



POLICY REPORT

Social Attitudes, Behavior, and Consequences surrounding COVID-19 in Qatar

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The Social and Economic Survey Research Institute (SESRI), a social scientific survey research initiative of Qatar University, was established in October 2008 with enthusiastic support from the leadership of Qatar University. SESRI's mission is to provide sound and reliable data to guide policy formulation, priority-setting, and evidence-based planning in the social and economic sectors.

Report prepared by:

Dr Justin Gengler, Research Associate Professor Dr Noora Lari, Policy Department Manager Buthaina Al-Khelaifi, Senior Research Assistant Maryam F. Al Thani, Senior Research Assistant Rima Charbaji El--Kassem, Project Manager

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Executive Summary

Amid the outbreak of the contagious novel Coronavirus (COVID-19), public risk perception and behavioral responses are crucial for preventing the spread of the epidemic. The success or failure of states' preventive measures—e.g., social distancing, quarantine, and vaccination—depends upon compliance from the general public. Yet, knowledge of public risk perceptions and behavioral responses surrounding the COVID-19 epidemic is still emerging, and clear quantitative data remain limited. This report summarizes the results of a SESRI study that investigated social attitudes, behavior, and consequences surrounding COVID-19 in Qatar. An original online survey was conducted in both Qatar and a comparison case (Kuwait) during a 3-month period from November 2020 to January 2021. A total of 4,597 citizens and residents of Qatar aged 18 years and older were recruited to participate, with 2,282 completing the full interview. A total of 2,671 citizens and residents of Kuwait (1,184 completed) also took part in the survey to provide a regional baseline.

Key findings from the survey include the following:

- There is a gap in knowledge between citizens and expats in Qatar, and between men and women, with the former possessing much lower levels of knowledge about COVID-19.
- The perceived risk posed by COVID-19 declined substantially in Qatar over the data collection period from November 2020 to January 2021.
- Qatari citizens view COVID-19 as less serious, on average, than expatriates in Qatar.
- Qatari citizens report substantially lower levels of adherence to social restrictions, especially limits on social gathering, compared to non-citizens.
- Reported psychological stress due to COVID-19 is higher among noncitizens compared with Qatari citizens.
- Low-income and unemployed individuals in Qatar suffered higher psychological distress than their counterparts.
- Women in Qatar experienced substantially higher levels of mental distress compared with men.

- Seventy percent of respondents in Qatar said that the COVID-19 crisis has negatively affected their household income.
- Social stigma of COVID-19 survivors is higher among females than males in Qatar.
- Women in Qatar report facing new challenges during the COVID COVID-19 pandemic, as they manage work and an increase in family and caregiving responsibilities; therefore, they opt into remote work and schooling more than their male counterparts.
- Non-citizens in Qatar are less likely than citizens to opt into remote work and schooling, fearing loss of unemployment and cuts to salary or benefits.
- Women in Qatar are more likely than men to prefer students to attend school.
- Citizens and non-citizens in Qatar both evaluated the state's reaction to the pandemic to be appropriate.
- Greater knowledge of COVID-19 is associated with more negative views of the public's reaction to the crisis.
- Both citizens and noncitizens in Qatar prioritize state spending on healthcare.
- Individuals in Qatar give higher vaccine priority to those in medical need, as compared to individuals able to pay for access.
- Individuals in Qatar who perceive COVID-19 as more dangerous, are more likely to prioritize for-pay access to the vaccine, regardless of their health status.

Introduction

The novel Coronavirus COVID-19 was first observed in December 2019 in Wuhan, China and has since spread quickly across the globe (Sohrabi et al., 2020). On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. To counter the spread of COVID-19, countries around the world, including Qatar and other Arab Gulf states, have implemented restrictions on social interaction and other aspects of life that require significant and difficult changes to individuals' behavior.

Significant impacts on many aspects of social life have continued throughout 2020 and now 2021, including interpersonal interaction, work, leisure, hygiene, and travel. COVID-19 has heightened levels of personal stress both directly, due to worries over infection, and indirectly, as a result of social isolation, lost income, and other causes. Some populations are particularly susceptible to increased stress levels, including the elderly, those with chronic and mental health diseases, children and adolescents, and healthcare workers treating Coronavirus victims.

Over the past four decades, a large number of empirical investigations have examined public risk perceptions, psychological and social distress, and behavioral responses associated with epidemic outbreaks. These studies have found variation in responses to epidemics according to age (Folkman, Lazarus, Pimley, & Novacek, 1987), socioeconomic status (Kunz-Ebrecht, Kirschbaum, & Steptoe, 2004), and employment type (Norbeck, 1985), among other factors.

Prior research (e.g., Caleo et al., 2018; Webster et al., 2020) has also identified individual-level predictors of adherence to quarantine protocols, including: demographic and employment characteristics, knowledge about the disease outbreak and quarantine protocol, the length and practicalities of quarantine, the perceived benefit of quarantine, the perceived risk of the disease outbreak, experience with and trust in healthcare workers and the health system, and sociocultural factors such as social norms, cultural values, and law abidance.

However, the applicability of previous results to the case of COVID-19 is limited by the fact that preventive measures to contain the spread of Coronavirus far exceed the use of quarantine, as considered in previous research. Studies of social behavior in the time of COVID-19 must

assess public attitudes toward and compliance with unprecedented, wide-ranging changes to social behavior spanning inter-personal interaction, work, leisure, travel, and personal hygiene. Due to the novelty of the Coronavirus outbreak, quantitative studies of risk perceptions, behavioral responses, and trust in governmental policy surrounding COVID-19 remain very rare. For instance, Caria et al. (2020) use a global online cross-sectional survey to study how adherence to COVID-19 social restrictions is influenced by trust in government information and public health institutions. Meanwhile, Bodas and Peleg (2020) have found that individuals are more likely to comply with Coronavirus preventive measures when they believe that they will be compensated financially from lost work income, using survey data from a single country case. Until now, only two preliminary survey-based studies have examined public perceptions and behavior in Qatar surrounding COVID-19, and each has important limitations. The first study, conducted by the Social and Economic Survey Research Institute (SESRI) at Qatar University, is limited in focus and did not investigate views, beliefs, or behavior related to COVID-19 social restrictions. In fact, the short telephone survey was carried out prior to the implementation of strict social distancing measures in Qatar in mid-March 2020.

The second set of data on public attitudes in Qatar regarding COVID-19 come from the International Survey on Coronavirus (Caria et al., 2020). In late March-early April 2020, this online survey collected over 150,000 responses from residents of dozens of countries, including Qatar. The survey asked about adherence to social restrictions, agreement with social distancing policies, and trust in the government's response to COVID-19. However, the project did not have direct involvement from scholars in Qatar, and its questions were not tailored to the specific societal context and preventative policies in place in Qatar.

