

The Relationship between Global Crises and Aggression

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Purpose: Existing literature suggests there is a relationship between aggression and global crises as well as health pandemics. Despite previous research highlighting this relationship, research in the UK that examines this relationship, and particularly between the pandemic containment measures with aggression, has not been thoroughly examined. This pilot study investigates the aggression levels in the UK before and during the implementation measures for containing the latest global health crisis. **Design:** For the needs of the pilot study, 149 participants (127 female and 21 males) completed an online questionnaire which measures aggression levels before and during lockdown. **Findings:** The investigation showed that aggression increased during the lockdown periods, with themes of anger and loneliness also being identified through a content analysis. This project is one of the first to examine aggression during lockdown and isolation restrictions. Further implications and limitations are discussed.

Keywords: crises, lockdown, pandemic, conformity, violence, aggression

Introduction

The emergence of the COVID-19 pandemic caused extreme damage to society, with not a single individual being able to avoid its detrimental effects. An extremely important issue emerging involves the increasing problems regarding the growing anxieties caused by the pandemic which are in turn triggering neglect and violent episodes. There is a current gap in the existing literature exploring the effects of the COVID-19 pandemic on aggression levels within the UK, indicating an extreme importance for this research. As this crisis is new phenomenon, it is not yet clear what its relationship with violence is, nor is there knowledge surrounding the effects of the year-long social isolation (Usher et al.,2020). Without this knowledge, it cannot be known what issues are emerging in the privacy of people's homes, potentially suggesting that many individuals who need help are not being acknowledged. Whilst the new global crises with the energy prices has added to the existing difficulties, consequently adding to the research gap.

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Hatred, Violence and Scapegoating

Coverage of historical epidemics and behavioural triggers has uncovered long-held assumptions that epidemics spark animosity among societies, as adopting hatred and advocating blame to others is easily done (Cohn 2020). However, there is evidence of anomalies existing, as the Mexican swine flu was spread due to fear of contagion, although it did not trigger mass hatred or violence, (Cohn 2012). Similarly, yellow fever in America sparked mass compassion and increased volunteering, (Cohn 2020).

Despite the counterargument within the literature, the COVID-19 pandemic has proven to be no exception to the theme of hate and blame as scapegoating has transpired against various groups across the world. Due to the country of the disease's origin, blame has predominantly been directed towards Chinese individuals in the form of serious hate crimes and assaults, (Gee et al. 2020). The initial spread of misinformation resulted in widespread cases of xenophobia as Chinese individuals were connected to the disease, sparking old stereotypes by incorrectly linking race to the pandemic and distorting understanding of the disease, (Gee et al. 2020, Leung 2008). Currently, there are growing reports that mention similar perceptions and behaviour towards Russian citizens, mainly because of the war between Russia and Ukraine, and the impact of that war on the energy prices in the western countries.

Social Harmony, Inclusivity and Solidarity

Despite surplus research suggesting that epidemics divide societies, new evidence implies that common responses include increased solidarity and social cohesion resulting from a shared compassion, (Cohn 2018, Jedwab et al. 2019). Solidarity is often defined as a common interest in survival and safety, promoting social cohesion. During a pandemic a collective effort is made to protect others, particularly those who are vulnerable such as the young and old, (Baylis et al. 2008, Prainsack 2020, Tomasini 2021).

Societies often come together as a response to potential harm to protect their common interests and diminish the threat against them (Dawson & Verweij 2012). The ability to recover from tragedies quickly, by adapting and overcoming vulnerabilities has been documented in the literature, demonstrating the strength and flexibility of the individuals affected (Peters 2020). Historical examples of solidarity include the outbreak of yellow fever and the 1918 Great Influenza which led to increased empathy among the masses and peaceful movements as volunteering and self-sacrifice were encouraged (Cohn 2018).

The most recent pandemic, COVID-19, has overall demonstrated a better response to crises than in the past. The social violence exhibited by the current pandemic is nowhere near as serious as the violence apparent in the riots responding to the outbreak of Cholera and the Black Death (Jedwab et al. 2020). Many areas have seen a decrease in both violent and non-violent crimes, when comparing the same week, a year apart, with South Africa reporting a 71% decline in homicides and 85% decline in rape because of the lockdown (Marupeng 2020).

