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## "I feel like death on legs": COVID-19 isolation and mental health



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#### ABSTRACT

This study investigates the personal and collective responses to COVID-19, as it is described in British personal stories and newspaper reports from Britain and Sri Lanka and examines the social and economic impact of the pandemic on different societies. Although some studies have been done on the impact of COVID-19, none of these studies have focused specifically on the impact the coronavirus has had on different societies because of the global lockdown and restrictions on people's movements. This study attempts to address this gap in the literature by focusing on how the language used in a corpus of personal stories and newspaper reports collected over a span of one month, reveal the impact of COVID-19 on two societies by investigating how self-isolation and lockdown is leading to mental health breakdown in individuals and affecting wider social and economic collapse. The data was analysed using corpus linguistics methodology such as keyword analysis using AntConc (Anthony, 2019) and Linguistic Inquiry and Word Count (LIWC) (Pennebaker Conglomerates, 2015). The findings from LIWC shows that the enforced self-isolation is leading to mental health breakdown. The analysis of the news reports show that Britain's priorities are centred on the economy whereas Sri Lankan newspapers focus on educating people about the severity of COVID-19.

## 1. Introduction

The coronavirus pandemic has been likened to a war situation and metaphors such as 'battle', 'fight', 'combat', 'attack', 'defend', 'beat' etc., have been used by World leaders to describe the response to the pandemic (Maxwell et al., 2020). Magnus (25th February 2020) notes one such metaphor that gained traction at the start of the pandemic: "President Xi Jinping has vowed to wage a 'people's war' against the COVID-19 epidemic." The treatment of the pandemic as a war is also seen in the following headline by Britain's Sun newspaper (Clark, March 15, 2020) where the Prime Minister is said 'to declare war' and his action plan is referred to as a 'battle plan': "Army on standby as Boris declares war on coronavirus with battle plan to kill the deadly virus". These uses of war metaphors suggest the scale of the pandemic globally and the effect that it is having on the population as a whole. On 13th March, 2020, the Prime Minister of Britain stated on national TV that "We're going to lose many more loved ones" (Binns, 13th March, 2020). The scale of the spread has brought the issue of mental health well-being to the forefront. The Guidance from the UK government states "the coronavirus (COVID19) outbreak is going to have an impact on everyone's daily lives, as the government and the NHS take necessary steps to manage the outbreak, reduce transmission and treat those who need medical attention". The Public Health England website advices people to

look after their well-being by 'connecting with others', 'helping and supporting others', 'by talking about worries', 'looking after one's physical well-being', 'trying to manage difficult feelings', 'managing media and information intake', 'sticking to a regular routine and sleep pattern', etc (Gov, 2020). The awareness of the pressure that the lock-down is placing on people's mental health is increasing and this is seen by the support for the government campaign by the Duke and Duchess of Cambridge (BBC News, 29th March, 2020), who remarked: "The last few weeks have been anxious and unsettling for everyone. We have to take time to support each other and find ways to look after our mental health. By pulling together and taking simple steps each day, we can all be better prepared for the times ahead" (Table 5 and 6).

As the COVID-19 pandemic has been branded as 'the worst health crisis in a generation' (Binns, March 13th, 2020), the problem of people's mental well-being is an important issue to address. Rimé et al. (1991) state that during traumatic situations such as natural disasters and pandemics, people process the trauma of the situation by coming together and that newspapers mirror this collective script of how the trauma is being processed by society. This is confirmed by Gortner and Pennebaker (2003, p. 583), who noted that newspapers mirror the "psychological dynamics of society". Therefore, the purpose of this paper is to investigate the social impact the novel coronavirus is having on two societies by examining a selected corpus of news reports and personal stories from the

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internet to uncover the effect that COVID-19 self-isolation has had on mental health well-being. The research questions examined in this paper are: (1) Is self-isolation due to COVID-19 having an effect on mental health? What are the priorities of different countries during the crisis as evident in newspaper reports? To answer these research questions, I used the search terms 'coronavirus', 'COVID19', 'isolation'' and 'mental health' using google advanced search to find texts from Sri Lanka and Britain and randomly selected 36 articles that included all four search terms. It was difficult to find personal stories using search words on google. Therefore, the 10 personal stories were collected from internet sources such as Facebook and charity websites.

The paper is organised as follows: Section 2 examines the background to coronavirus and its spread around the globe and the impact that it has had on different countries; Chapter 3 discusses the data and methodology used in the paper. Chapter 4 presents the results and analyses and the last section concludes the paper.