In view of the limitations of existing data, SESRI designed and implemented an original survey that examined social attitudes, behavior, and consequences surrounding COVID-19 in Qatar. The online survey was conducted in both Qatar and a Gulf comparison case (Kuwait) during a 3-month period from November 2020 to January 2021. A total of 4,597 citizens and residents of Qatar aged 18 years and older were recruited to participate, with 2,282 completing the full interview. A total of 2,671 citizens and residents of Kuwait (1,184 completed) also took part in the survey to provide a regional baseline.

The survey's main objectives were the following:

- Review existing studies addressing public risk perceptions, behavioral responses, and determinants of compliance with government preventive measures during outbreaks of the contagious novel Coronavirus (COVID-19);
- Measure and track the level of COVID-19-related public knowledge, risk perceptions, attitudes and behavioral responses, and psychological distress in Qatar over time;
- Examine trends in public attitudes toward the state's response to the COVID-19 outbreak
 in Qatar, and intentions to conform to mandated preventative measures;
- Assess psychological distress due to COVID-19, perceived susceptibility to the virus, and preventive measures taken among individuals in Qatar;
- Identify predictors of individual-level compliance with state-mandated preventive measures in Qatar; and
- Compare the character and drivers of social behavior surrounding COVID-19 in Qatar to an instructive regional comparison case (Kuwait), and identify any differences.

Thus, the key motivation of this study was to fill a gap in reliable data on public attitudes and behavior surrounding COVID-19 in Qatar, since until now such data have not been available to researchers or policymakers. Similarly, by conducting our survey both in Qatar and Kuwait, we aimed to be able to better interpret our substantive findings from Qatar within the larger context of the Gulf region. Although the novelty of the COVID-19 pandemic precludes direct comparison of our data to previous data, our research design includes a comparison case—the State of Kuwait—that affords a meaningful baseline to which to compare the attitudes, behaviors, and statistical associations between variables observed in Qatar.

Findings

1 PUBLIC KNOWLEDGE AND RISK PERCEPTIONS

1.1 Knowledge of COVID-19

A first survey section gauged respondents' level of knowledge about COVID-19 by asking a set of true/false questions. Figure 1 summarizes responses from Qatar and Kuwait, according to respondent citizenship (citizens versus non-citizens). When answers to the knowledge items are combined and grouped by survey country, the data reveal that knowledge of COVID-19 (measured on a 0-5 scale) is significantly lower among citizens in Qatar as compared to expatriates in Qatar, but not in Kuwait.

Similarly, there is a statistically significant gap in COVID-19-related knowledge in Qatar between men and women, with women being more knowledgeable on average, even after controlling for relevant factors such as education, age, health, and so on. Overall, the data show that a number of individual-level factors are associated with greater knowledge of COVID-19: being female, being more educated, and non-citizen status (in Qatar only). Age is only weakly associated with greater COVID-19 knowledge.

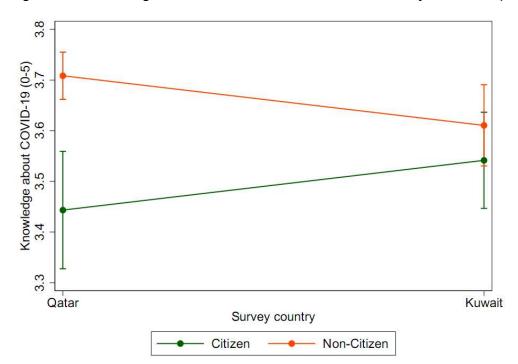


Figure 1. Knowledge of COVID-19 in Qatar and Kuwait, by Citizenship

Finally, trend (lowess moving average) analysis shows that knowledge about COVID-19 has increased steadily over the surveying period, especially in Qatar. This is illustrated in Figure 2.

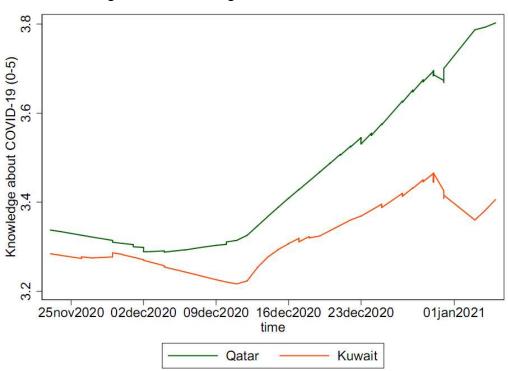


Figure 2. Knowledge of COVID-19 over Time

In the wider context of the COVID-19 pandemic, our data were collected over a relatively short period; and yet they show a clear upward trend in public knowledge about the pandemic. Presumably, if data existed from earlier in 2020, they would show an even steeper increase in knowledge as the public (and experts) gradually learned more about the virus. However, even our three month cross-section of data is sufficient to demonstrate a qualitative gap in knowledge between citizens and expats in Qatar, and between men and women, with the former possessing substantially lower levels of objective knowledge about COVID-19.

Moreover, these gaps in knowledge based on citizenship and gender are not observed in Kuwait, suggesting that they do not result from structural factors common to other (Gulf) societies but are somehow rooted in the Qatar context specifically. As demonstrated in this report, knowledge about the virus is a significant predictor of other attitudes and behaviors of individuals in Qatar, including risk perceptions and adherence to preventative measures, and so disparities in COVID-19 knowledge based on gender, citizenship, or other factors can have real-world impacts.

1.2 COVID-19 Risk Perceptions

In another section of the survey, respondents were asked to rate the danger to personal health posed by different types of afflictions and accidents, in order to understand the perceived risk or seriousness attached to COVID-19 in Qatar, related to other types of health emergencies. This validated, seven-item scale included infection by COVID-19 alongside: cancer, the flu, a car accident, food poisoning, a heart attack, and an accident at home. The following results consider the relative risk assigned by individuals to COVID-19 compared to an index (average) of the six aforementioned items.

Results show, first, that COVID-19 is viewed as less serious by Qataris as compared to non-Qataris; but no such difference exists in Kuwait. Second, females in both countries tend to view COVID-19 as less serious, but this difference is not statistically significant. As shown in Figure 3, an individual's tendency to perceive COVID-19 as more dangerous relative to other medical emergencies is associated with the following factors in order of importance: non-citizen status, objective knowledge about the virus, and age. Conversely, more educated individuals, individuals in Qatar, women, and healthier individuals are associated with perceptions of COVID-19 as being less dangerous. Trend analysis shows that fear of Coronavirus has decreased in Qatar but has spiked in Kuwait around the beginning of 2021.

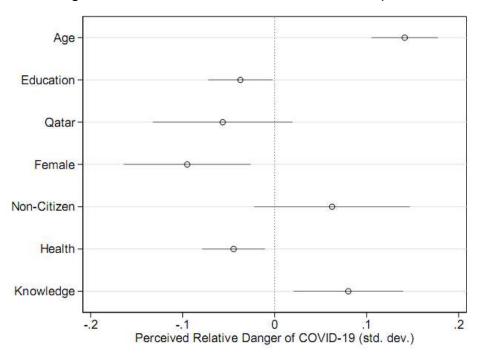


Figure 3. Correlates of COVID-19 Risk Perceptions

Our findings show that the perceived risk posed by COVID-19 declined substantially in Qatar over the data collection period from November 2020 to January 2021. As with knowledge, data prior to this period are unavailable, but would likely show a longer-term decline in risk perceptions. Meanwhile, risk perceptions in Kuwait have deviated substantially from those observed in Qatar, spiking after mid-December. It is possible that this drastic shift in perceptions was caused by the closure of the country's land, sea, and air borders around that time, due to concern over the transmission of a new viral strain of COVID-19 from the United Kingdom. If such is the case, the findings would illustrate how local changes or differences in policy can have dramatic impacts on public attitudes toward the Coronavirus pandemic.