Increased worldwide unity during this crisis has been proven to likely be a result of the whole world being affected instead of it being restricted to one area. Global solidarity and shared knowledge facilitate the avoidance of psychological conflict. In addition, complete transparency from those in power, regarding the cause of the pandemic, resulted in conspiracy theories being quickly dispelled (Jakovljevic et al. 2020, Jedwab et al. 2020). Further, as authority figures were also affected, anxieties were reduced. Despite most of the world demonstrating a non-violent response to the crisis, there has been evidence of high volumes of blame, conspiracy theories and violent protests against lockdown restrictions worldwide (Jedwab et al. 2020, Loayza 2020).

Crises and Conformity

Research suggests that social disconnection, uncertainty, and social fragmentation are characteristics closely linked to pandemics, which commonly increase conformity and are likely to attract individuals to those with clear or extreme norms (Abrams et al. 2021). Conformity is strongest among individuals belonging to the same unit, as acceptance is essential to fit in and develop social relationships (Cialdini & Goldstein 2004, Packer et al. 2021). Therefore, social influence is heavily relied upon, to spread policies and to ensure each individual audience will comply, for example, the media may promote coercion and identify credible individuals such as religious leaders (Antonakis 2021, Van Bavel et al. 2020).

Two common elements of conformity include normative influences, adapting to maintain social acceptance, and informational influences, adopting similar behaviour to others as this is what is accepted as appropriate, with the latter being more common among pandemics (Cialdini & Goldstein 2004, Deutsch & Gerard 1955). Consumer behaviour is altered radically because of crises, as rumours and false information encourage mass buying of products and labelled ‘cures’, even if they are not proven to be effective (Song et al. 2020). When an individual’s life is threatened, which is the case during a pandemic, their behaviour becomes irrational and is heavily influenced by their peer groups opinions (Murray & Schaller 2012). Existing literature suggests that informational conformity consumer behaviour is extremely harmful during epidemics, as it encourages price changes, impulsive buying and misallocation of resources which are all harmful to the economy and society (Dong & Zhong 2017). Demonstrations of this type of conformity have occurred during the COVID-19 pandemic, such as the demand-driven panic buying across the world which saw individuals purchasing abnormal amounts of goods from local supermarkets (Islam et al. 2021). The reason for the irrational buying was misinformation spread through media outlets and excessive information that accompanied rumours.

Despite this undesirable and unusual display of conformity, there has also been evidence of conformity in a positive way. Most of the world exhibited conformity during COVID-19 in the form of adherence to the lockdown rules (Van Bavel et al. 2020). Unfortunately, many individuals refused to cooperate and rebelled against the rules of social distancing, mask wearing and staying at home. Across the United

States protests against quarantine and social distancing measures broke out, fuelled by their president's encouragement (Dyer 2020, Meeker 2020). Motivated by their beliefs of injustice and disagreement with restrictions, some global protests became violent as angry individuals wanted justice as they had become resentful towards the measures in place (Armbruster & Klotzbücher 2020, Briscese et al. 2020). Economic decline and uncertainty lead to demonstrations of frustrations and rebellion against conformity (Justino & Martorano 2019, Li & Coppo 2020, Sedik & Xu 2020). Due to the current understanding of conformity, it is agreed that individuals exhibiting negative behaviour can easily influence others as their reactions are seen as acceptable. This can be particularly dangerous during a crisis when harmful attitudes and beliefs are shared and lead to detrimental consequences, as the threat of contagion encourages unexpected and irrational behaviour (Robson 2020).

