**A case-study on mental health and the well-being team’s reaction during COVID-19 pandemic**

**Abstract:**

While the COVID-19 caused crisis all over the world and it was unannounced, so huge population did not see it coming and people were not ready to be in such situation. As observed on web, people really had to fight with their emotions. There was an increase in the form of emotions such as anger, fear and sadness. This analysis could be used to understand how such pandemic situation leads to creating a turbulence in mental health of people and necessary measure can be taken to prevents people’s life socially. Certain set of policies can be formed to make sure people have less anxiety and more ways to find positivity around them. The purpose of writing the case-study is to reflect on the side of reaction of the people who conducted the survey and the people who did participation. After extracting the behavioral patterns and data on emotions, it becomes easy to analyze what percentage of population goes through mental health issues and how to effectively find ways to keep a healthy well-being of humans.

**Introduction:**

Having been in the phase of covid-19, where many countries faced complete lockdown, the motivation to do the research remains to makes peoples’ lives easy and less stressed. Many countries noticed efficient number of rise in suicides or self-harm. One major reason for that was also loss of jobs or pay-cuts. Due to big economic fluctuation, there were many financial crisis as well and that did cause problems in the house and created a problem to peoples’ mental health.

The basic idea or motivation behind conducting this case-study is to help people be in their best and positive mental state by analysing the data that we get after performing a number of surveys. The domain is mainly cloud-computing where the survey data is stored on cloud and picked up as per the necessity but also it is in the field of mental health.

**Background:**

By providing teletherapy or be it through a means of text message, it does help.[1] Specially in teenagers, the covid-19 fear and situation to be alone was on its peak during covid times.[2] There were past research in general that had happened that spoke about mental health, however after the pandemic began, the research became more exclusive and focused at

certain things like anxiety, feeling of being alone etc. The data of people’s mental health was getting collected by various government organization, research labs and universities.

There were many programs that were introduced and along with that even universities (e.g. University of Hertfordshire) were helping their students to cope up with the situation. The university kept sending e-mails to their students to inform that the help is available. The well-being team had started to do therapy calls to students who were in distress. That did not make the situation better, however, it did make the students feel better about the situation and there was less number of cases of anxiety. (I personally had a call with a well-being manager at University of Hertfordshire and I was constantly being asked whether I am doing fine and if my anxiety has reduced.)

During normal times, people were allowed to move out and talk to their friends or people they like and things were pretty normal. When such situation, approached without any warning, human brains started to have panic and it was difficult to adjust to new normal.

The screenshot below is from the paper cited below, it shows that there were many tabs such as ‘Important Survey’, ‘Trail making’, ‘Quick daily rating’ and ‘Tip of the day’ and those dependant or independent variables lead to make an activity graph which was called dashboard. For e.g., you can check tip of the day everyday and keep updating your quick daily rating, when you do this the application algorithm checks if your anxiety levels have dropped. At the same time, a person is allowed to take surveys as well, so you tend to answer many questions that does have options, once you finish, the data is stored and your progress is noted after a certain time. Whilst you are allowed to put every detail of your daily activities and it tells you that whether you are improving on your behaviour or how much change an individual is making in their life and their mental health. Many such real-time applications were developed to find out individual’s mental health. By entering detail, they were able to find more about themselves which is nice and it also gives suggestions on how to improve.

Creating an app does not require more technology, however it definitely solves many problems until covid-19 subsides and can keep peoples’ life on track being normal.