Beyond change over time, our data show an analogous citizenship-based discrepancy in risk perceptions of COVID-19 in Qatar that was observed in the case of knowledge: our sample of Qatari citizens views COVID-19 as less serious, on average, than expatriates in Qatar. Also once again, this difference is not witnessed in Kuwait, suggesting a local explanation for this variation in beliefs between Qataris and non-Qataris.

Finally, it is instructive to reiterate the finding that, following years of age, the strongest determinant of COVID-19 risk perceptions in Qatar is one's level of objective knowledge about the virus. The more a person knows about COVID-19, in other words, the more likely s/he is to believe that it poses a serious health risk. The relative lack of knowledge about COVID-19 among Qataris compared to non-Qataris, therefore, is likely one key factor why Qatari citizens tend to view Coronavirus as less dangerous.

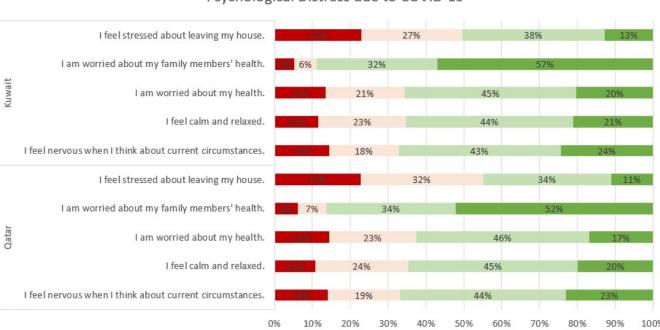
2 Personal and Social Effects

2.1 Psychological Stress due to COVID-19

The COVID-19 pandemic is known to have had significant negative impacts on mental health globally. Our data show that psychological stress because of COVID-19 declined modestly over the data collection period in both Qatar and Kuwait, with the reported mental distress decreasing precipitously during the winter holiday period at the end of December and in early January. Presumably, this reflects the fact that many individuals were able to engage in leisure activities, potentially including travel abroad, a finding that draws attention to the need for pleasurable activities and occasional breaks from work and schooling as ways of coping with the pandemic.

The survey utilized a five-item validated scale to measure psychological stress as a result of the COVID-19 pandemic. The responses across the two surveyed countries are reported in Figure 4.

Figure 4. Psychological Distress due to COVID-19



Applies somewhat

Applies very much

Does not apply somewhat

Does not apply to all

Psychological Distress due to COVID-19

Figure 5 shows that in both surveyed countries, the data evidence a substantial discrepancy in the views and experiences of how a pandemic affects the psychosocial well-being of citizens in Qatar and Kuwait compared with the respective non-citizen populations of these countries. The overall mean score representing the consequences of psychological stress indicated higher distress levels (1–4 scale) among noncitizens compared with citizens, whereas both citizens and expats in Qatar report lower levels of psychological stress compared with their respective peers in Kuwait.

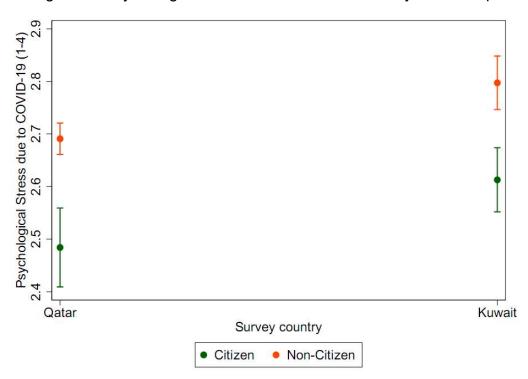


Figure 5. Psychological Distress due to COVID-19 by Citizenship

Generally, the factors associated with the pandemic that cause a drop in psychosocial well-being include isolation, bereavement, fear, and loss of income. Non-citizens are more affected because they have limited options when it comes to addressing these challenges. The same is predicted for non-citizens already facing great vulnerabilities or challenges, in which their mental health condition is affected or their existing mental health issues are worsened. One could also speculate that citizenship-based disparity is due partly to the additional stress of economic insecurity (and perhaps that related to immigration status) felt among non-nationals.

Citizens in Qatar and Kuwait report markedly lower levels of psychological stress compared with expatriates, a gap that may be attributed to differences in COVID-19 knowledge and risk perceptions. Another explanation is that citizens may, on average, be more likely to possess the economic resources and practical (legal) ability to engage in stress-relieving activities, such as travel abroad or remote work and school. Finally, the difference may partly be due to the fact that many non-citizens will have remained away from their home countries (and potentially families) for an extended period.

Another observed difference in stress levels is between men and women, with women in both Kuwait and Qatar (but most especially in the latter) experiencing substantially higher levels of mental distress compared with men. This may partly be attributed to their experience of the lockdown, their remote work status, and the additional challenges associated with work–family balance, the domestic responsibilities of women both in general and during the pandemic, and, once again, the aforementioned gender-based gap in knowledge about COVID-19.

Unemployment was independently associated with greater psychological distress; those who were unemployed had higher stress levels than those who were employed. The unemployed might have experienced potential financial strain and loneliness during the crisis. As seen in Figure 6, among both employed and unemployed respondents, the mean stress scores for Qatar remain lower than those for the respective groups in Kuwait.

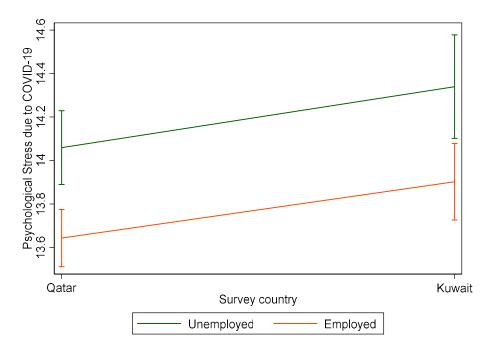


Figure 6. Psychological Distress due to COVID-19 by Employment Status

It is worth noting that the higher psychological stress level seen in both Kuwait and Qatar indicates a trend that is related to the income level. In both countries, those with lower income had higher mean stress scores compared with those with modest to high income. The implication is that for low-income-earning individuals and families, the COVID-19 crisis disproportionately affected their finances, leading to greater psychological stress. This implies that income levels

are associated with ease in dealing with mental disorders, and a decrease in income level is therefore linked with a higher risk for anxiety.

In addition, the mean stress scores of those with modest to high income were similar in both countries, but those with low income in Qatar had significantly lower mean stress scores than those with low income in Kuwait. A potential explanation is that individuals living in Qatar might have a higher absolute income level compared with those living in Kuwait.

