is generally higher in global cities than in other cities (e.g., Daily Sabah, 2020). Further, social and economic dynamics and urbanization patterns separate global cities from the rest of the world in terms of risk factors and consequences of outbreaks (Acuto, 2019). Global cities’ population densities and over-urbanization, for example, make their residents more prone to infection risks. Socio-economic factors such as inequalities, income and sectoral polarization, and higher living costs diversify the impacts of pandemics on different classes (Quinn and Kumar, 2014).

In short, confronting a pandemic disease in a global city has different economic, social, and/or psychological consequences to living in any other city. Based on this hypothesis, this paper explores several impacts of the coronavirus on the inhabitants of Istanbul as the only global city in Turkey, and how these impacts differ from the experiences of people living in

other cities in the country. By doing so, the paper also intends to make an empirical contribution to current literature that is conceptualizing the relationship between global cities and pandemic diseases. To this end, through a detailed analysis of online survey data covering about 5700 participants from different cities in Turkey, and by measuring several variables such as income distribution, inequalities, fears, and infection anxieties, this paper discusses the advantages and disadvantages of living in a global city during a pandemic.

In what follows, a brief review of the literature showing how pandemic and global-city research are related will be conducted. Then the methodology section explains the details of the research. This is followed by the results and discussion sections.

Thinking Global Cities and Outbreaks Together

In global and world cities research, diseases have been overshadowed by other topics, such as economics, architecture, and social and political dynamics. However, the global outbreaks that the world has experienced intermittently over the last two decades indicate that global cities are at the center of globalization, urbanization, and pandemic cases (Keil and Ali, 2008; Wolf, 2016; Connolly et al., 2020). In this context, the recent COVID-19 crisis also provides a serious field of observation for this non-comprehensive but gradually growing literature.

During the most recent phase of globalization, the remarkable increase in political, economic, and social exchanges and mobilities have created “myriad flows of information, knowledge, instruction, plans, strategies, direction and personnel that travel between cities” (Taylor, 2013: 301). These flows have been spatially reflected in the world map as a hierarchical network, also known as world city network, where cities operate, link to each other, and are ranked according to the number and diversity of connections (Derudder and Taylor, 2019). However, mobility within this global network is not only limited to endless capital, commodity, or information exchanges; increasing airline traffic between global cities and global immigration to these cities enables viruses to diffuse between these cities over a very short time period (Connolly et al. 2020).

Therefore, it can be argued that global cities “potentially serve as a network for disease transmission” Ali and Keil (2008; 5). The recent spread of SARS and the current spread of COVID-19 indicate that outbreaks follow a route across the world that overlaps with the network of global cities and the number of connections on this network. The outbreaks primarily and mostly circulate between the top hyper-connected global cities, and from there, infections spread to other cities within their national urban systems that have fewer

global connections (Ruan et al., 2006). Hence, people living in global cities are at a higher risk of infection than those living in other cities due to the circulation of viruses and the number of cases.

In addition to their global connectivity, what makes global cities more vulnerable to epidemics are their population densities and built environments full of multi-story apartments, skyscrapers, and mega-infrastructure projects, most notably major airports (Acuto, 2019). This pattern of extended urbanization, where distinctions between city centers, suburban, and rural areas are becoming blurred, inevitably creates a suitable environment for viruses to circulate and spread from rural areas to city centers where millions of people live (Connoly et al, 2020, Keil et al., 2020). Further, considering the over-density of the population in global cities, ensuring the required social distancing to prevent infection is almost impossible (UCL, 2020). Therefore, global cities become more “prone to outbreaks of infectious diseases” (Wolf, 2016; p.2). However, these risks are arguably higher for global cities in the global south, which are often characterized by a higher population density and lower quality infrastructure systems (McFarlane, 2009; Alirol et al, 2010).