### 2. Background

## 2.1. The outbreak and its global spread

COVID-19 was initially introduced by WHO after an outbreak of coronavirus in the Chinese province of Wuhan in December 2019. According to Huang et al. (2020) China immediately took action to control the spread of the disease by isolating people suspected of having the disease, searching for people with whom they had contact as well as collecting epidemiological and clinical data from patients, to develop diagnostic and treatment procedures. The clinical features reported by Huang et al. (2020, p. 470) for the first 41 patients identified as contracting the disease include fever, dry cough and malaise and are non-specific. Huang et al.'s (2020) study provides the first indication of the severity of the emerging disease. They note that, as the early symptoms identified were non-specific, it posed a huge problem for early detection of cases with the novel coronavirus of 2019, against a background of other circulating respiratory diseases such as influenza and SARS (2020: 470). The World Health Organisation (WHO) suggests that most people who contract the virus will only experience mild to moderate breathing difficulties and that they will recover without requiring any special treatment. Those likely to develop serious illness are identified as "older people and those with underlying health conditions such as cardio-vascular disease, diabetes, chronic respiratory disease and cancer" (WHO, 2020). The disease can affect any individual regardless of their age or health condition, as evidenced from the current age of those who have succumbed to the disease. This disease, which began in China, has become a global crisis within a matter of months, with the death toll standing at over 50,000 cases as of early April 2020, with the highest death rate recorded in the US at present.

The coronavirus outbreak that began in Wuhan, Hubei Province, has now spread internationally to 210 countries and territories around the world (worldometers.info, 2020). As of April 5, 2020, the number of those infected with coronavirus has surpassed a million cases reported globally. The Centers for Disease Control and Prevention (CDC) reports that "in addition to sustained transmission in China, there is now community spread in several additional countries." Wang et al (2020, p. 472) states that there are many unanswered questions regarding the "origin, duration and extent of transmission", although early information about the spread of the virus appeared to suggest that the first exposure was the Huanan Seafood Wholesale market in Wuhan, although as Wang et al. (2020) note, with the appearance of more cases, the importance of the value of this information appears to have decreased.

Li and Li (2020, p. 275) note that two of the previously identified strains of coronaviruses - SARS-COV and Middle East respiratory syndrome coronavirus (MERS-Cov) are both zoonotic in origin and that 2019-nCoV is also likely to have a zoonotic origin. They note that the 'early confirmed cases of the new coronavirus in Wuhan were closely linked to the Huanan seafood market (a wet market), where a large

variety of vertebrate and invertebrate animals, wild caught and farm raised are sold" (Li & Li, 2020, p. 275). Benvenuto et al. (2020, p. 64) state that 2019–2020 nCoV most probably originated from the Bat SARS-like Coronavirus circulating in the Rhinolophus bat family. In response to the outbreak of 2019-nCoV, as Li and Li (2020, p. 275) note "the Chinese Government has banned all forms of wild animal transaction, and there are already spontaneous efforts on the internet to explain the risks involved in consuming game, together with pleas to withhold from buying, selling, or consuming wild animals".

With the spread of the coronavirus to 210 countries, governments around the world have taken drastic measures to limit the rapid dispersion of the virus; most countries in the world have enforced travel restrictions and border control measures with passenger screening at airports.

Graham Abbot (a holidaymaker to Sri Lanka) interviewed by the BBC on his return, told the BBC interviewer that he was reassured by the efforts taken by the Sri Lankan airport to control the spread of the virus such as personnel wearing face masks and handling documents with gloved hands and temperature checks whereas he said this was not the case on his arrival at Heathrow airport, where people were being requested to keep a good distance apart from each other but no other measures such as wearing masks or using gloves was visible (BBC News, 29th March, 2020).

#### 2.2. Nomenclature

On 11 February 2020, the WHO named the disease spread by the novel coronavirus as COVID-19 (Coronavirus Disease 2019) and the virus as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). According to Public Health England, "characterisation of SARS-CoV-2 is ongoing. Initial information shared by China and WHO indicates that SARS-CoV-2 is a beta-coronavirus that is genetically similar to SARS-like coronaviruses obtained from bats in Asia" (Gov.uk).

## 2.3. Symptoms

The WHO website states that "the COVID19 virus affects different people in different ways". They identify COVID19 as a "respiratory disease" from which most people with mild symptoms will recover without any special treatment. Those most at risk are identified as people over the age of 60 and those with underlying medical conditions such as cardio-vascular disease, respiratory illnesses, diabetes and cancer. The common symptoms identified include high temperature, persistent dry cough, tiredness, shortness of breath and aches and pains and sore throat with nausea and diarrhea being symptoms in very severe cases. There are some similarities between influenza and COVID-19, with both illnesses having similar symptoms such as high temperature, coughing, aches and pains and tiredness and both illnesses can be spread through respiratory droplets from coughing and sneezing. The CDC states that "recognizing persons who are at risk for COVID-19 is a critical component of identifying cases and preventing further transmission".

Those who have any of the above symptoms are advised to self-isolate for 14 days and to keep a safe distance from each other, which has resulted in what has come to be known as 'social distancing'; the physical separation from each other. These new measures taken by world leaders to mitigate the spread of the virus have led to a new normal of people not having any social contact, working from home, self-isolating, which can all lead to issues pertaining to mental health.