The COVID-19 crisis also had a significant impact on the stress levels of young people compared with older-age individuals. A great variation between the two countries is evident among respondents who were divorced, separated, or widowed. The reason for this can be associated with the difference in situational contexts between the two countries as far as coping with the stress caused by COVID-19 is concerned. The findings also showed that adults in generally poor health had higher mean stress scores compared with those who had good/excellent health in both countries. The mean scores of those with good to excellent health were similar in both countries, but those with poor to fair health in Kuwait had higher mean stress scores compared with those with poor to fair health in Qatar.

Other demographic, attitudinal, and health-related variables related to greater psychological distress because of COVID-19 include pre-existing health conditions, greater knowledge about COVID-19, and greater risk perceptions of COVID-19. Notably, older individuals report lower levels of stress compared with younger individuals in our sample. Lastly, the survey indicates that stress because of COVID-19 generally declined in both countries during the survey period, with a precipitous decrease around the new year. This resulted perhaps from increased travel, holiday, or other leisure time activities during this period.

2.2 Impact of COVID-19 on Domestic and Family Life

The respondents were asked some questions about how COVID-19 has affected their family and domestic life. Our survey results illustrate that the impact of COVID-19 on various family dynamics shows a trend that is common for the two countries in terms of financial security, management of household and work duties, and marital relations. As reported in Figure 7, the most commonly reported negative effect was a decrease in household income. A combined 57% in Kuwait and 70% of respondents in Qatar said that their income suffered as a result of the pandemic. One-third of the respondents in both countries reported that they struggled to be productive at work (or working from home) because of childcare responsibilities. Around 20% in Qatar and Kuwait said that they hired help to assist with household tasks. More positively, relatively few respondents reported that COVID-19 had a negative impact on their family relationships.



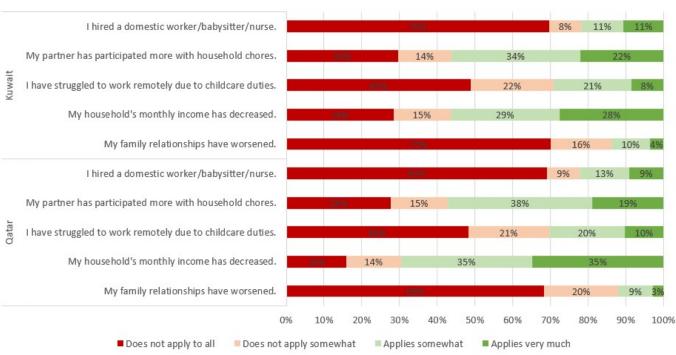


Figure 8 shows that compared with respondents who were Qatari and Kuwaiti citizens, those who were noncitizens in both countries had higher mean scores, reflecting more adverse

impacts on their family dynamics because of COVID-19. The COVID-19 crisis also deepened preexisting gender inequalities, as female respondents, compared with their male counterparts, had a higher mean score, denoting a higher adverse impact of COVID-19, because their unpaid care work increased during the crisis.

Additionally, those who were never married or divorced, separated, and widowed had lower mean scores, indicating that their family dynamics were affected less adversely than those who were married. The latter group has high mean adverse family dynamics scores, which might be because the pandemic changed or influenced their relationship dynamics, conflicts, the juggling of work and childcare responsibilities, and the distribution of care work between married couples.

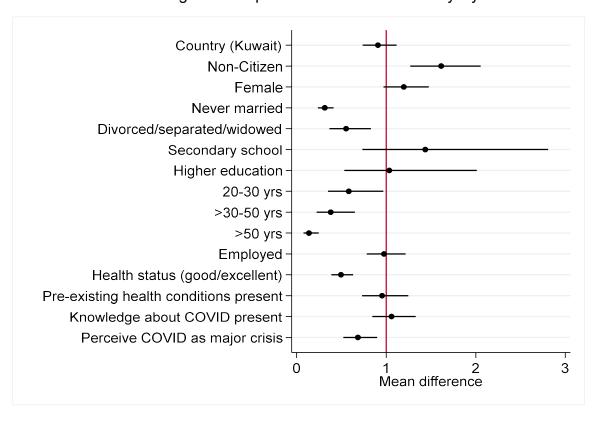


Figure 8. Impact of COVID-19 on Family Dynamics

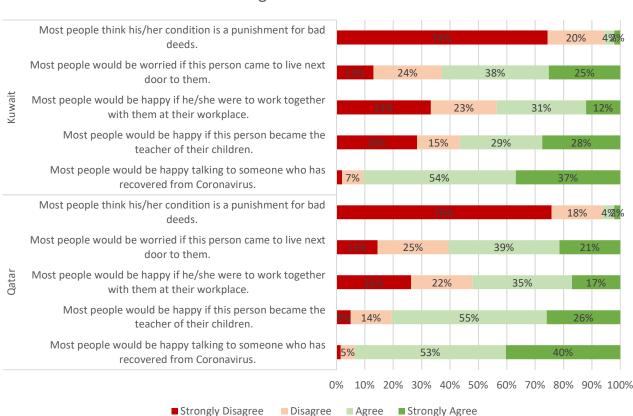
Having a source of income means an increased ability to handle family dynamics and challenges, given that it is quite normal that the impact of the COVID-19 crisis can be observed in family dynamics and mental health in low-income households. The respondents in Qatar and Kuwait who were unemployed had a higher mean adverse family dynamics score than those who were employed, as unemployment during the crisis can have a negative effect on family life

because of the inability to find work during the lockdown. In this situation, individuals have limited options in relation to their financial security, which, in turn, affects their marital relations. The trend remains consistent in both Qatar and especially among respondents from Kuwait; those with low income had higher mean scores for adverse family dynamics than those with modest to high income as a result of COVID-19.

2.3 Social Stigma

Anxiety as a result of lockdowns, lack of knowledge surrounding COVID-19, and fear of catching the disease has given rise to stigma toward COVID-19 sufferers and survivors worldwide. Stigma can make it more difficult to control the spread of an outbreak. Fearing social stigma, people may be more likely to hide symptoms of illness or refrain from seeking immediate healthcare. Our survey assessed respondents' perception of reintegration of former COVID-19 sufferers. Figure 9 summarizes responses from Qatar and Kuwait.

Figure 9. Social Stigma of COVID-19 Survivors



Social Stigma of Covid-19 Survivors

When answers regarding social stigma are combined into an additive index and grouped by survey country, the data reveal that there is no statistically significant difference between citizens' and non-citizens' perception on the reintegration of COVID-19 sufferers in Qatar or Kuwait. This may reflect the fact that the two countries have a highly developed and free healthcare systems that are available to citizens and non-citizens.