Pandemics and Life Satisfaction

A large body of literature has investigated in-depth the detrimental effects of lifestyle changes caused by pandemics. Disasters can cause extreme damage to society and negatively affect a variety of factors. Individuals can be affected emotionally as loved ones may pass away and financially, as they may lose their jobs, with both affecting life satisfaction (Barro & Ursua 2008, Barro et al. 2020). Further, social isolation in the form of lockdowns significantly affects health and psychological welfare, inducing psychological stress and depression, particularly among older adults, (Brooks et al. 2020). Negative mood changes and discontent as a response to crisis are likely to negatively affect life satisfaction. Quarantine measures imposed after an outbreak of SARS in Asia and Canada over a decade ago demonstrated this and had damaging consequences on the mental health of the individuals involved, causing severe distress, and increasing anxieties (Hawryluck et al. 2004, Reynolds et al. 2008). To reduce spreading of diseases, separation is required, meaning the increased stresses and anxieties are an unfortunate accompaniment that cannot easily be avoided.

Financial, Social and Mental Effects

Loss of work, income and childcare has led to increasing risks of problems within the home due to developing fears around stability (Prime et al. 2020). Across the world, individuals have struggled immensely to continue supporting their families during these strenuous times, as many individuals have lost their jobs, while the remainder are expected to home school their children and work from home simultaneously as approximately 1.37 billion children have been unable to attend school (Cluver et al. 2020). It is anticipated that many individuals will be unable to acquire and maintain stable work for the foreseeable future, even after the disease has subsided (Crayne 2020). Financial strain is not only detrimental on a personal scale but also globally. Many industries are at significant risk due to uncertainties

surrounding the economy and a global recession, (Fernandes 2020), with expectations that it will take many years for some jobs to be available again (Berman 2020).

Without this affordance, an individual's wellbeing is affected negatively as their work community and psychological support (Pratt & Ashforth 2003) is withdrawn. The literature suggests that individuals who have problems securing employment experience extreme psychological suffering, (Dooley et al. 1996, Hamilton et al. 1993). There has been a significant decline in the mental health of individuals across the world, in comparison to before the pandemic, (Czeisler et al. 2020, Ettman et al. 2020, McGinty et al. 2020) global responses to the pandemic include suicidal ideation, depressive symptoms, insomnia, stress and anxiety, (Holmes et al. 2020, Killgore et al. 2020, Torales et al. 2020).

As a result of the new lifestyle changes and developing strain on mental health, there were growing concerns that such circumstances and a lack of access to services providing help would increase the risk of aggression manifesting and having detrimental repercussions (Peterman et al. 2020). These anxieties were all supported by research on previous epidemics and began manifesting on a global scale as the pandemic emerged, (Usher et al. 2020). Studies have found that there was increased intimate partner violence and sexual violence resulting from the outbreak of Ebola in 2018 (UN Women et al. 2014), related to the reduced access to health and protective services (Peterman et al. 2020). Sexual and gender-based violence in Guinea increased by 4.5% from before the outbreak of the virus and areas of Congo affected by Ebola, reported increasing sexual and domestic violence against women and children because of the crisis (Wenham et al. 2020). Despite these reports, alternative evidence found that there was a decrease in violence and exploitation (Bandiera et al. 2019), however, this research was a result of personal perceptions, meaning it is not entirely reliable.

Household Violence

Feelings of depression often bring out negative elements of a relationship, including hostility, blame, withdrawal and feeling unsupported (Rehman et al. 2008) which may quickly spiral into violent and uncontrollable episodes. As close relationships are a main source of comfort and support to an individual's well-being (Pietromonaco & Collins 2017) it is understood how stress and frustrations during a crisis are often taken out on those closest to them.

The COVID-19 pandemic is evidence of this happening as the global crisis has been used by individuals as a way of intimidating and threatening their victims to isolate and further abuse them (National Domestic Violence Hotline 2020) Research has suggested that individuals are using social distancing measures to prevent their partners from accessing resources as their violence increases dramatically (Gupta & Stahl 2020). Increasing displays of coercive control are being demonstrated within already abusive relationships and the threat of contagion is fuelling this danger further (Usher et al. 2020). The literature describes a horrifying surge in intimate partner violence across the world during the recent lockdowns (Roesch et al. 2020), particularly towards women as reports suggest they are affected more negatively