#### 2.4. The response to the crisis

In Britain, the initial response to the coronavirus crisis by the Government was a policy of 'herd immunity', where the disease is passed through healthy members of the population. There has been mounting criticism of the Government's initial response to the crisis being 'complacent' by Prof. John Ashton, the former chief of Public Health

England (BBC Newsnight, 11th March, 2020) and The editor in chief of The Lancet, Richard Horton, calling the government's strategy a "major error" (BBC Question Time, 26th March, 2020). Likewise, sections of the media have pointed out that the subsequent response has been a scapegoating argument blaming the NHS and Public Health England administration over testing and preparedness. In the last few weeks, there has been a massive mobilisation of solidarity with retired staff returning to the NHS to work in the frontline and 750,000 people volunteering their services to the NHS. There has been recognition and praise for 'key workers' such as those working in the NHS, retail workers, police officers, firefighters and this recognition was manifested by clapping for the NHS. In terms of recognizing those at risk, the Health Secretary, Matt Hancock, has stated that 100,000 frontline NHS workers will be tested by the end of the month. Britain announced a partial lockdown of Britain on the 23rd of March 2020. As of 10th April, the number of infected cases is over 65, 000 with over 8000 deaths.

There has been some criticism of the Sri Lankan government's response to the pandemic, as lockdown was not imposed until 20th March. In January, the Sri Lankan government responded to the early warnings of a coronavirus strain issued by China and WHO by instructing the Quarantine unit at the Bandaranayke International Airport to screen passengers for suspicious symptoms. Thereafter, the government also issued warnings for children, pregnant women and elderly people with chronic illnesses to avoid crowded places. Then on 7th March, it implemented new quarantine measures to curtail the spread of the disease. The first locally transmitted COVID case in Sri Lanka came to light on 11th March 2020 and since then as of 04th April 2020, there have been seven fatalities and 190 infected cases. Sri Lanka has imposed a curfew on 4 districts in the country such as Colombo, Kandy, Gampaha and Puttalam to curb the spread of the virus.

#### 2.5. Previous studies on traumatic situations

#### 2.5.1. Quarantine and mental health

The scale of the lockdowns around the world is unprecedented, which is why the issue of mental health is important. The situation has been likened to wartime. A war affects society. During times of distress, people react in different ways. The scale of the number of those infected by the virus and the loss of life, currently standing at over 100,261 cases makes this a traumatic event. Research into previous events where quarantine was necessary provide evidence of psychiatric breakdown. A rapid review undertaken by Brookes et al. (2020) on the psychological effects on quarantine, suggests that being in quarantine or self-isolation can severely impact people's mental health to the extent that they can be diagnosed as having post-traumatic stress syndrome (PTSD). Symptoms of PTSD are identified as 'unexplainable' and include sleeplessness, anxiety, unhappiness and signs of hyper alertness (Jones & Wessely, 2005, p. 172). These symptoms were first identified during World War I in soldiers suffering from shell shock due to trench warfare and was seen as an illness that was evident even in those who had not been involved in

Brookes et al. (2020, p. 912) note that "Quarantine is often an unpleasant experience for those who undergo it. Separation from loved ones, the loss of freedom, uncertainty over disease status, and boredom can, on occasion, create dramatic effects. Suicide has been reported, substantial anger generated, and lawsuits brought following the imposition of quarantine in previous outbreaks". They define quarantine as "the separation and restriction of movement of people who have potentially been exposed to a contagious disease to ascertain if they become unwell, so reducing the risk of them infecting others" whereas isolation is defined as "the separation of people who have been diagnosed with a contagious disease from people who are not sick". However, they note that both terms are used interchangeably in the context of the current pandemic in communication broadcasts to the public.

They examined 5 studies comparing the psychological outcomes for people who were quarantined and who were not quarantined. In one study among hospital staff who had come into contact with SARS, which is like COVID-19, also caused by a coronavirus, they found that the most predictive factor of PTSD three years later was being quarantined, with staff more likely to report symptoms such as "exhaustion, detachment from others, anxiety when dealing with febrile patients, irritability, insomnia, poor concentration and indecisiveness, deteriorating work performance, and reluctance to work or consideration of resignation".

In another study, Brookes et al. (2020, p. 913) found that compared to parents and children who had been quarantined in areas exposed to either SARS or the H1N1 outbreak in 2009, with those who had not, the children who were quarantined had a 4 times higher mean PTSD score compared to those who were not quarantined. With the parents, 28% (27 of 98) who were quarantined had sufficiently serious symptoms "to warrant a diagnosis of a trauma-related mental health disorder, compared with 6% (17 of 299) of parents who were not quarantined" (Brookes et al., 2020, p. 913).

Brookes et al. (2020, p. 914) also found that being quarantined led to changes in behaviour, particularly among health care workers, who showed avoidance behaviours such as minimising contact with patients and not reporting to work. Their findings suggest that there is some correlation between duration of quarantine and mental well-being. The longer the quarantine period is, it can have more of an impact on mental health breakdown. This is evident through one study which "showed that those quarantined for more than 10 days showed significantly higher post-traumatic stress symptoms than those quarantined for less than 10 days" (Brookes et al., 2020, p. 916).