Meanwhile, social stigma toward COVID-19 survivors is higher on average among females as compared to males in both Qatar and Kuwait, and this difference is statistically significant in Kuwait as shown in Figure 10. In general, the main reason females and males experience different level of stigma is due to the fact that the society assigns them different gender roles. Females are usually expected to fill the role of the caretaker and the household manager in addition to their professional responsibilities. This expectation is even greater if they have kids. Greater stigmatizing by females during the COVID-19 pandemic could perhaps be explained by the additional responsibilities that this pandemic imposed on them. Females with children had no choice but to take on additional childcare responsibilities (such as homeschooling and home entertaining) that are often shared unequally with their partners especially in Kuwait, which was implementing a distance education system during the time of the survey.

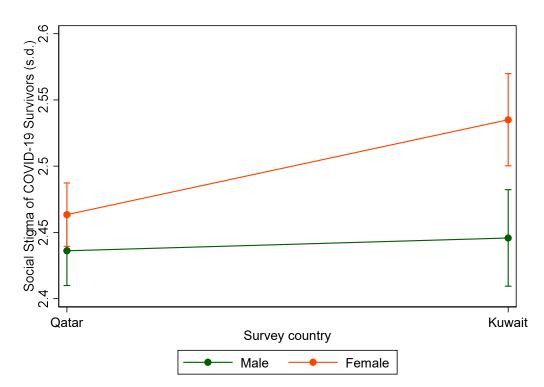


Figure 10. Social Stigma of COVID-19 Survivors, by Gender

Figure 11 depicts the impact of different variables on social stigmatization of COVID-19 survivors. As can be seen, the following variables have a statistically significant positive effect on stigmatization toward COVID-19 survivors: gender (female) and perceived danger posed by COVID-19. Intense feeling of fear and anxiety may lead to negative attitudes toward COVID-19 sufferers among respondents who perceived the high severity of the pandemic. Notably, non-citizen status has a statistically significant negative effect on public stigmatization against COVID-19. One potential explanation is social contact: Non-citizens were more likely to opt-out of remote working due to their fear of job loss amid the worldwide economic downturn; consequently, their social interactions, including with former COVID-19 sufferers, may have debunked some common misconceptions that lead to social stigma.

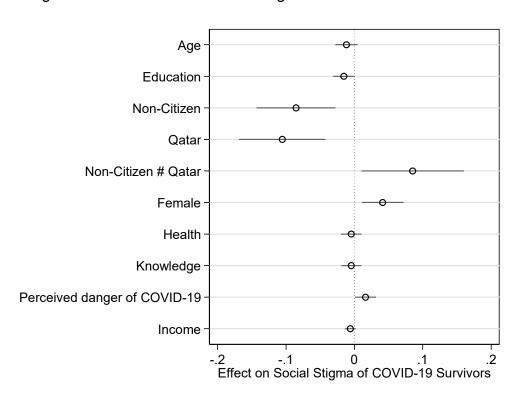


Figure 11. Correlates of Social Stigma of COVID-19 Survivors

The novel COVID-19 has provoked social stigma and discriminatory behavior because there are many unknowns surrounding transmission and a possible cure. Time-series analysis shows that public stigmatization against COVID-19 survivors has gradually declined over the survey period in Qatar. This decrease is maybe due to the fact that Qatar has achieved a significantly low mortality rate in comparison to other countries due to the extensive testing and world-class public health system. Additionally, over time, government and the non-governmental organizations worked hard to build confidence and trust by providing appropriate and reliable information on COVID-19 transmission and prevention. In Kuwait, meanwhile, public stigmatization against COVID-19 survivors gradually decreased over the study period until mid-December, before increasing sharply at the beginning of January amid the second wave. This is illustrated in Figure 12.

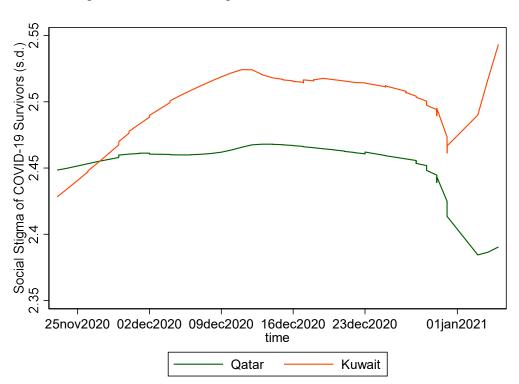


Figure 12. Social Stigma of COVID-19 Survivors over Time

3 PREVENTATIVE MEASURES

3.1 Adherence to COVID-19 Preventative Measures

The survey asked respondents to report how often they engage in different activities associated with the suppression or spread of Coronavirus, namely mask-wearing, hand-washing, and social gathering. Respondents were also asked the extent to which they have chosen to work remotely or kept their children home from school out of concerns over transmission of COVID-19.

As depicted in Figure 13, the vast majority of respondents in both Qatar and Kuwait reported regularly cleaning their hands and wearing masks, but only around one-third in each country abstained from social gatherings during the surveying period. Also, more than 40% of respondents in Qatar reported having kept their children home from school due to COVID-19, while 30% said they chose to work from home.

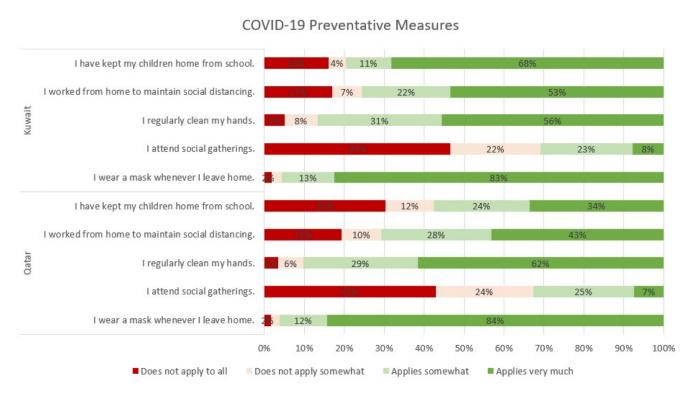


Figure 13. Adherence to COVID-19 Preventative Measures

Results indicate that, in both Qatar and Kuwait, citizens are much less likely to engage in preventative measures (1-4 scale) as compared to expatriate residents. Meanwhile, although adherence to COVID-19 restrictions is slightly lower among men than women in both Qatar and Kuwait, this difference is not statistically significant.

Figure 14 summarizes the impact of different variables on individual adherence to COVID-19-related preventative measures. As can be seen, the following variables have a statistically significant positive effect on adherence, in order of substantive importance: education, gender (female), age, COVID-19 risk perception, and non-citizen status (in Qatar and Kuwait). Notably, self-reported health status does not independently predict adherence to preventative measures.