than men due to restricted use of health services and increasing gender-based violence (Wenham et al. 2020). Much of the literature has focused on male perpetrated violence towards women and children, suggesting females are more likely to be victimised (Gulati & Kelly 2020), with discussion forums used in research being 96% female reporting (Lyons & Brewer, 2021). However, the strong emphasis on female victims is likely to be a result of existing stereotypes and underreporting from male victims. In the UK, deaths resulting from domestic abuse more than doubled in a one-month period when compared with the average rate over the previous 10 years (Grierson 2020), and in Argentina, it was reported that every 29 hours a woman was killed by her partner (Wenham et al. 2020). Reports have also surfaced in Australia that there had been a significant increase in individuals needing help and increasing case complexity (Lattouf 2020).

Links within the literature have also been identified between hostile sexist attitudes and increasing violent behaviour towards intimate partners and children after the lockdown period has ended (Overall et al. 2020). Already in Australia there has been an increased demand for services protecting women and children from violence and increasing risks for children not being able to go to school (Duncan 2020). Important lessons can be taken from previous pandemics regarding the ignorance towards gender related effects of a crisis. Some countries made no effort to tackle the issue after the outbreak of Ebola, such as Kazakhstan where domestic violence is not illegal and therefore was not addressed. Similarly, Hungary confirmed that they would not reprimand the Istanbul Convention for their violence towards women and did not attempt to protect them from domestic violence (Klugman 2017, Wenham et al. 2020). Despite this shocking response, it was not the case in all countries as Italy significantly increased their service provision and created more helplines for victims of domestic violence and protocols at pharmacies. Similarly, Kenya encouraged telephone counselling for victims and Australia increased funding for anti-violence organisations and provided more accommodation (Wenham et al. 2020). However, to understand which measures are the most effective in harm prevention, data collection is essential and must be encouraged. Collecting data from during and after an outbreak must be conducted and focus on the causes of violence as this is a very under-reported area.

Current Study

This study focused on investigating the aggression levels during the global crisis in 2019-2020, through an exploration of attitudes towards lockdown rules and a comparative analysis of self-reported aggression, before and during lockdown. Although it has been proven that social harmony is a common response, an abundance of research has investigated a plethora of triggers and negative feelings that frequently arise. Often violence is encouraged by pandemics as individuals search for others to blame, turning them to their victim as an outlet to target their aggression. Research conducted across the world and from other pandemics has concluded that aggression is a common response by many and very commonly appears within households (Peterman et al. 2020, Usher et al. 2020, Van Gelder et al. 2020). Further, the

lockdown conditions forcing everyone to stay at home for long periods of time and isolating from loved ones provides opportunities for aggressive altercations to manifest and go unnoticed.

The main aim of this investigation was to achieve an understanding of whether there is a positive correlation between the COVID-19 crises containment measures and aggression. To analyse this relationship, changes in aggression or perceived anger were examined with a comparison before and after the year of the restrictions. Another objective of this study was to examine feelings surrounding triggers of aggression linked to the pandemic to understand the reasons for potential behavioural changes. The final objective was to determine whether increasing aggression due to lockdown is a result of conformity. Understanding a link between conformity and aggression might provide an insight into how violent behaviour can be influenced by others. The hypothesis created for this investigation states that individuals would report higher levels of aggression after the lockdown period. The main justification for this prediction comes directly from suggestions within the research that aggression has increased because of the pandemic, along with strains financially and mentally leading to intense irritation. Further, increasing frustrations stemming from the strict restrictions are likely to lead to heightened tendencies to demonstrate violence.

The motivations for this research are emphasised in the literature, with the absence of a UK-based study in this area is the main driving force for this study, making this unique contribution particularly important. An understanding of the effects of lockdown on aggression will provide an insight into the reality of isolation and enable recommendations to be made for the future. Identifying triggers to violence can help pinpoint areas for improvement and highlight individuals who are likely to assert aggression or those who are potential victims. Being aware of these two groups will enable strategies to be designed to protect both from possible harm and inform future interventions. Further, the findings will contribute to the existing literature on COVID-19 and aggression and enable a global comparison with the research conducted in other countries.