Another group that has been found to evidence higher levels of posttraumatic stress disorder symptoms (Brom, Durst, & Aghassy, 2002 cited from Boals & Perez, 2009, p. 1319), and depressive symptoms (Steinitz, 1982 cited in Boals & Perez, 2009, p. 1319), negative affect (Ben-Zur & Zimmerman, 2005 cited in Boals & Perez, 2009, p. 1319) and emotional distress (Carmil & Carel, 1986 cited in Boals & Perez, 2009, p. 1319), is holocaust survivors. Boals and Perez (2009, p. 1319) note that "the effects of the Holocaust on its survivors have continued to persist even decades after liberation [.....] and affords a further and valuable opportunity to explore how individuals are able to cope with traumatic experiences". Boals and Perez (2009) analysed interviews conducted on 20 holocaust survivors. They examined the differences in language use of people speaking about the experiences of the holocaust (a traumatic event) compared to them speaking about experiences not related to the holocaust (a non-traumatic event). Their focus was on differences between first-person singular and plural pronouns (I and we), affect words (anger, happy) and cognitive processes such as because, hence. Their findings (2009:1326) indicated that words related to cognitive processes were used as a way of dealing with traumatic situations. They found a difference in the use of first person singular and plural use, with a higher use of first person plural words compared to first person singular words when talking about holocaust related events. They attributed the difference in pronoun use to the shared nature of the experience rather than one which was experienced alone (Boals & Perez, 2009, p. 1326). This differs from past research which has found personal singular pronouns to increase in situations of distress. Pennebaker et al. (1997) also hypothesised that the use of positive emotion words is a good predictor of a person's mental well-being.

## 3. Methodology

#### 3.1. Data

As the purpose of the paper is to investigate whether self-isolation due to COVID-19 has had an impact on the mental health of the population, a corpus of 36 news reports from Britain and Sri Lanka and 10 personal stories from Britain from 3rd March to 3<sup>rd</sup> April 2020 were collected to investigate the effect on mental health due to self-isolation and/or quarantine. (See Table 1). The news articles were found using the query terms 'COVID19', coronavirus', 'stories' 'isolation' and 'quarantine'

Table 1 Data.

Type of data	Number of texts	No. of words
Corpus 1: British newspaper articles	20	50,501
Corpus 2: Sri Lankan newspaper articles	16	48,204
Corpus 3: British personal stories	10	10,602

using google advanced search. Two separate searches were carried out to find relevant data from Britain and Sri Lanka. From the results, I selected 36 articles randomly that included all four search terms. The selected corpus of texts for Britain includes 50,501 words and the selected corpus for the Sri Lankan data include 48,204 words (See Table 1). The personal stories were collected from different internet sources such as Facebook and the Mind charity website and were far more difficult to find. The 10 stories were collected from Britain and consists of 10,602 words. No personal stories were available from Sri Lanka.

The methodology used to analyse the data include corpus software such as AntConc (Anthony, 2019) and LIWC-2015 (Pennebaker Conglomerates Inc). Phillips notes corpus linguistics methods can be used to extract information about the 'aboutness' of the texts. In his words, "the crucial point concerning aboutness is that it is a type of meaning arising from the global structuring of text" (Phillips, 1985, p. 30). In order to investigate the effect of isolation on mental health, the corpus techniques 'keyword analysis' and 'KWIC (key word in context) was used to look at the concordance lines and to see how the words were used. The keyword analysis was conducted by using AntConc (version 3.5.8) (Anthony, 2019). Baker (2010, p. 26) identifies key words as "words which occur statistically more frequently in one corpus than in a second corpus". He sees keywords as useful 'signposts' in identifying the "lexical focus or preoccupation of a corpus (for specific text)" (2010:26). In order to analyse the keywords in the Sri Lankan news articles, the British news stories were used as a reference corpus and vice versa. The following criteria was used to calculate the top 100 keywords: chi squared p < 0.05(+Bonferroni). LIWC2015 was used to analyse the psycholinguistic and stylistic features of the personal stories in order to investigate whether isolation is having an impact on mental health fallout. Pennbaker and Neiderhoffer (2003, p. 548) notes that the words people use can be a measure of diagnosing a person's mental, social, and physical state. They find that word use can reveal traumatic experiences shared by people. People with mental health problems were found to have a higher use of first person singular plurals (Pennebaker and Neiderhoffer 2003, p. 560).

## 4. Results

# 4.1. Research question 1: Is self-isolation due to COVID-19 having an effect on mental health?

To answer Research Question 1, I analysed the corpus of personal stories using LIWC (Pennebaker, 2015). From the different categories that are analysed, I have utilised the following results: (1) results for affect, positive and negative emotions; (2) results for cognitive processes and personal pronoun use.

## 4.1.1. Use of affect, positive and negative emotions

The results for Affect and Positive and Negative Emotions are illustrated in Table 2 and Fig. 1 (see Fig. 2).