Strong divergences in pandemic outcomes can be assumed between global cities and others. There is no doubt that the first and foremost of these differences involves the economic costs of outbreaks. As is well known, one of the most basic functions of the global city is the command center role it plays in the financial and administrative organization of the world economy (Sassen, 2016). While leading global cities like New York, London, and Tokyo undertake these functions on a global scale, secondary global cities like Istanbul, Moscow, and Seoul mostly come to the fore due to their regional managerial characteristics (Csomos, 2017). Global cities are deeply affected by economic meltdowns due to their functions and positions in the global economic order, which can occur for several reasons (Heng, 2013). In a coronavirus pandemic too, they are likely to bear the brunt of the economic loss much more than other cities.

However, this doesn't mean that the potential economic losses in global cities are equally distributed among their inhabitants. In sectoral terms, global cities have been characterized by a radical shift from industry to service economies. This shift has caused a strong occupational polarization between the lower and advanced service sectors, increased income disparities, and sharpened the existent inequalities between different classes (Fainstein, 2001; Timberlake et al., 2012; Crankshaw, 2017; Dorling, 2019). Pandemics may deepen these inequalities dramatically. Namely, positioned at the top of this hierarchy, sectors such as finance and media, where highly skilled-employees earn higher wages, are suitable for remote working without much-change. Hence, white-collar professionals working in these

sectors easily adapted to remote working during the lockdown and carried out their business routines almost as usual (Tanguay and Lachapella, 2020).

However, this was not valid for the lower classes. In sectors such as leisure, tourism, retail trade, in particular, local retailing, a huge proportion of labor force requirements are met by low-skilled (often immigrant) hourly-waged and low-paid workers with no employment security. When global and local human mobility halted, a huge amount of small-local-businesses permanently or temporarily closed (Bartik et al, 2020) and therefore massive layoffs occurred (Frank, 2020). Further, workers in these sectors often have to be physically present at workplaces and are unable to work from home, so this forces them to choose between maintaining employment by taking infection risks or forego their income during pandemics (Quinn and Kumar, 2014).

This implies the existence of a bilateral relationship between pandemics and inequalities. Namely, lower-income people living in global cities are more affected by the economic effects of a disease, and these inequalities worsen conditions for the disadvantaged classes during outbreaks, both physically and mentally (Sparke and Angelov, 2020; Harvey, 2020). As the mobility statistics of some global cities demonstrate, during the coronavirus period, lower-income workers often have to maintain their jobs; however, in wealthier districts, people can obey stay-at-home orders (Cumhuriyet, 2020; Glanz et al., 2020; Valentine-DeVries et al.; 2020) or prefer to move safe vacation towns (Qucaly, 2020). Therefore, the number of cases is higher in regions where economically disadvantaged classes live (NYC, 2020). Further, due to the potential financial losses, infection risks, and even lack of access to affordable healthcare, epidemic-related stress and anxiety are expected to be higher among lower-income people (Quinn and Kumar, 2014).

In sum, global connections, urbanization patterns, economic and demographic characteristics, namely almost everything that makes a city a global city, also plays a vital role in pandemics. From viral spread to viral outcomes, global cities diverge from other cities during outbreaks. Dynamics such as mobility, population density, and over-urbanization provide very favorable environments for disease transmission, and so the numbers of cases are considerably higher. Deeply felt economic crises and inequalities can have destructive impacts, especially on the urban poor, and negatively affect the physical and mental health of city dwellers who confront the outbreak in reality. In conclusion, living in a global city during a pandemic is likely to generate conditions that diverge greatly from other cities. Whether these experiences are deemed relatively positive or negative depends on the socio-economic status of people living in the city.