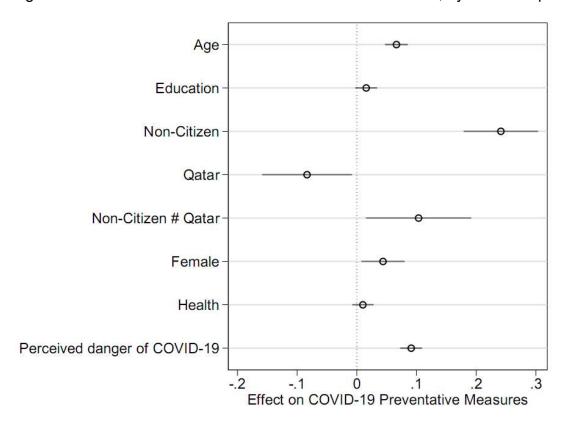


Figure 14. Adherence to COVID-19 Preventative Measures, by Citizenship

Time-series analysis shows that adherence to COVID-19 restrictions has gradually declined but not changed substantially in Qatar over the survey period, whereas in Kuwait observance of Coronavirus restrictions declined substantially around the new year. This change may have coincided with increased travel and social gatherings marking the beginning of 2021. Thus, adherence to COVID-19 preventative measures waned only slightly in Qatar over the data collection period, although a noticeable dip was observed around the winter break period. In Kuwait, adherence to COVID-19 social restrictions largely tracked that in Qatar until the winter break, when adherence there slipped substantially.

Our data on adherence to COVID-19 preventative measures show the largest discrepancy based on citizenship of any indicator considered in our survey. This is true of both Qatar and Kuwait. In both countries, citizens report substantially lower levels of adherence to social restrictions, especially limits on social gathering, compared to non-citizens. Notably, this citizenship-based gap in compliance is even larger in Qatar than it is in Kuwait. The fact that such a discrepancy applies to social gathering but not other measures such as mask-wearing or hand-washing, suggests that the higher levels of non-compliant behavior among citizens compared to non-citizens is not due to lower levels of knowledge of risk perceptions about COVID-19, but some other factor(s).

Apart from citizenship, the other factors associated in our data with compliance with COVID-19 preventative measures in Qatar, are well-established in the literature. These include age, education, gender, health status, and risk perceptions.

3.2 Remote Work and Schooling

One of the most common public health responses to control the global COVID- 19 pandemic has been social distancing. Qatar and Kuwait made great efforts to confront the pandemic and to reduce its negative effect. Whilst Kuwait was implementing a distance education system during the time of the survey, a blended learning system was being followed in schools across Qatar. Figure 15 summarizes the extent to which respondents have chosen to work remotely or kept their children home from school in Qatar.

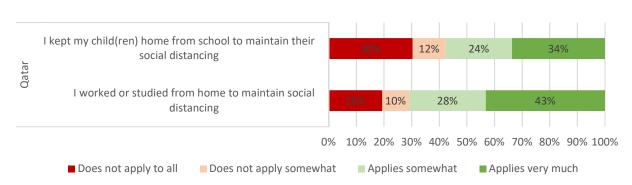
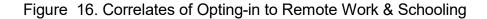


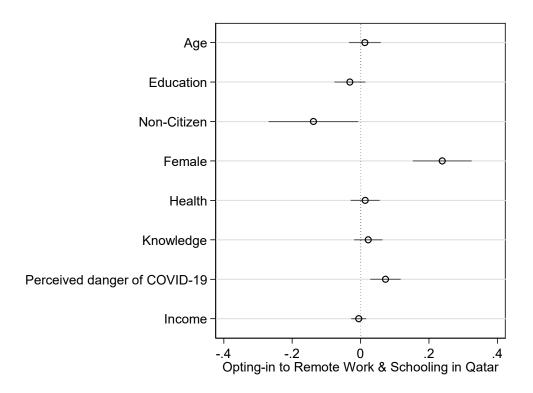
Figure 15. Opting-in to Remote Work and Schooling

When answers to remote work and schooling are combined, the data reveal that a higher percentage of citizens in comparison with non-citizens in Qatar opted into remote work and schooling to maintain social distancing, and this difference is statistically significant. One possible interpretation of the results is that non-citizens are more fearful of job loss. Indeed, some of Qatar's biggest companies laid off a substantial number of foreign staff or cut their salaries and benefits amid the coronavirus economic downturn. Consequently, parents who work may be more likely to send their children to school, especially if they do not have childcare support.

Additionally, more females in comparison with men in Qatar opted into remote work or schooling, and this difference is also statistically significant. This may be taken as evidence that the novel COVID-19 is wreaking havoc on families, as parents find it exhausting to balance between work/studies and childcare demands. Gender gaps in household responsibilities remain strong, with females often seen (and seeing themselves) as the main provider of care for their children, and thus refrain from sharing childcare responsibilities with their husbands.

Figure 16 depicts the impact of different variables on opting in to remote work and schooling. As can be seen, the following variables have a statistically significant positive effect on opting in to remote work and schooling: gender (female) and the perceived danger posed by COVID-19. Most likely, those who perceive greater danger posed by COVID-19 embrace remote work and schooling as a protective behavior. Notably, non-citizen status has a statistically significant negative effect on opting in to remote work and schooling. This may be additional evidence that non-citizens in Qatar fear a loss of unemployment or benefits amid the pandemic.





Time-series analysis reveal that perception towards opting-in to remote work and schooling generally increased throughout the study period, with a precipitous increase around the new year as shown in Figure 17. As the pandemic drags on, risk assessment among people increases alongside it. Over time, people have taken the threat of COVID-19 more seriously, especially around January time when residents in Qatar feared a second wave. There was a substantial concern among the Qatari residents that the pandemic would resurface with a stronger strength, a rise in the number of cases, overstretching healthcare systems and leading to a potential lockdown.

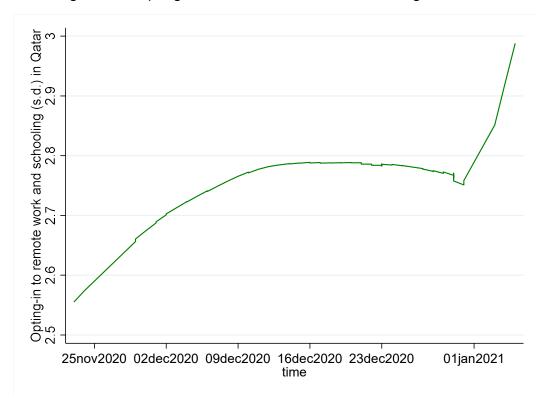
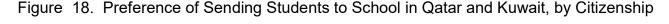


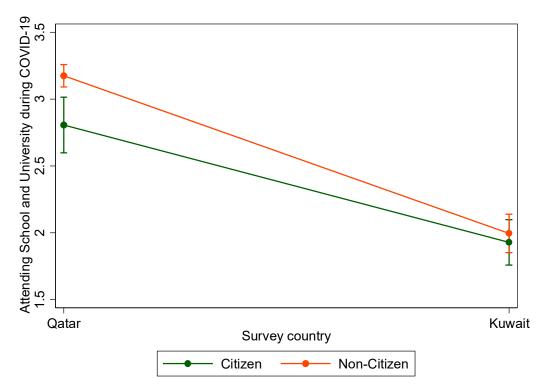
Figure 17. Opting-in to Remote Work and Schooling over Time

4 Policy Perceptions

4.1 School and University Attendance

Beyond personal behavior surrounding remote schooling, the survey examined participants' general attitudes regarding whether or not children and students should attend school and university in person.