Methodology

Participants

The individuals in the sample were recruited through a questionnaire link disseminated on a variety of platforms. Social media pages, both personal and public, such as Facebook, Reddit, and LinkedIn, along with Sona, Survey Circle and multiple University student sites were used to promote the questionnaire and find a range of different participants to ensure generalisability. The original sample consisted of 149 participants, 21 males, 127 females and one preferred not to say. 50% of the sample were aged 21-25, with 85% reporting their ethnicity as white and 58% students. However, several responses had to be removed as they were unable to complete all required sections. Although some questionnaires were not completed in full, only some of the data was necessary for each analysis and therefore each test conducted had a different number of participants within the sample. In total, there

was 104 participants in the before and after lockdown condition, with 116 participants in the conformity variable.

Design

The research adopted a within-subjects design as each of the participants completed all the stages of the questionnaire. This design was chosen as there were not different conditions being tested, nor were there different groups and therefore it was important that the individuals answered each section to investigate the research questions.

Materials

A mixed method was adopted in the form of a questionnaire created using Qualtrics, consisting of four different sections. A demographic section enquired about the participant's background characteristics. The next section asked participants to describe their feelings towards a range of rules adopted during lockdown to assess triggers.

The third section was the Buss and Perry (1992) Aggression Questionnaire, enabling a direct comparison between participant self-reported perceptions of their own aggression before and during the lockdown period. Two 5-point scales, ranging from one (extremely uncharacteristic of me) to five (extremely characteristic of me), were used to indicate how characteristic each of the 29 statements were in describing participants and measured levels before the crisis and since. This method was chosen as it enabled a complete understanding of aggression levels and had been proven to be a valid scale. Cronbach's Alpha argued the scale possessed considerable internal consistency and reliability coefficients indicated adequate stability (Buss & Perry 1992). The scale consisted of four factors: nine items for physical aggression, five items for verbal aggression, seven items for anger and eight for hostility. The individual subscales were calculated for before and during lockdown along with a total for each of the timescales.

The Goldsmith and Clarke Conformity Scale was the final component of the questionnaire, used to understand the participants' likelihood of being influenced by external sources. Seven bipolar adjectives were used to measure the tendency to conform, employing a 7-point semantic differential format, indicating which adjective they most related to (Goldsmith et al. 2005). This scale was employed as it had been tested for validity, with internal consistency indicating acceptable to good reliability. The scoring system was coded 1-7, depending on how close to each adjective on the scale they felt they related to the most. A total column was calculated to include all the items as a higher overall score indicated greater conformity.

Procedure

Individuals participating in the study were required to provide informed consent to ensure their cooperation was voluntary. The sample was then asked to briefly describe how a list of lockdown rules made them feel. The next section was the aggression scale, presenting participants with 29 statements regarding aggression and

asking them to rate how characteristic each of the statements were of themselves, before and during the lockdown. The final section provided participants with seven pairs of opposite adjectives and asked for an indication on the scale of which best reflected their own personality. After this a debrief form was issued, ensuring the studies aims and participants rights were reinforced. There were no time constraints on the sections, however, each question forced a response so participants could not progress until they had answered the previous question.

Results

Descriptive Statistics

Descriptive statistics were run on the continuous variables, aggression, and conformity, with the results of these tests are displayed in Table 1. The varying sample sizes are a result of incomplete responses. Table 1 outlines the descriptive statistics for the measures of central tendency and spread of the data for the subscales and totals of conformity and aggression before and during the lockdown. In total, before lockdown the mean aggression score for the 104 participants was 61.97 (SD = 15.38), which increased to (M = 65.53, SD = 16.03) during lockdown. Of the 116 participants in the conformity variable, the mean score was 33.34, (SD = 4.46); this variable had a negative skew.