Istanbul: The Global City and the Pandemic

Today, Istanbul is considered a global city in many respects. Indeed, in retrospect, the city has always been an important city on a world scale, except for a short period during the twentieth century. Since the historical Silk Road, Istanbul has functioned as a gateway between East (Asia) and West (Europe) and been a major trading and finance center. Therefore, the city has been exposed to various infectious diseases in the past such as plague and cholera just as it is today (Boyar and Fleet, 2010; Varlık, 2015). During the nineteenth century, in particular, massive migration influxes mostly propelled by wars and territorial losses often introduced serious infectious outbreaks (Ortaylı, 1986). The political turmoil during the aftermath of the First World War resulted in the collapse of the Ottoman Empire and marked the beginning of a dramatic downturn for Istanbul. The city lost not only its capital city status but also its privileged position in the global system and most of its cross-border connections. This also marked a period when Istanbul became confined within national boundaries for part of the twentieth century and thereby remained relatively free of the effects of global crises and pandemic diseases.

However, since the 2000s, Istanbul began to rise again in the global order (Sassen, 2018). Today, the city is considered one of the foremost secondary global cities (GaWC, 2017), a major regional gateway (ESPON, 2013), and a leading managerial center for the regional operations of global companies (Bhandari and Verma, 2013). Notably, owing to its privileged geographical location, the city sits at the very center of diverse cross-border mobilities, in particular human mobilities. For example, global airline traffic had a vital role in spreading the recent pandemic, and the city ranks among the top twenty cities in the world and the top five in Europe in terms of global connectivity and passenger numbers (ACI, 2019; OAG, 2019).

This inevitably caused Istanbul to be heavily affected by the coronavirus outbreak. Very soon after it emerged in China, coronavirus cases began to appear in Istanbul too. The city was the location of the first coronavirus case detected in Turkey and is where more than half of the total cases in the country occurred. Further, because Istanbul is the only global city in Turkey, as well as its economic capital and the most crowded and densely populated city, the economic, social, and psychological consequences of the pandemic were arguably more deeply experienced in Istanbul than the rest of the country.

Data Collection and Sampling Methods

This research was designed as a quantitative case study developed from wide-ranging survey data conducted on 9–12 April 2020. The survey was circulated on social media

platforms, mostly through researchers' individual and academic networks, and participants were recruited using the convenience sampling method. Among more than 5600 participants, those answering no more than 10% of the survey were excluded and 5538 questionnaires were evaluated in total. Participants mainly consisted of well-educated and middle-class individuals, but all income, education and occupational levels participated in the survey. To enable a robust comparison, the data was divided into Istanbul and other cities; while the former comprised 1944 participants (38%), the latter returned 3594 questionnaires.

Findings

The survey results supported our hypothesis that the coronavirus pandemic had different impacts on Istanbul compared to the rest of the country. One of the most remarkable differences was the density of the cases. The findings indicated that one of the costs of being a global city for Istanbul was the significantly higher rate of infection. As illustrated in the table below (Table-1), 22.3% of Istanbulites witnessed at least one confirmed coronavirus case within their close social circle. This rate, however, dropped below 10% outside of Istanbul.

City	No	Yes	Total
Istanbul	77.7%	22.3%	100.00%
Other cities	91.10%	8.90%	100.00%
Total	86.00%	14.00%	100.00%

($\chi^2(1) = 177.208, p = .000$).

As discussed in the literature, compared to other cities within the same national boundaries, global cities are often characterized by higher income levels and well-educated, white-collar labor forces, mostly working in the private sector. Our results supported these assumptions in no small measure. Firstly, as expected, the average income level in Istanbul was much higher than that of the remainder of the country. Secondly, compared to other cities where the primary source of employment was the public sector (29.6%), the majority of the labor force in Istanbul was agglomerated in the private sector (27.7%). Interestingly, there were no significant differences in education levels; nevertheless, the rate of those with a post-graduate degree was slightly higher in Istanbul.