The results from the analysis of personal stories using LIWC shows that affect words make up over 55% of words used in personal stories. In relation to the expression of emotions, there are more negative emotions in the stories than positive emotions (28.11% compared to 26.8% for positive emotions) (See Fig. 1). The negative emotion words in the personal stories are words such as mental, anxiety, stress, worries, worried, difficult, killed, lost, struggling, fighting, stressed, fears, annoying, anxious, challenging and so on. With the lockdown in the UK continuing for over two weeks, the effects of being in quarantine or self-isolation appear to be

**Table 2**Analysis of emotions in the personal stories from Britain.

Story	Word Count	Affect %	Positive Emotions %	Negative Emotions %
Story 1	621	5.31	0.64	4.51
Story 2	1163	4.39	1.38	3.01
Story 3	1025	4.78	1.56	3.22
Story 4	432	4.17	2.55	1.62
Story 5	1099	5.82	2.64	3.00
Story 6	2054	6.52	2.73	3.31
Story 7	693	4.62	3.03	1.59
Story 8	908	7.27	3.96	2.97
Story 9	605	6.94	5.29	1.32
Story 10	2002	5.41	3.02	3.56
Total	10,602	55.23	26.8	28.11

having a negative effect on mental health and supports the findings of Brookes et al. (2020, p. 916) who found that being in isolation for over 10 days has a negative effect on mental health. These findings suggest behavioural changes noted by Brookes et al. in their rapid review of the psychological effects of quarantine, where they also found that being in self-isolation can result in a diagnosis of post-traumatic stress syndrome. Research done by Boals and Perez (2009) found that word use changes during situations of distress, as evident from their study with holocaust survivors. The words used in the personal stories suggests that the writers are worried and unsettled by what is happening globally and feel that the situation is out of their control. There is also a sense that the unknown aspects of the coronavirus is causing fear about how it will affect their immediate and future situations. As those with underlying health conditions are particularly susceptible to the illness, as stated by WHO, there is a great fear of losing loved ones such as parents and grandparents which is leading to anxiety and mental breakdown due to not being able to see those who are ill with symptoms or to be close to those who are dying or have died.

## 4.1.2. Use of cognitive words and personal pronouns

As evident from Table 3, in the personal stories there was a high overall use of cognitive words (90.51%) and personal pronouns (82.99%) (see Figure 2). Cognitive processes are words which show understanding and insight; these words show a higher use in the personal stories. Personal pronouns also show a high use with the first person singular pronoun being used five times more than the first person plural pronoun (35.23% as opposed to 7.37%). The higher proportion of cognitive words in the personal stories support findings of previous research (Boals & Perez, 2009, p. 1326, Pennebaker et al., 2003, p. 548) and show that in these stories too, this is one way in which the participants are dealing with the traumatic situation of being in isolation because of COVID-19. This is further confirmed by the high number of first person singular pronouns, which could suggest, as Pennebaker et al. (2003, p. 560) have found, that the mental health of the writers could be fragile due to the current situation of distress, which one story referred to as 'a war zone'. This is seen in an example from one of the stories:

"Since going into isolation my anxiety has really increased. It often comes really unexpectedly. I have trouble breathing and thinking straight. It's just a sense of all-over- the-placeness" (Ligia, Story 1).

In her story Ligia talks about a 'sense of all-over-the-placeness' which is similar to what Jones and Wessely (2005, p. 172) refer to as 'unexplainable' symptoms of PTSD. This is illustrated by Ligia having 'trouble breathing and thinking straight'. Another aspect evident in the personal stories is the fear of how COVID-19 will affect the writers themselves and their loved ones. As WHO (2020) observes, elderly people with chronic diseases are more at risk from the coronavirus and the anxiety and fear caused by the possibility of parents and grandparents contracting the disease, as well as the risk to self, as a patient diagnosed with the respiratory disease, asthma, is brought out in Leah's story. She reveals the

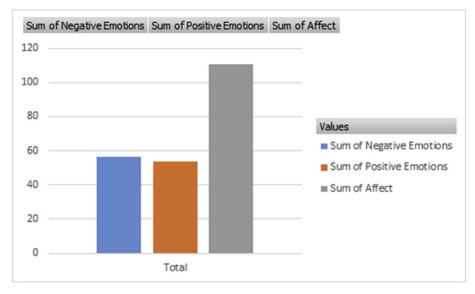


Fig. 1. Sum of affect, negative and positive emotions.

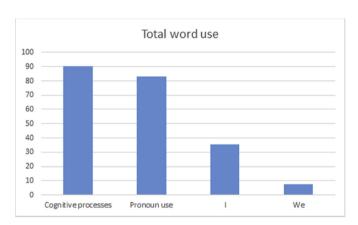


Fig. 2. Total word use for cognitive processes and pronoun use.