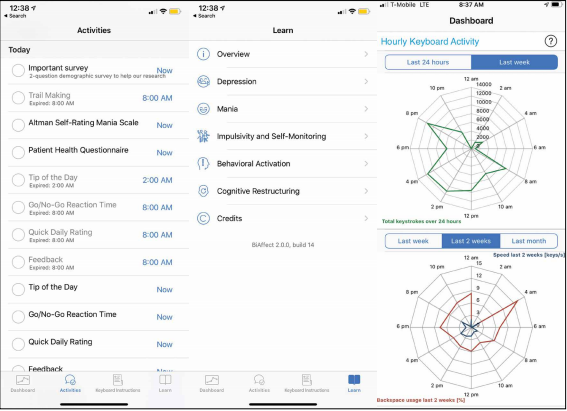
s

Fig: displays everyday activities with a dashboard of people using the app (S. Allen) [5]

**Methods:**

Let us take survey methods, where users are being asked to explain their feeling and mental health through either an app survey or through website surveys. There are set of questions that can range from 10 to 40, that asks you about your surrounding and your daily activities and the level of stress or anxiety you have. It also asks the difference where you were able to do certain things well before and you are not performing those activities at this moment.

After collecting the data from the survey, a statistical test can be performed that calculates the relation between different things like for e.g how many steps you have taken on that day versus how much screen time or for how much time you were on screen. Based on this data, it is easy to calculate that the person had reduced the time for physical activity that may exponentially give a rise to anxiety. For e.g. Fika app, it had so many surveys since the time lockdown started due to covid and the app asked about every small detail to whoever installed it. It asked about anxiety issues and issues related to daily routine. It did ask if people got back to their faith due to so much stress and the result said that because people were so stressed, they started believing in god more than they did before.

A lot of people were made to work from home due to the circumstances of covid-19 and their family members were at home as well. Due to constantly being at home, many people

had more fights and that led to their mental breakdown. Few of them already had issues with their families and it made even harder to stay in the same roof. They were not able to efficiently work from home; the results were not good like before. Also, because people were confined in their homes, with very little or no chance of stepping out, there was increase in the screen time (from the technology they used).

There were so many covid coaches who had to volunteer and help others either through tele-therapy or video calls on internet so that people who were distressed, could be relieved. Many problems were related to the neurological part. In the beginning, everyone seemed to have a relief and had a feeling that they are having good rest at home, however, as soon as the lockdown was there for quite a long time, people started to feel suffocated.

Such applications which can be easily downloaded that did help people to survive the pandemic better and hopefully it gives good track to the government and the companies who want to try and take care of their people and their employees respectively.

**References:**

[1] S. Allen, "COVID-19 Is Straining Mental Health—Could Technology Be the Answer?," in IEEE Pulse, vol. 11, no. 4, pp. 8-13, July-Aug. 2020.

[2] A. Khattar, P. R. Jain and S. M. K. Quadri, "Effects of the Disastrous Pandemic COVID 19 on Learning Styles, Activities and Mental Health of Young Indian Students - A Machine Learning Approach," 2020 4th International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2020, pp. 1190-1195.

[3] A. Mathur, P. Kubde and S. Vaidya, "Emotional Analysis using Twitter Data during Pandemic Situation: COVID-19," 2020 5th International Conference on Communication and Electronics Systems (ICCES), COIMBATORE, India, 2020, pp. 845-848.

[4] M. Tropea and F. De Rango, "COVID-19 in Italy: current state, impact and ICT-based solutions," in IET Smart Cities, vol. 2, no. 2, pp. 74-81, 7 2020.

[5] S. Allen, "Artificial Intelligence and the Future of Psychiatry," in IEEE Pulse, vol. 11, no. 3, pp. 2-6, May-June 2020.

[6] A. K. Tripathy, A. G. Mohapatra, S. P. Mohanty, E. Kougianos, A. M. Joshi and G. Das, "EasyBand: A Wearable for Safety-Aware Mobility During Pandemic Outbreak," in IEEE Consumer Electronics Magazine, vol. 9, no. 5, pp. 57-61, 1 Sept. 2020.

[7] Yin, Q., Sun, Z., Liu, T., Ni, X., Deng, X., Jia, Y., Shang, Z., Zhou, Y. & Liu, W. 2020, "Posttraumatic stress symptoms of health care workers during the corona virus disease 2019", *Clinical psychology and psychotherapy,*vol. 27, no. 3, pp. 384-395.