During the economic and social lockdown, these differences had different consequences for the working-life of city dwellers. According to the data, workers living in Istanbul adapted more comfortably to the new working conditions when the epidemic began to spread across

the country ($\chi^2(1) = 6.274, p = .012$). Therefore, loss of efficiency was seen as significantly less among those working in Istanbul ($\chi^2(1) = 12.054, p = .002$). One possible explanation for this is that the occupational structure in Istanbul is more suitable for remote working than in other cities. Table-2 illustrates that the percentage of workers stating that their jobs allowed working from home was far higher in Istanbul (60.4%) than in other cities (55.3%) ($\chi^2(1) = 11.119, p = .000$).

City	Yes	No	Total
İstanbul	60.40%	39.60%	100.00%
Other cities	55.30%	44.70%	100.00%
Total	57.30%	42.70%	100.00%

($\chi^2(1) = 11.754, p = .000$)

Although the income level was much higher in Istanbul and working from home was easier during the lockdown, the survey results revealed that Istanbulites were substantially more concerned about their economic conditions than the citizens outside of the city ($\chi^2(1) = 3.394, p = .001$). Quite likely, these concerns were also triggered by fears of unemployment, which were much higher in Istanbul than the rest of the country ($\chi^2(1) = 50.511, p = .000$). It is not surprising that people living in Istanbul were more pessimistic about their future than others ($\chi^2(2) = 12.245, p = .000$). This pessimism was also revealed in a survey question asking participants whether they believed that the crisis would be overcome within the next six months. Whereas more than half of the other cities' dwellers (52.7%) gave a positive response to this question, in Istanbul, optimists consisted of less than 50% of total participants ($\chi^2(4) = 13.979, p = .007$).

Further, upon deeper analysis, the data also suggested that class contradictions are more crystallized in the global city and that economic inequalities dramatically worsen the financial, physical, and psychological conditions of the disadvantaged classes. The most striking evidence of this hypothesis was that about 90% of Istanbulites within the lowest income bracket either lost their jobs before or during the pandemic or were concerned about being dismissed. Therefore, they were much more worried about their future and pessimistic about the potential economic consequences of the outbreak ($\chi^2(4) = 23.331, p = .000$). Nonetheless, the middle and upper-middle classes, a considerable number of whom were white-collar professionals with a higher education, had the least worries about the possible economic costs of the coronavirus.

Another analysis based on differences in education level indicated similar polarizations and divergences. As illustrated in the table below, the majority of Istanbulites with a secondary education or lower stated that they would not be able to meet their economic needs should lockdown persist for more than two months. The greatest majority of participants who lost their job during the pandemic were workers categorized in this group. Unsurprisingly, a higher level of education meant less economic anxiety and fear of unemployment, to a significant extent. Well-educated Istanbulites were the most comfortable group in the economic sense because their jobs allowed them to work at home, as will be seen below.

Table 3. The economic conditions of Istanbulites during the pandemic by education level

	Do you feel any concerns about ensuring your basic needs?		How long do your savings allow you to maintain your life without working?		What is your current employment status?		
	No	Yes	No	A few months at most	Still working, no concern	Dismissed during the pandemic.	Unemployed before the pandemic.
Secondary education and below	42.2	57.1	46.1	27.3	23.4	6.5	16.2
Graduate and Post-Graduate	61.3	37.9	24.4	34.3	39.7	2.5	13.6

Survey results also indicated that individuals’ occupations shaped how they were psychologically affected by the coronavirus. Here, to provide an accurate comparison, the data were separated according to whether the participant’s profession permitted remote working. This was one of the ways to measure how occupational polarization in a global city affects the lives of workers during a lockdown. This is because, as discussed in the literature, the polarization between upper and lower service sectors in global cities creates further separation during a pandemic. However, while technology and information-based advanced sectors have sufficient flexibility for remote working, people working in lower sectors are generally unable to stay-at-home if they want to remain employed. When analyzed in this way, the findings indicated that those individuals eligible to work remotely in Istanbul had fewer pandemic-related psychological problems than others (See Table-4).