**Table 3**Use of cognitive words and pronouns in the personal stories.

Word category	Total word use %
Cognitive processes	90.51
Pronoun use	82.99
I	35.23
We	7.37

uncertainty and fear caused by the situation, especially in relation to contracting the disease and also managing daily life because of social distancing, for example, how to get essential items.

"Since the coronavirus pandemic hit I have experienced a huge amount of emotions. There has been a lot of anxiety, particularly surrounding my parents and grandparents who are high risk due to health problems and age, but also surrounding my own health as I have asthma. I have, alongside the rest of the country, felt a huge amount of uncertainty and stress. It has ranged from where am I going to be able to get my essential items from, to what is happening with my therapy and my son's nursery. (Leah, Story 8)

This is a major social impact of the effect of the coronavirus, as the fear of going out because of the need to social distance, means that people have had to queue up in supermarkets and shops to buy items, often only to find shelves empty of the items they need. Lou's story illustrates the

'emotional distress' referred to by Carmil & Carel, (1986 cited in Boals & Perez, 2009, p. 1319).

"My mental strength has evaporated and every issue feels like climbing a mountain, from the difficulty of getting a blood test to having to travel to London for my haematology medication. Take food shopping. My husband shops for us and always has to queue to get into the supermarket, then can't get everything we need. (Lou, story 6)

The longer the lockdown goes on and the self-isolation continues, the ability to cope could deteriorate more rapidly as discussed by Brookes et al. (2020). UK has seen an increase in the number of cases of domestic violence, murder and suicides due to people struggling to cope with coronavirus lockdown. This is seen is the following example, which suggests the challenges faced with being in isolation:

"I had a respiratory tract infection that got a great deal worse. I was finding it hard to breathe. I feel really unwell. I am currently in isolation. It is not pleasant. At the heart of it, I feel like death on legs" (Alison, Story 5)

In another story, Jessie illustrates the fear of 'not knowing if you are going to stop breathing'. As mentioned in Section 2.1, respiratory problems are a hallmark of the illness and as there is no treatment, patients are required to self-isolate. Without full knowledge of what the virus can do, this shows how people can be affected mentally because of the loneliness and inability to cope.

"I wasn't tested for Covid-19. My doctor told they 'couldn't swab everyone, but it was safe to assume I had it'. He said the pain I was experiencing was the inflammation from my lungs and that I should keep self-isolating and taking painkillers. I have never had breathing issues before. It is scary not knowing if you are going to stop breathing." (Jessie, Story 9)

Despite the fear and anxiety caused by the situation, the personal stories also reveal the desire to help and alleviate other people's distress. This can be seen as a coping strategy. An NHS nurse, Lucy talks about her encounter with a COVID-19 patient after she had finished a twelve-hour shift in the following example:

"I have spent 5 hours after my shift by the man's side despite having plans for a takeaway tonight. I have just left his side now as he is too poorly to have any visitors, but he has my contact details if he wants to tell me when he is better." (Lucy, Story 4)

In the following section, I examine whether the issue of mental health is one that is prominent in newspaper articles in Britain and Sri Lanka.

# 4.2. Research question 2: What are the priorities of different countries during the crisis as evident in newspaper reports?

To explore this, the British newspaper reports were compared with the Sri Lankan news reports using the keyword analysis technique in AntConc (2019). As Phillips (1985) has noted, keywords can be used to examine the 'aboutness' of the texts. The keywords were put into semantic categories manually using the basic USAS semantic categories (Archer et al., 2002). As the number of keywords in the British and Sri Lankan corpora were different, with the British corpus having only 16 keywords and the Sri Lankan corpus 41 keywords, I have only analysed the top 8 keywords that had a frequency of over 25 from the two corpora in Table 4.

For the British corpus, there were only 16 keywords out of a total of 3010 keyword tokens. The 8 keywords were:the, government, economy, NHS, crisis, capitalism, class, of, The analysis of the keywords using the USAS semantic categories highlights that British newspaper articles are mostly focused on the government, money and commerce and the importance of the NHS during this crisis. The grammatical use of the determiner 'the' suggests that the newspaper reports are focused on discussing very specific and definite issues whereas the word 'of' suggests involvement with different things.

In order to see how the words are used in the corpus, I conducted a concordance search using AntConc (2019) for the first five keywords and this revealed the context of use. As there was too much data to analyse, I used the context of every fifth line in order to determine how the words were used. As before, I used the categories in the USAS semantic analysis as a guide to determine the lexical patterns used in the concordance lines.

