

Coronavirus and Google Searches in Pakistan What the Trends Tell

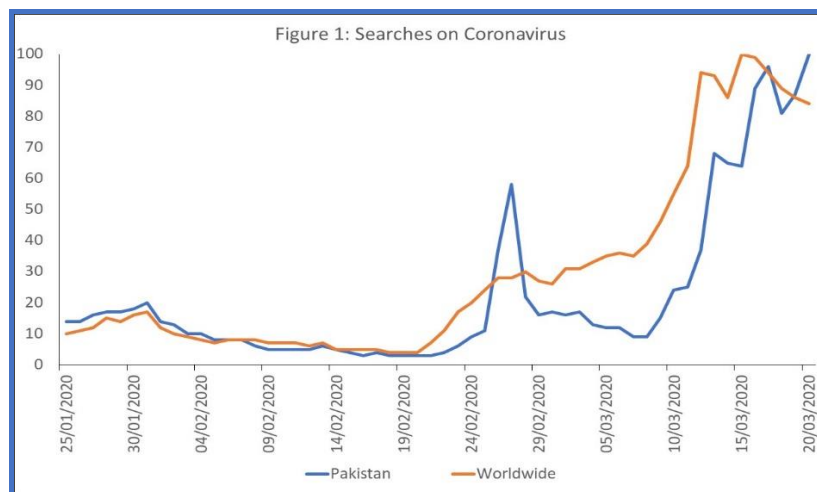
Since the outbreak of the coronavirus in China in December 2019, coronavirus related searches have trumped all other searches globally. The search term ‘coronavirus’ is by far the most searched term on the internet. The outbreak of COVID-19 has sparked both curiosity and fear among the people. No surprises there. The coronavirus fear has brought other anxieties as well. It is natural to feel concerned about several things due to the scale of the outbreak. The related concerns are coronavirus cure, the impact of coronavirus on the economy, hygiene or sanitizer, lockdown, and quarantine.

Let us have a look at what we Pakistanis, as a nation, have been searching since the coronavirus became a global concern. The interest surged toward the end of January, so we observe the trends starting from January 25. For the sake of comparison, I compare the trends in searches in Pakistan with worldwide trends.

Before we get to the trends let us be clear that ‘Google Trends’ does not report directly the number of searches. Rather, it reports search “intensity” or “research interest over time”. According to Google Trends it means, “[these] numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means that there was not enough data for this term.”

1. Coronavirus

Figure 1 shows how coronavirus searches since January 25 have picked up in intensity in Pakistan as well as worldwide. The first coronavirus case was reported on February 26 in Pakistan. Hence a spike on February 27.



2. Coronavirus and Economy

The economy-related search terms, such as ‘recession’, ‘stock market’, ‘US dollar’, and ‘oil prices’ picked up in intensity worldwide on March 9 (Figure 2A). This is the time when coronavirus cases started to grow exponentially in Italy, the USA, and the world over. The interest in oil prices also shows a spike because it was around that time that the oil output war between Saudi Arabia and Russia intensified.