Table 1. *Descriptive Statistics of Continuous Variables*

		N	Min.	Max.	Mean	Std. Deviation
		Stat.	Stat.	Stat.	Stat.	Stat.
(Before Lockdown)	Physical Aggression	104	9.00	32.00	19.95	4.83
	Verbal Aggression	104	5.00	19.00	10.55	3.52
	Anger	104	7.00	26.00	16.38	4.33
	Hostility	104	8.00	27.00	15.10	5.26
	Total	104	29.00	101.00	61.97	15.38
(During Lockdown)	Physical Aggression	104	9.00	33.00	21.07	5.25
	Verbal Aggression	104	5.00	19.00	11.13	3.56
	Anger	104	7.00	28.00	17.52	4.64
	Hostility	104	8.00	27.00	15.82	5.20
	Total	104	29.00	101.0	65.53	16.03
	Conformity	116	17.00	48.00	33.34	4.46

Inferential Statistics

Prior to the following analyses, the variables were tested for normal distribution and data was examined for compliance with the assumptions. The first set of tests conducted analysed the relationship between aggression and the lockdown period. The hypothesis tested was that individuals would report higher levels of aggression after the lockdown period. The self-reported results of perceived aggression before the lockdown were compared to perceived aggression during the lockdown. Each

of the four subscales of aggression was analysed, along with the totals, to understand the differences in aggression. There was a statistically significant increase in verbal aggression before ($M = 10.55$, $SD = 3.52$) and during ($M = 11.1$, $SD = 3.56$), $t = 1010$, $Z = -4.432$, $p = 0.00$) the lockdown. The median scores for before and during lockdown were 10 and 11, respectively, with 41 participants reporting higher levels of verbal aggression after the lockdown, whereas only seven reported higher aggression before the lockdown. There was also a statistically significant increase in hostility before ($M = 15.09$, $SD = 5.26$) to during lockdown ($M = 15.82$, $SD = 5.20$), $t = 1195$, $Z = -4.315$, $p = 0.00$. The median scores for before and during lockdown were 14 and 15, respectively, with 41 participants reporting higher levels of hostility after lockdown but only 12 reported higher levels before.

For the physical and anger subscales, along with the totals, repeated measures t-tests were conducted. There was a significant increase in physical aggression from before lockdown ($M = 19.95$, $SD = 4.83$) to during lockdown ($M = 21.07$, $SD = 5.25$), with this difference being statistically significant, $t(103) = -4.76$, $0 < 0.01$. The mean increase in physical aggression was 1.12 with a 95% confidence interval ranging from -1.58 to -.65. The eta squared statistic (0.47) indicated a small effect. There was also a significant increase in anger from before the lockdown ($M = 16.38$, $SD = 4.33$) to during lockdown ($M = 17.52$, $SD = 4.64$), this difference was statistically significant, $t(103) = -5.17$, $0 < 0.01$. The mean increase in anger was 1.14 with a 95% confidence interval ranging from -1.57 to -.70. The eta squared statistic (0.51) indicated a medium effect. A significant increase was identified for the totals from before the lockdown ($M = 61.97$, $SD = 15.38$) to during lockdown ($M = 65.53$, $SD = 16.03$), this difference was statistically significant, $t(103) = -6.07$, $0 < 0.01$. The mean increase in total aggression was 3.56 with a 95% confidence interval ranging from -4.72 to -2.39. The eta squared statistic (0.594) indicated a medium effect.

The final set of analyses conducted investigated the relationship between aggression and conformity, to see whether the former could predict the latter. A simple correlation was carried out for both aggression timescales to conclude whether the two variables were associated. There was a very weak positive correlation between conformity and aggression before lockdown, meaning the two variables increased together. However, the relationship was not statistically significant, ($r = 0.12$, $p > 0.05$).

There was also a very weak positive correlation between conformity and aggression during lockdown, meaning a greater aggression score was associated with a greater conformity score. However, the relationship was not found to be statistically significant, ($r = 0.11$, $p > 0.05$). Confirmatory analysis was then conducted on the variables in the form of a simple linear regression to predict conformity based on aggression. The results found that neither aggression pre-lockdown, $F(1, 105) = 1.40$, $p = 0.24$, nor aggression during lockdown, $F(1, 104) = 1.33$, $p = 0.23$ were significant predictors of conformity. Therefore, the null hypothesis was not rejected.