The analysis of every fifth concordance line illustrates that there is a lexical pattern to how the words appear in context. In the British newspaper corpus, the word 'government' is mainly used with words which have a negative semantic prosody such as 'inactivity', 'incompetence' and 'reluctance' in relation to the government's ability to deal effectively with the coronavirus pandemic. The word 'NHS' appears in relation to employment and, particularly, the issue of inadequate resources such as 'understaffing'. The word 'of' mainly appeared with nouns and did not have as clear a lexical pattern as the other key words but appeared to be used in a range of ways such as with general actions, attention, cognitive processes, attributes, comparisons and so on. The word 'economy' also appeared to be used in a negative context with words such as 'restart' and 'problems'. The word 'capitalist' was associated with business and power. The keywords and the context of use in British newspapers illustrate the wider social and economic implications of the pandemic (see Table 5). As noted in Section 2.3, due to social distancing being a critical requirement in preventing the spread of the disease, enforced lockdown by the government has meant that people are unable to work as normal and are either working remotely or have been furloughed. This understandably has a great social and economic impact, as businesses

**Table 4** Keywords in corpus 1 and 2.

Semantic Category	UK newspapers	Sri Lankan newspapers
Words of evaluation		Severe
Health and disease	NHS	Patients, respiratory, symptoms, cough, fever
Medicines and medical treatment		Clinical
Words to do with the body and the individual		
Words to do with grammar	The, of	You, your
Money and commerce in industry	economy, capitalism, capitalist, class	-
Government	Government	-

and places of work have had to stop or curtail their work. The uncertainty caused by the pandemic, which was evident in the personal stories is also reflected through the response of the media, which is worried about the 'uncertainty' of the social and economic effects on the country. The newspapers appear to be worried about the NHS being overwhelmed due to the pandemic and as a result there is discussion about NHS resources, one of which is 'understaffing'. As Gortner and Pennebaker (2003, p. 582) have noted, by raising these issues, newspapers can help the country "to make sense and meaning [...] and at the same time represent their community's emotions and its need to assess the consequences of the [pandemic]." Britain's response was seen by scientists as 'complacent' and this is also mirrored by some of the words used by the newspapers.

In contrast to the keywords in British newspapers, the Sri Lankan news corpus had 41 keywords from 1835 keyword tokens. However, none of the keywords in the British news reports appeared in this corpus. The keywords in the news reports in Sri Lanka show that the 'aboutness' of the reports has a different focus with the top 5 keywords being *patients*, respiratory, severe, you, your (see Table 6). The semantic analysis of the keywords illustrates that the Sri Lankan news reports center more on the evaluation of the severity of the disease, health and medicines. The word 'patient' was mainly used in the context of the stage of identification of the patient's illness and the number. The term 'respiratory' was used in relation to COVID-19 being a respiratory disease and focused mainly on the symptoms and methods of prevention and treatment. The word 'severe' was also used in the context of health and disease and medicine and medical treatment. The second person pronoun 'you' was used in the context of advising readers to modify or change their behaviour with words such as 'adjust' to be safe from the virus. The second person possessive pronoun 'your' was used in relation to the body and people, especially, children and the elderly and also talking about the level of intelligence in terms of people being ignorant about the severity of the disease. As noted by Huang et al. (2020) China immediately took action to control the spread of the disease by isolating people suspected of having the disease, searching for people with whom they had contact as well as collecting epidemiological and clinical data from patients, to develop diagnostic and treatment procedures. As in Britain, in Sri Lanka too, there were criticisms of the government being too slow to take action, and this is in a sense reflected in the Sri Lankan newspapers, which appear to be urging the government and the people of Sri Lanka to emulate the actions taken by China to curb the spread of the disease by informing people about the disease and getting them to 'adjust' their behaviour in keeping with WHO guidelines to stop the spread of the virus; it appears the newspaper reporters think the people of Sri Lanka are 'ignorant' about the disease and how to prevent its spread. As noted in Section 2.3 the newspapers also look at the symptoms of the disease and how it affects different populations such as children and the elderly.

#### 5. Conclusion

The purpose of the paper was to address the gap in the literature by examining how linguistic features in personal stories and newspaper reports reveal the impact of the pandemic on mental health and wider social and economic issues. The analysis of the corpora, albeit on a very small scale, has been revealing in terms of gaining an understanding of the effects of self-isolation and lockdown on mental health. The results are also instructive in showing the media focus of two different countries, Britain and Sri Lanka, during the current crisis. The personal stories from Britain revealed the psychological effects the lockdown is having on people, particularly in cases where they are self-isolating. The uncertainty and fear evident in the personal stories is to a degree also mirrored in the newspaper reports, which reflects the collective mood of the country about the social and economic impact of the pandemic. In both countries people's fears about the 'unknowns' to do with the virus, appear to be mirrored in the newspapers, with Britain concentrating mainly on how the pandemic is going to affect the economy and the NHS in an environment of funding cuts, whereas in Sri Lanka, the newspapers

**Table 5**The lexical patterns of Corpus 1 keywords in concordance lines.

Keywords	Context of use lexical patterns					
Government	Proper nouns and pronouns Our, Johnson, British	Communication announced Arguing	Level of interest and expectation Reluctance Expects	General actions Inactivity	Importance central	Ability and apprehension Incompetence Worried
NHS	Grammatical words and pronouns The, our	work and employment Staff Understaffed Workers	General actions Performance			
Of	General actions  Production	Attention Interests	Cognitive processes thought	Attributes Characteristics	Comparison Exception absence	Difficulty Challenge Threat
Economy	Names for groups of people and places British, Chinese, UK	Words depicting commencement <i>Restart</i>	Size Largest	Words relating to difficulty Problems	Group affiliation culture	
Capitalist	Words associated with business Consumerism Corporations Economy Market	Possession Ownership	Power Elite Leaders	Group affiliation Bandwagon	restriction/ autonomy Class chaos	