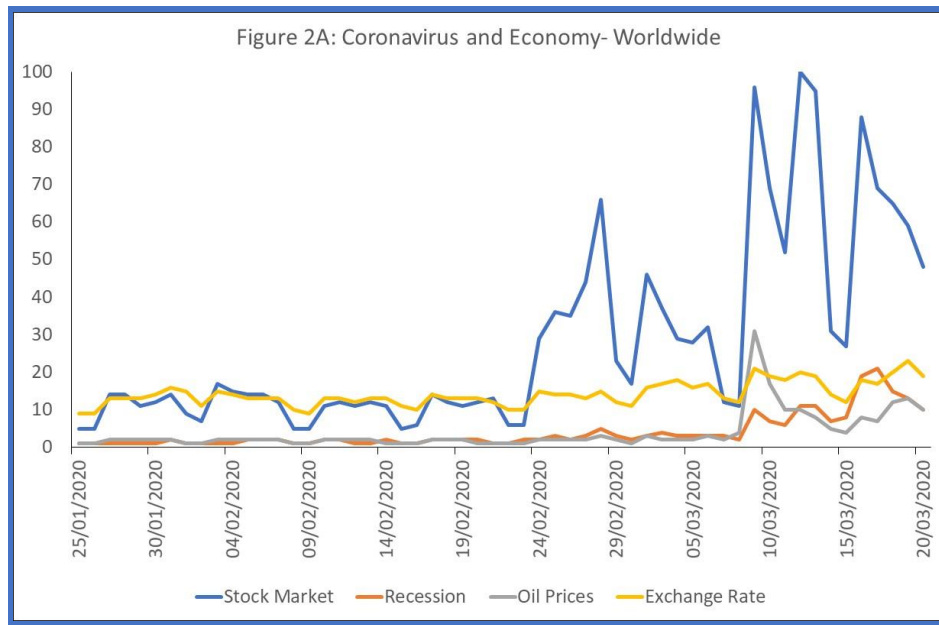
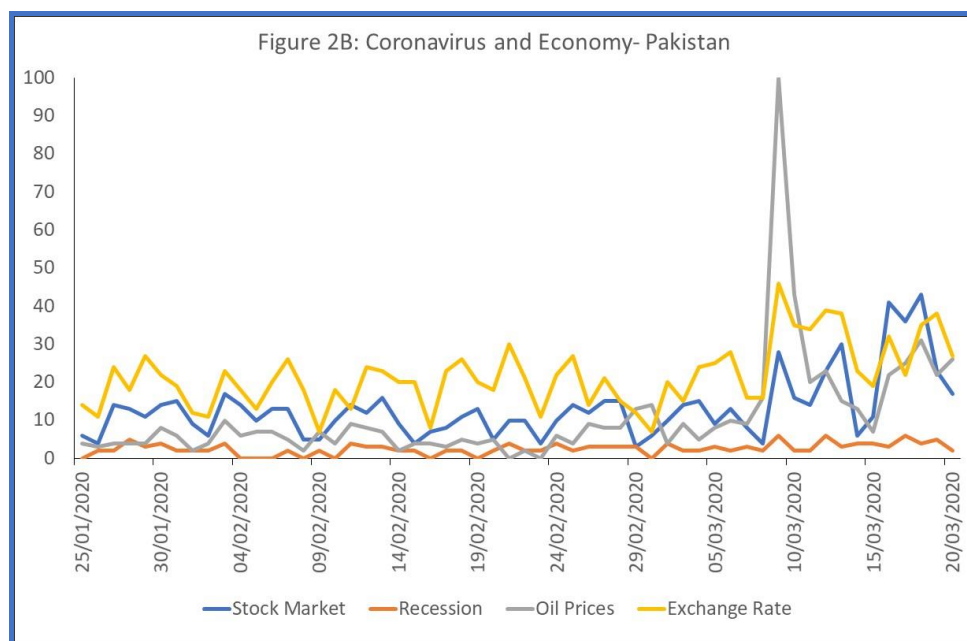
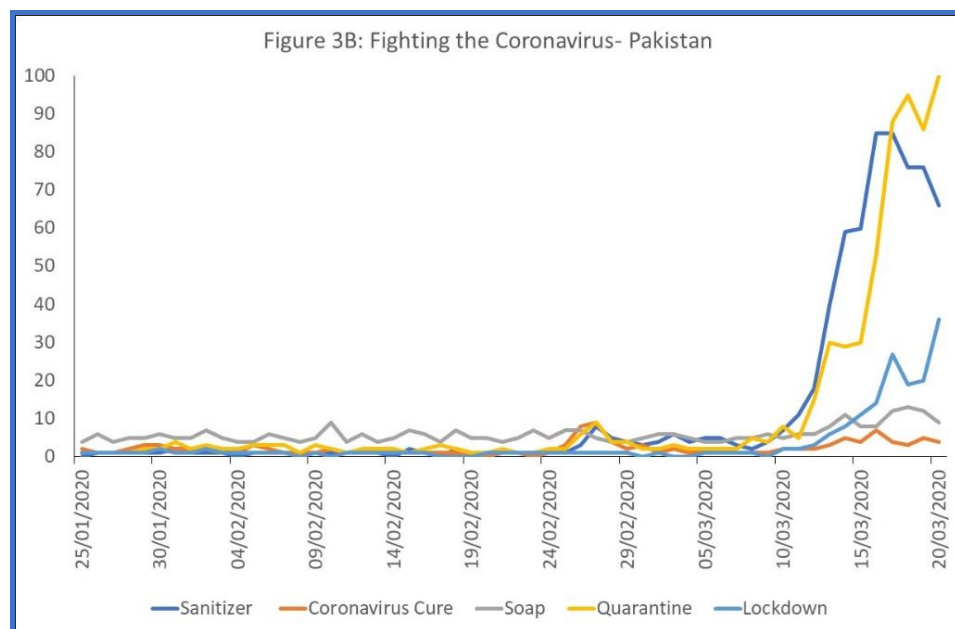
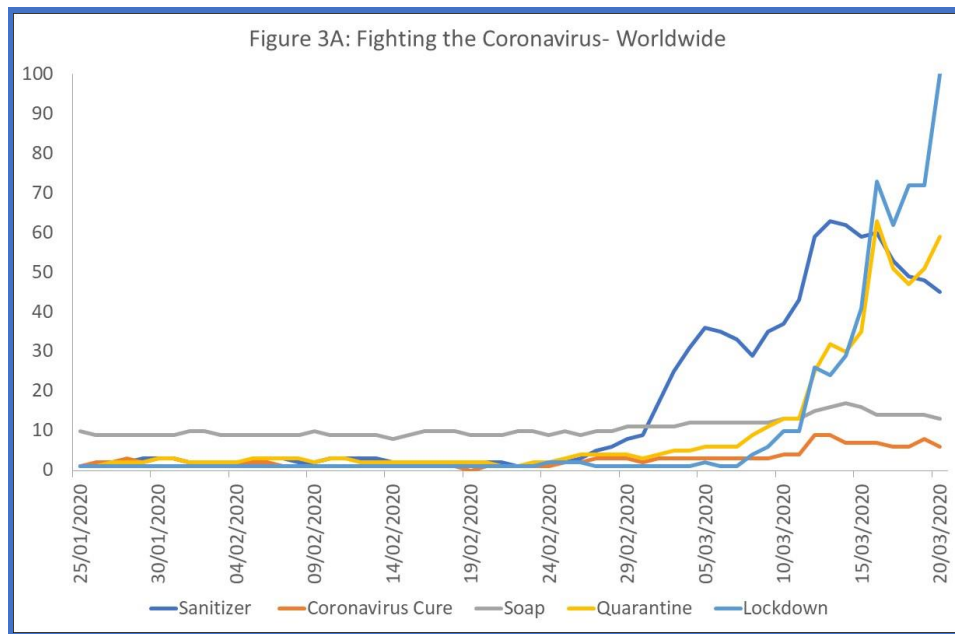