Table 4. The problems of Istanbulites during the pandemic according to the availability of telecommuting						
Psychological Effects of the Outbreak	Is Your Job suitable for working from home?	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed P value)
I get hard to maintain my daily routine	No	478	3.39	1.283	0.059	0.03
	Yes	662	3.21	1.264	0.049	
I became getting angry more often and quickly	No	479	3.52	1.328	0.061	0.000
	Yes	660	3.27	1.273	0.05	
I'm afraid of getting infected	No	473	3.3	1.36	0.063	0.008
	Yes	662	3.03	1.308	0.051	
I feel worthless	No	472	2.55	1.342	0.062	0.001
	Yes	655	2.34	1.221	0.048	
I am afraid of not to afford my basic needs	No	474	3.47	1.379	0.063	0.000
	Yes	660	2.99	1.373	0.053	
My health condition got worse during this period.	No	471	2.57	1.269	0.058	0.040
	Yes	649	2.37	1.166	0.046	
I often feel desperate	No	466	3.12	1.384	0.064	0.000
	Yes	650	2.88	1.336	0.052	

As illustrated in the table, the most striking difference created by the availability of flexible telecommuting was economic concerns which were much higher for those who were unable to stay-at-home. These individuals also expressed more fear of the infection risk compared to telecommuters. Other questions measuring the social and physiological condition of participants during the restrictions provided similar results. Workers who had to physically commute to work felt angrier, greater unease, and less healthy than before the pandemic. However, individuals working from their homes had far fewer problems. In short, given the overall table, it can be assumed that the economic and psychological burden of living in a global city during a pandemic is carried by those who are disadvantaged in terms of vocational status, educational attainment, and income distribution.

Discussion and Conclusion

Globalization has accelerated the spread of epidemic diseases worldwide, increased the density and the number of cases, and deepened their economic, social, and psychological impact. However, this does not mean that these impacts are distributed equally on a world scale. Global cities are at the center of many dimensions of globalization and experience the effects of epidemic diseases more than other cities in the world (Ali and Keil, 2008). Istanbul, like many other global cities, has been seriously affected by the coronavirus. About half of

the total cases in Turkey have occurred in Istanbul. Further, Istanbul became the major coronavirus gateway to other cities, as confirmed by the survey results. These findings reveal that the percentage of those with infected cases in their social circle was more than double in Istanbul compared to the rest of the country.

A strong divergence in the consequences of the pandemic between Istanbul and other cities was also revealed. In terms of occupational structure, private sector employment, and information-based and highly qualified professional jobs that permitted telecommuting were agglomerated in Istanbul. Similarly, the income comparison indicated the average wealth in Istanbul differed positively from the rest of the country. Therefore, economic concerns due to the pandemic might have been fewer in Istanbul; however, the results indicated the opposite. The people of Istanbul reported higher anxiety levels about providing for their basic needs than those living in other cities. This can be explained by the higher costs of living in global cities, and perhaps to a greater extent, by global cities' higher vulnerability to financial instability.

Our detailed analyses of the impacts of coronavirus on the people of Istanbul according to education, income, and profession differences, overlapped with the findings of current literature arguing that lower classes are more negatively affected by disease (Quinn and Kumar, 2014; Sparke and Angelov, 2020). Therefore, well-educated and high-earning workers with jobs generally more suitable for telecommuting were less negatively affected by the lockdown (see also, Tanguay ve Lachapella, 2020). As highlighted in the previous section, these divergences shaped not only economic conditions and concerns during the pandemic but also social and psychological anxieties, which were significantly higher among the lower-class people of Istanbul.

To conclude, living in a global city during a pandemic offers some advantages on the one hand, but serious costs on the other. One of the most dramatic costs is global cities' higher infection risk during pandemics than other cities. This risk also undermines the psychological well-being of global city dwellers. However, for some inhabitants such as white-collar professionals, and those with a higher education, and higher income levels, global cities provide some advantages during a lockdown. Yet, for the lower classes and those who are unable to work remotely, living in a global city can entail serious economic losses, unemployment, social problems, and psychological breakdown.

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