Content Analysis

The answers provided by participants to the COVID questions were subject to content analysis, to analyse feelings towards specific restrictions in place and the potential triggers of aggression. Participants were asked about different rules relating to restricted activity such as seeing loved ones, attending hospitality venues, travelling, and working from home. A common theme identified throughout was a shared understanding as participants could recognise the importance of the new rules and their benefits, however, could not help but express their concern and unhappiness. A small group of participants were unbothered by the newly implemented restrictions as they were more than happy to stay at home and did not rely on others for life satisfaction. However, from most respondents, the main themes identified were anger, loneliness, powerlessness, social deprivation, and suffocation.

Synonyms of anger were very commonly reported by the sample within this section, such as the repetition of the word's frustration, hate, annoyed, disappointed, and stressed was constant. There was a strong indication of irritation as participants felt extremely annoyed about the new rules and interruption to their daily routines. The restriction that generated the most anger was not being able to see loved ones and staying at home unless journeys were essential, closely followed by cancellations to leisure activities as this brought up a lot of negative feelings. Another predominant theme was loneliness. Extreme isolation brought about by being made to stay at home for long periods of time, triggered feelings of anxiety and helplessness which were strongly linked to mental health issues. Being unable to see loved ones upset and saddened many as their support and care systems were taken away from them, in a time when joining together and helping each other was essential. Further, for individuals relying on sport and attending work to improve their life satisfaction, being forced to stay at home was detrimental to their personal well-being. Participants commonly reported a loss of enjoyment for life because of the inability to make experiences and have enjoy themselves at leisure and hospitality venues, describing suffering social deprivation. Individuals relying on these settings for employment also felt extreme worry regarding financial loss and uncertainty. Feelings of alienation triggered by these rules was a key trigger to the onset depressive symptoms, especially for individuals living alone.

Like the strong sense of loneliness, another clear emerging theme was an overwhelming feeling of suffocation. Respondents commonly reported feeling trapped and confined in their own homes, almost like they were in prison, being reprimanded for something they were not responsible for. Disconnections from the outside world were common and the forced distance meant major life events were missed and the lack of freedom meant there was nothing to look forward to. A loss of power was also commonly reported as the last theme identified from the content analysis. The inability to control their own lives meant individuals felt weak and helpless as they could not go or do what they wanted, nor could they express themselves through their hobbies the way they usually would.

Discussion

The main aim of this research was to investigate the relationship between lockdown and aggression. A hypothesis was developed to investigate this relationship, stating that individuals would report higher levels of aggression after the lockdown period, when compared with before. The findings showed that there was an overall significant relationship between the two variables, including each of the variables' subscales. The subscale with the biggest increase in aggression was anger, closely followed by physical aggression. These results confirm the hypothesis, as aggression did increase because of lockdown. This supports existing literature as research argues that pandemics commonly increase violent outbursts such as unprovoked attacks and mass violence (Cohn 2020, Cohn & Kutalek 2016, Esner & Nivette 2020, Rose 2018). Research conducted on COVID-19 in other countries also concluded that aggression has seen a dramatic increase since the introduction of lockdowns, particularly escalating family violence and hostility (Gupta & Stahl 2020). The findings within this investigation contribute to the literature and support previous research that concluded that all types of aggression increase during times of uncertainty.

The second analysis examined whether there was a relationship between gender and conformity. The results found that there was not a statistically significant difference in conformity between males and females. Existing research found evidence that females were more likely to conform and follow COVID-19 rules and restrictions than males, (Haischer et al. 2020). The findings within the current analysis do not support these findings in the literature. This difference may be due to the biased participant characteristics within the current investigation, or perhaps due to the strict view of gender as dichotomous within the literature and ignorance to social and psychological mechanisms as a complicated concept (Brouard et al. 2020).