Figure 2B shows Pakistanis, like the rest of the world (Figure 2A) are also concerned about the effects of coronavirus on the economy. The interest in the exchange rate – the grey line in Figure 2B – is especially important for Pakistan, which reflects in Google search trends in Pakistan.



3. Fighting the Coronavirus

How to tackle and combat the coronavirus, what precautionary measures can be taken against its spread is on everyone's mind, in Pakistan or anywhere else in the world. These concerns reflect well in the searches, shown in figures 3A and 3B. These figures show search trends for 'coronavirus cure', 'sanitizer', 'soap', 'quarantine', and 'lockdown'.

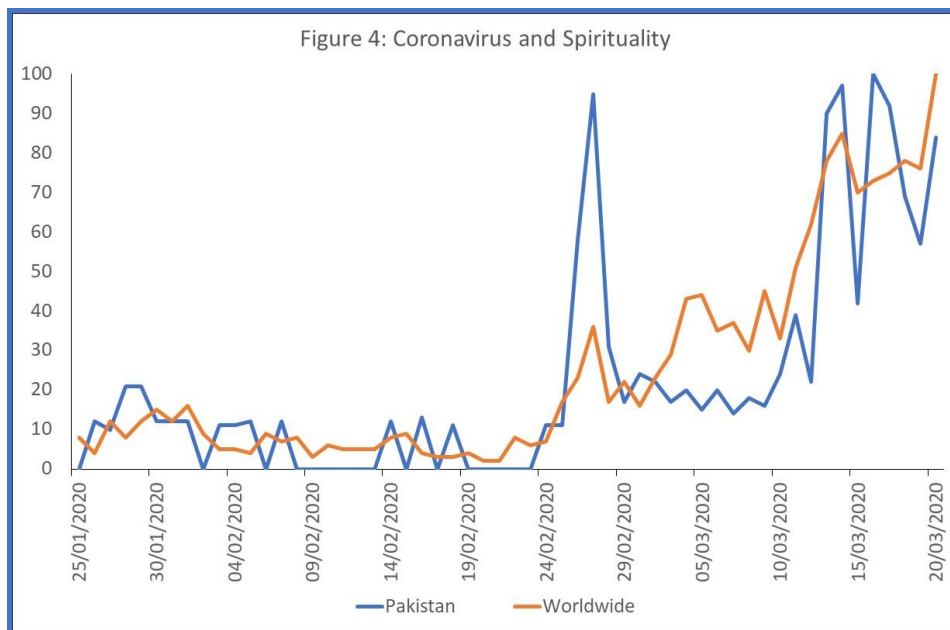


In both the figures, there is a clear surge in interest on terms that directly relate to fighting the coronavirus. The interest in terms 'quarantine' and 'lockdown' is quite visible. It seems the meaning of the term quarantine has piqued the interest of people both globally and in Pakistan. In Pakistan, probably not many people knew the meaning of quarantine, which suggests a rise in the search for this term. Similarly, for

the past few days, lockdown of many cities in the world and the possibility of the lockdown in Pakistan has people searching for the term lockdown. In Pakistan, the surge in searches for sanitizer came later than globally because perhaps it is around that time when the shortage of sanitizers started in Pakistan.