Preferences of allowing students to attend school or university were combined as one variable, using a 6-point scale. Expatriates in Qatar more strongly preferred students to attend school compared to Qatari nationals, and this difference is statistically significant. In Kuwait, there is no difference between citizen and non-citizen in their preference of attending school, both of which is lower than the Qatari case. This is likely due to the fact that schooling in Kuwait, since the beginning of the crisis was done virtually. Hence, the public did not have the option in expressing their preference to prefer attending school or not.

In Qatar and Kuwait, women preferred students to attend school or university compared to men, and this difference is statistically significant in Qatar. This could be attributed to the fact that women often feel more responsible for their children's education, and hence they preferred their children to attend school in person. It is essential to note that this preference is higher in Qatar and not Kuwait, and this is probably linked to the fact that in Kuwait students have been doing online schooling since the beginning of the pandemic. This makes them indifferent towards sending their children to school. In other words, if they had experienced the blending policy that

was implemented in Qatar, where students go for two to three days of the week, their opinions might have been different. Moreover, people in Kuwait, especially women, might argue to send their children to school to lessen the burden of online learning on their households.

More generally, when examining factors affecting one's preference of students' attendance during the pandemic, it appears that being female, being healthy, and having higher income are all significantly associated with the preference of sending students in person to schools and universities. Finally, knowledge about COVIDCOVID-19 is weakly and negatively associated with the attendance variable, which implies that understanding the seriousness of this disease makes one reject the idea of sending children to school in person.

4.2 Perceptions of State and Public Response to the Pandemic

Respondents were asked to evaluate the responses of the state and public toward the COVID-19 crisis. In Kuwait, non-citizens thought that the government reaction was too extreme relative to citizens, and this gap is statistically significant (see Figure 19). There is no significant difference between the assessments of citizens and non-citizens in Qatar, as both evaluated the state reaction to the pandemic to be appropriate (represented by 3, the midpoint on our 1-5 scale).

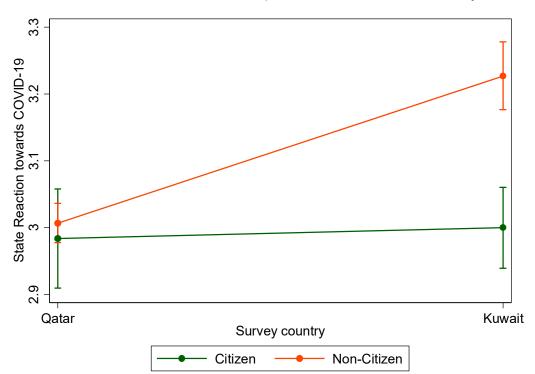


Figure 19. Attitudes towards the State Response in Qatar and Kuwait, by Citizenship

Furthermore, there is no statistical difference between men and women's perception of the state response, although in both countries, men were more likely to evaluate the state reaction's as too extreme as compared to women. This could be related to men's likelihood to discuss and participate in politics more than women. Notably, both females and males in Kuwait thought that the state response to the pandemic was extreme. This could reflect the more stringent policy measures taken by the Kuwaiti government since the beginning of the pandemic.

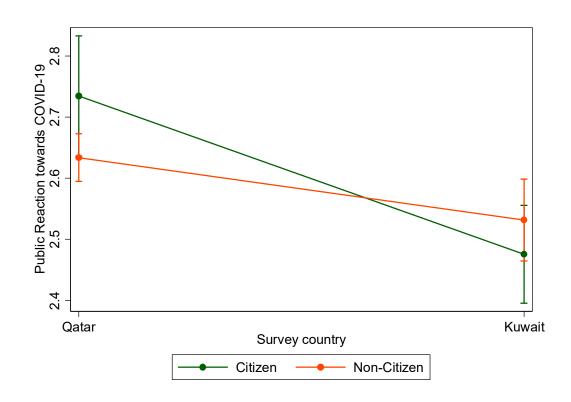


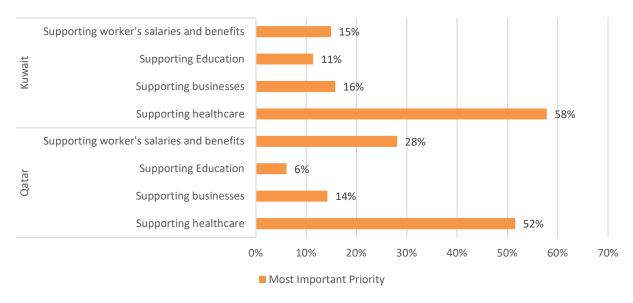
Figure 20. Attitudes towards Public Reaction in Qatar and Kuwait, by Citizenship

A number of factors influence respondents' views towards the public reaction to COVID-19: being healthy and being in Qatar (as opposed to being in Kuwait) affect one's perception of the public reaction positively. Being older also affects the perception of the public reaction positively but this relationship is statistically weak. On the other hand, having more income as well as greater objective knowledge about COVID-19 negatively affects one's evaluation of the public reaction. Moreover, compared to individuals in Qatar, both citizens and noncitizens in Kuwait perceive the public reaction more negatively. Finally, being more educated negatively but weakly affects views of the public's reaction.

4.3 State Spending Priorities Amid the Pandemic

Figure 21. Preferences for Government Spending during COVID-19





The survey also aimed to assess public preference regarding what should be the top priority for state spending during the pandemic: supporting healthcare, businesses, education, or workers' salaries and benefits. When studying the factors affecting respondents' views towards state spending to support the healthcare system, it appears that those with greater objective knowledge above the virus are more likely to prioritize spending on the healthcare system. On the other hand, having higher income has a negative impact on prioritizing healthcare spending. To be more knowledgeable about the seriousness of the disease makes one prioritize spending on the healthcare system.

On the other hand, having high income could indicate that the higher strata of society are more likely to own businesses and thus demand that governmental spending should be directed toward the private sector. This conclusion is supported by the fact that having a higher income is statistically associated with prioritization of supporting businesses.

Regarding prioritization of education spending, several factors including being female and being more healthy have a significant positive impact on prioritizing governmental spending on the education sector. On the other hand, having greater knowledge about COVID-19, and being a

non-citizen, have a negative impact on prioritizing state spending on education. Compared to Kuwait, people in Qatar report relatively lower prioritization of education.

Finally, regarding making salaries and benefits the top priority of governmental spending, being female and being a non-citizen (in Qatar only) has a positive significant effect on prioritization of spending on workers' salaries and benefits. Being in Qatar compared to Kuwait also has a negative correlation on prioritizing salaries. It may be that the relatively stronger economic situation in Qatar compared to Kuwait reduces this priority among individuals in Qatar. Finally, having a higher income is negatively associated with this priority, which may reflect the better financial circumstances of more high-income individuals, as well as their reliance on income from sources other than salaries, such as investments or business income.