**Table 6**The lexical patterns of Corpus 2 keywords in concordance lines.

Keywords	Context of use lex	rical patterns		
Patients	State of the physical condition Critical, recovery, suspected, confirmed	Words depicting quantity 80% Number Some		
Respiratory	Health and disease Illness, fever, disease, inflections, symptoms, syndrome	Personal care Hygiene	Social actions Treated, developed Prevent	
Severe	Health and disease Infection Diseases Cases Disease Damage	Medicines and medical treatment Clinical Trials		
You	Words denoting change Adjust Become			
Your	Terms relating to the body Body, chin, hands, face, eyes	People Children, elders	Cognitive processes thought	Terms denoting level of intelligence ignorance

are trying to urge people to take better social precautions as a way of preventing the spread of the disease. The analysis of the personal stories using LIWC was exceptionally useful in seeing the fallout in mental health well-being through the expression of affect, positive and negative emotions. As the results illustrated, there were more negative emotions than positive emotions and the stories showed that coping with isolation was a challenge for many of the story writers. Despite the stress and anxiety experienced by the writers, there were however also glimmers of hope, in the words of solidarity with the NHS, the desire to help and care for others. The analysis illustrates that the writers' disclosure of their own personal struggles with mental health is a way of coping with their struggles. The use of cognitive processes and personal pronouns was also an important measure in gaining insight into mental health. Pennebaker

et al. (2003) have found that people are likely to use more first person singular pronouns when their mental health is weak. This was confirmed through the study, as there was a much higher use of first person singular pronouns compared to first person plural pronouns. In their study with holocaust survivors, Boals and Perez (2009) found that going through a traumatic situation collectively can have an important effect on participants. They found a higher use of the plural personal pronoun 'we' in their study in contrast to the current study, where although there is a sense of sharing the experience, the trauma of the situation appears to be more individual. The use of words for cognitive processes is also high; this suggests that the writers use their understanding of the situation to cope with the trauma of the event. Overall, the results from the LIWC analysis provides an answer to the first research question: isolation is having an effect on people's mental health, and as Brookes et al. (2020) have noted, the longer the lockdown continues, it is likely that there will be a greater impact on mental health well-being.

On the other hand, the analysis of keywords of the newspaper corpora was instructive in highlighting the lack of focus on the mental well-being of people during this traumatic situation. What the results highlighted was how the media in different countries focus on the crisis. In Sri Lanka, the media appears to be more focused on reporting on the severity of the disease and informing people about the virus; giving advice, as was seen through the results of the concordance lines for the second person pronoun 'you'. The Sri Lankan newspaper reports talked more about what the disease was like and the symptoms and means of treatment and prevention. As Gortner and Pennebaker (2003, p. 582), have noted, in the immediate aftermath of a disaster, it is common to see a large number of articles that are "detailed and elaborate to adequately inform the public" about the dangers of the situation. With the first suspected local case being identified in Sri Lanka in March 2020, it is then not surprising that the newspaper reports in Sri Lanka are more about the virus and how to prevent its spread. This is what people in the society would have been talking about with the first case coming to light and this is reflected in the newspaper reports. The concordance analysis was revealing of the different contexts of use for the identified statistically significant keywords. In contrast to the Sri Lankan news reports, the focus in the British media was on the government and the economy. Although not many negative contexts were evident through the concordance lines, there were words with negative semantic prosody which showed dissatisfaction with the government's handling of the crisis and in some cases what was seen as 'incompetence'. In Britain, the issues of underfunding over the last decade and the ability of the NHS to cope was also evident through the concordance lines. This can be seen as mirroring society's

collective emotions about the government's treatment of the NHS. Overall though, the newspapers appeared to express concern about the 'stormy' economy and how it is going to recover. What was surprising in both countries, was the lack of any focus on how the enforced lockdown is going to affect people's mental well-being. In both countries, newspapers appear to reflect the wider social and economic concerns of people in their respective countries: in Sri Lanka, preventing the spread through understanding the disease; and in the UK, dealing with the wider social and financial implications to the economy.

As this is a very small scale study conducted within the constraints of time, further work could be done using bigger sets of data, looking at more personal stories or through interviews of different age groups in order to get a more thorough picture of the personal struggles with mental health due to self-isolation/quarantine. It would also be useful to examine personal stories of people in other parts of the world where there have been enforced lockdowns, such as Italy, to gain insight into the scale of the impact. COVID-19 has been unprecedented and issues of mental health such as fear of getting infected, fears of infecting others, losing a loved one and coping with death are all fascinating topics for study in the future.

### Declaration of competing interest

I declare there is no conflict of interest.

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