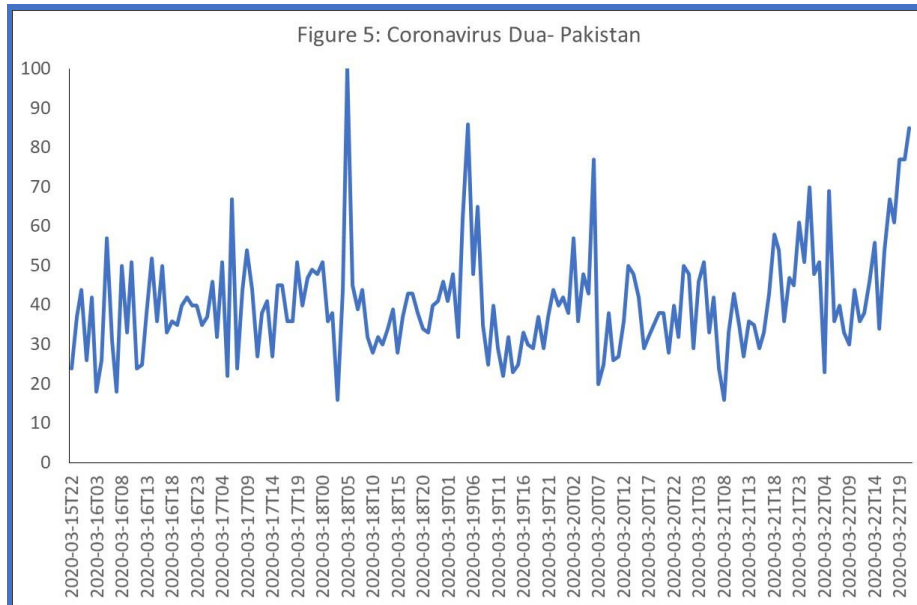
4. Coronavirus and Spirituality

Figure 4 shows the pattern between coronavirus and prayer related searches. The relation appears to be strong. The figure shows that the searches for ‘*Duas*’ have surged starting from the end of February. There is a spike for Pakistan, again, on February 27 because the first coronavirus case in Pakistan was officially declared on February 26.



It is suggestive of the individual behavior the world over. In times of distress, people turn to spirituality to calm themselves and find refuge in prayers when there is no apparent cure for a disease or a solution to a problem. In Pakistan’s case, it is heartening to know that we are not relying only on *Duas* to protect ourselves from the dreaded virus. A comparison of Figure 4 with Figure 3B shows Pakistanis are also, at least in their searches, cognizant of other means to protect them from the coronavirus. The anecdotal evidence, however, suggests otherwise. People are not taking the possibility of a lockdown or quarantining themselves by staying at home very well.

The fact that data tells a lot about human behavior – Pakistanis’ behavior in particular in this case – is reflected in Figure 5. Note that a ‘T’ before two digits represent time. For example, “2020-03-15T18” means ‘at 6 p.m. on March 15. I reported the trends in *Duas* for Pakistan only for the past 7 days because if I expand the range, say, to one month, Google Trends does not report time.

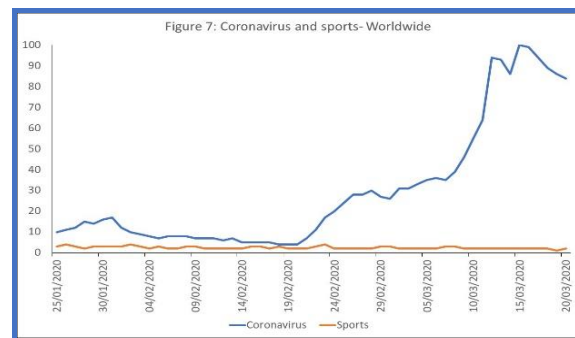
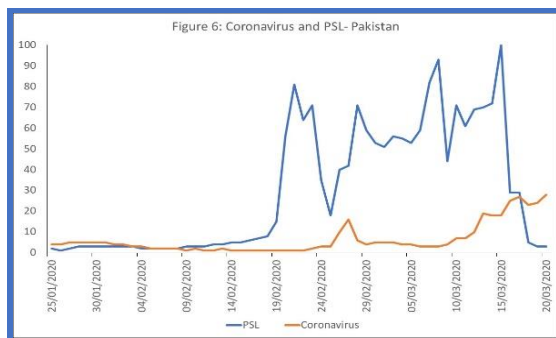