4.4 Priority for Receiving the COVID-19 Vaccine

The survey sought to understand public attitudes towards the COVID-19 vaccine, and the factors that should determine priority for receiving the vaccine. Figure 22 summarizes responses from Qatar and Kuwait. Attitudes towards vaccine priority were similar across the two countries, as well as citizens and non-citizens: all groups of respondents believed that vaccine distribution should proceed strictly according to medical need, rather than individuals being able to pay for early access. It is worth noting that Pfizer and BioNTech announced that the COVID-19 vaccine would become available during the time that our study was being conducted. Moreover, the Chairman of the National Strategic Group on COVID-19 announced in the end of October of 2020 that Qatar has reached a significant level in negations with the vaccine producing companies, in order to secure a batch for Qatari nationals and citizens. It is important to note that it was highly advertised that those most vulnerable to the COVID-19 side effects were people with preexisting medical conditions, which might explain the high number of priority given based on medical need.

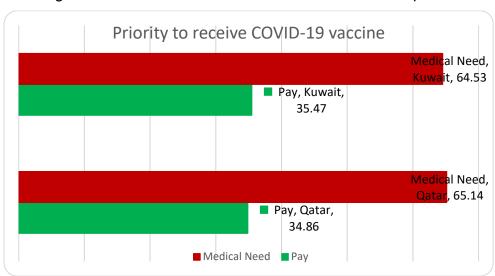
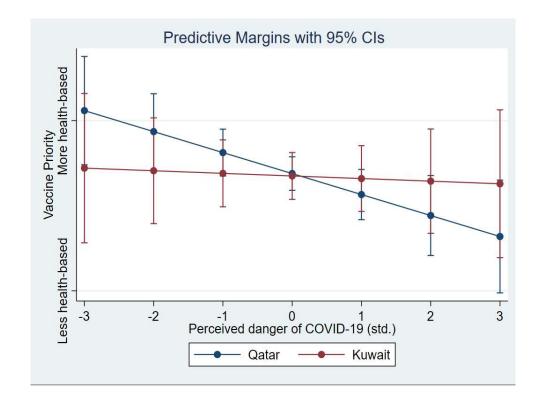


Figure 22. Prioritization of COVID-19 Vaccine Recipients

When answers to the priority items were combined by survey country, the data reveals that COVID-19 vaccine priority (measured on a 1-10 scale) is more homogeneous between citizens and non-citizens in Qatar, compared to citizens and non-citizens in Kuwait.

Figure 23. Risk Perceptions and Prioritization of COVID-19 Vaccine Recipients COVID



As shown in Figure 23, analysis of perceptions of priority to receive the vaccine in relation to the perceived danger of COVID-19 showed that respondents in Qatar who are more fearful are more interested in being able to pay for priority vaccine access. This was not the case in Kuwait, however, as perceived danger of the virus did not have an effect on vaccine prioritization. In other words, people in Qatar that view the virus as a danger are willing to pay in order to have priority to receive the COVID-19 vaccine. This could be due to the difference in the way the two governments are communicating the importance of the vaccine to the people. It is worth noting that both governments announced back in November that priority to receive the vaccine would be frontline workers, those suffering from chronic illnesses, and 80+ year olds. As of April of 2021, the vaccination roll-out has achieved almost double the rate in Qatar as it has in Kuwait, at 18% of the population vaccinated in Qatar compared to 7% in Kuwait (Reuters COVID-19 TRACKER).

Policy Recommendations

The findings outlined in this report suggest the following recommendations:

- Prioritize increasing public knowledge about COVID-19 in Qatar, especially among Qatari citizens and men, as greater knowledge is associated with greater compliance.
- Present clear explanations of important changes in public policy surrounding COVID-19,
 as such changes can have substantial impacts on risk perceptions.
- Support mental well-being by affording opportunities for relaxation and pleasurable activities, including opportunities to travel (via 'travel bubbles', etc.).
- Support women's mental health in particular through flexible arrangements for work and easing childcare and domestic burdens.
- Improve access to and coverage of mental health interventions (i.e., tele-communication services), particularly for disadvantaged demographic groups, such as unemployed and low-income-earning individuals and families.
- Spread accurate information about COVID-19 to combat the global online misinformation and debunk conspiracy theories and perpetuating myths. Government, media and key influencers play an important role in preventing and stopping social stigma of COVID-19 sufferers by sharing accurate information about how the virus is transmitted and treated.
- Providing emotional support and communicating messages that can help reduce social stigma felt by and toward COVID-19 survivors.
- Redouble efforts to ensure public compliance with COVID-19 preventative measures, particularly among Qatari citizens and in relation to social gatherings.
- Facilitate for employees (especially females) to work from home in adherence with public health measures, curtailing the spread of COVID-19 through social distancing.
- Alleviate disproportionate feelings of stress and burden among women by discouraging the societal norm of females as having primary childcare and household responsibility.
- Increase investments in technology to provide continuity in the face of drastic times that impose lengthy periods of work and school closure and which pushes teachers, students and those working from home towards a more extensive use of technology.
- Effectively communicate the dangers of COVID-19 in order to encourage citizens and residents to take the vaccine.

Bibliography

- Bodas, M., & Peleg, K. (2020). Self-Isolation Compliance In The COVID-19 Era Influenced By Compensation. Health Affairs. doi: https://doi.org/10.1377/hlthaff.2020.00382
- Caleo, G., Duncombe, J., Jephcott, F., Lokuge, K., Mills, C., Looijen, E., Squire, J. J. (2018). The factors affecting household transmission dynamics and community compliance with Ebola control measures: a mixed-methods study in a rural village in Sierra Leone. BMC Public health 18(1), 248.
- Caria, S., Fetzer, T., Fiorin, S., Goetz, F., Gomez, M., Haushofer, J., Hensel, L., Ivchenko, A., Jachimowicz, J., Kraft-Todd, G., Reutskaja, E., Roth, C., Witte, M., & Yoeli. E. (2020). "Measuring Worldwide COVID-19 Attitudes and Beliefs." Available online at: https://osf.io/3sn2k
- Folkman, S., Lazarus, R. S., Pimley, S., & Novacek, J. (1987). Age differences in stress and coping processes. Psychology and Aging 2(2), 171.
- Kunz-Ebrecht, S. R., Kirschbaum, C., & Steptoe, A. (2004). Work stress, socioeconomic status and neuroendocrine activation over the working day. Social Science & Medicine 58(8), 1523-1530.
- Norbeck, J. S. (1985). Types and sources of social support for managing job stress in critical care nursing. Nursing Research 34(4), 225-230.
- Reuters COVID-19 Tracker: https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/qatar/
- Reuters COVID-19 Tracker: https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/kuwait/
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., . . . Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). International Journal of Surgery 76, 71-76.
- Webster, R. K., Brooks, S. K., Smith, L. E., Woodland, L., Wessely, S., & Rubin, G. J. J. P. H. (2020). How to improve adherence with quarantine: Rapid review of the evidence. Public Health 182, 163-169.

The Social and Economic Survey Research Institute

Qatar University

P.O. Box 2713, Doha, Qatar

E-mail: sesri@qu.edu.qa