The figure shows that most of the spikes are for early in the morning, circa 5 and 6 a.m. People probably get up for morning (Fajr) prayers, open the Internet browser and recite the *Duas*. So, we are protecting ourselves with *Duas* early in the morning so that even if we ignore the directives to stay at our homes, we have a shield that is protecting us from the coronavirus. Let us ‘pray’ and we will be alright!!

5. Coronavirus and “Conditional Variables”

The next set of figures makes things interesting.

Let us see what else does Google searches and trends reveals what Pakistanis have been searching in the time of the coronavirus. Figure 6 shows a comparison of Google search trends between coronavirus and PSL in Pakistan. The interest in PSL dwindled only recently when the event was postponed.

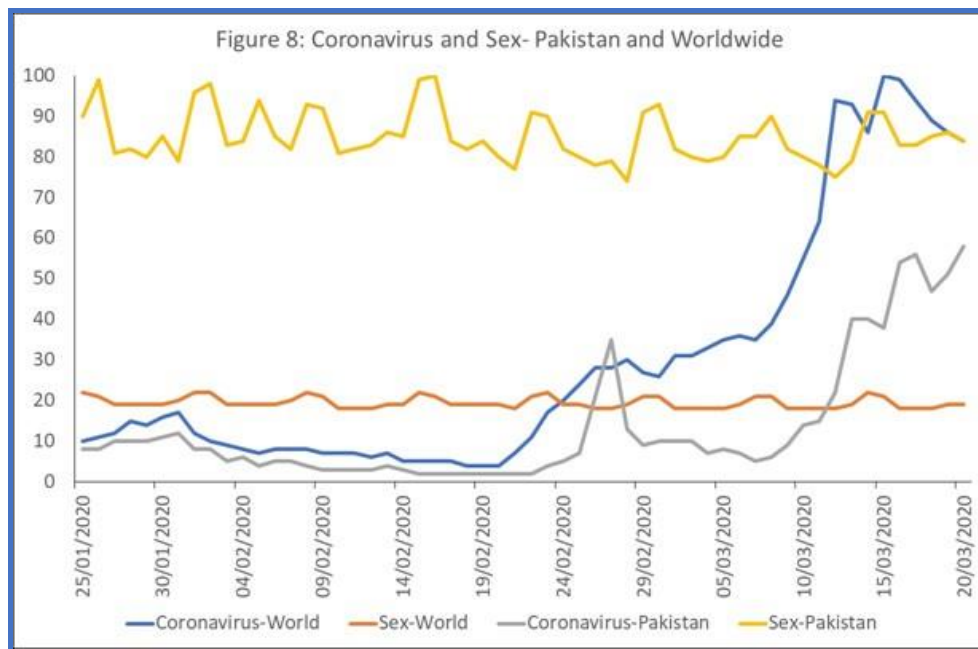


Since PSL is only popular in Pakistan, rather than comparing coronavirus and PSL searches worldwide, for worldwide searches, I compared coronavirus and sports. I tried other combinations such as ‘coronavirus and Tokyo Olympics’, ‘coronavirus and MLB/NFL/NBA’ for the US but the trends were just as in Figure 7. I also tried ‘coronavirus and cricket/IPL’ for India. The trends are not very different from those

shown by Figure 7. Cricket was slightly more popular term in India than the term 'sport' worldwide, but not relative to the search intensity for coronavirus.

So, what does it say about us? It might show that because of the lack of recreational activities, Pakistani people show unprecedented interest in the events that provide them with an opportunity to relax, away from daily activities, or struggles. But does that mean it should take precedence the event that has put not only Pakistan but also the whole world at risk? The purpose of this blog is just to show the search trends, so I would not engage in subjective discussion. Suffice it to say that data reveals a lot about human behavior.

The comparison between worldwide searches and Pakistan searches show more than words can say. If that is interesting, curious even, have a look at the last search comparison in Figure 8.



When the world was searching for coronavirus Pakistanis were busy searching....!!!

By: Omer Siddique, Pakistan Institute of Development Economics.

Pakistan Institute of Development Economics

Web: www.pide.org.pk, Twitter: @PIDEpk, Facebook: PIDEIslamabad