The final analysis attempted to investigate whether there was a relationship between conformity and aggression as they have both individually been found to increase during the lockdown, in existing literature. There was a very weak positive correlation identified between conformity and aggression before and during lockdown, however, the relationships were not statistically significant. Existing literature concluded that the crisis initiated displays of conformity such as irrational panic buying, (Islam et al. 2021) and increasing obedience to traditional gender roles (Rosenfeld & Tomiyama 2020, 2021). Research on previous pandemics also concludes that crises encourage the bandwagon effect (Wang et al. 2020) and attracts those with extreme views to join (Abrams et al. 2021). The findings within the current investigation do not support these findings as the result was non-significant. This may be due to limitations within the sample, or the method used, as comparing participant responses to adjectives does not reflect actual displays of conformity and individual imitation.

The themes identified within the content analysis were anger, loneliness, powerlessness, social deprivation, and suffocation. This analysis enabled an understanding of feelings towards restrictions introduced by the UK government to reduce spreading of the pandemic. It was very apparent that the overall response was extremely negative, as words and phrases used described feelings of hurt and disappointment. The literature suggests that violence is often caused by distrust and

broken relationships between society and authoritative bodies in times of uncertainty, (Cohn & Kutalek 2016), as anger and disappointment triggered by the isolation may lead to such mistrust and impairment of confidence in those in power. This could be an explanation for the growing aggression demonstrated in the dataset. Further explanations for manifesting aggression within the literature includes increasing anxieties due to a loss of control (Yang et al. 2021) and sudden economic changes leading to financial uncertainty (Jedwab 2020). The content analysis supports this research as participants reported increasing feelings of powerlessness due to not being in control of their own lives and fears for their future over economic insecurity. This may be responsible for the increasing aggression.

The literature has also described how an increasing strain on mental health in past pandemics has led to aggressive episodes (Peterman et al. 2020, Usher et al. 2020, Van Gelder et al. 2020). This was a main theme identified in the content analysis, was suffocation and loneliness, which had strong links to mental health issues because of isolation and being confined at home. Such depressive symptoms may be a main cause of the apparent increasing violence, supporting previous research. Similarly, the literature concludes that lifestyle changes such as social isolation impacts psychological welfare by inducing stress and depression (Brooks et al. 2020), which in turn can manifest into aggression. Social deprivation and missed opportunities reported by participants add to the possible growing explanations for the increase in aggression because of lockdown.

Implications

This research area significantly lacks valid research; therefore, this investigation makes a substantial contribution. This is beneficial as it aids a comparison to other research conducted, either supporting or contrasting previous findings, enabling new information to be brought to light. There is also the ability to compare findings from this pandemic to previous outbreaks of disease to understand differences and similarities. This makes a very important contribution to the real world in terms of prevention for the future. This investigation can guide an understanding of a 21st Century pandemic and encourage crisis prevention in regard to aggressive action, so we know how to deal with future outbreaks and ways to improve what has already been done. With the current energy crisis progressing, it is advisable that the authorities should be aware of the effect of crises on aggression and particularly domestic violence. Attempts to apply the findings from this pilot study to new research related to the energy crisis should take place, in order to create preventive models and policies related to crises and potential increased aggression levels due to failing measures.

Governing bodies can use the results to understand the positive and negative effects of the lockdown period and take this information and make new legislation. These authoritative associations can also learn whether the lockdowns were effective and worth the accompanying consequences, such as increased aggression and the onset of mental health issues. Understanding the effect of lockdowns will inspire changes to policy regarding pressure to stay at home, designing safer ways to get people out of the house. Support and health services can also use this knowledge to

identify at risk individuals and understand how to redesign and distribute their resources to be most beneficial. Services created to protect children from abuse or neglect and prevent domestic or family violence can be improved to reduce cases of exploitation and maltreatment. Similarly, facilities designed to support those perpetrating the violence due to the pandemic can be developed to find such individuals and help them to channel their anger differently.

Limitations

There were elements of the study restricting success that were evident from the onset. When designing the study, it was accepted that honesty could not be guaranteed as the investigation relied on self-report data and therefore, participants could choose to either conceal information they were embarrassed about or not tell the truth to finish the questionnaire quicker. It was also understood that individuals may not recognise that they had been more aggressive from before the lockdown meaning their answers would also not be completely accurate. Further, when designing the questionnaire, the rules regarding lockdowns kept changing meaning there were multiple lockdowns and therefore participants may have been answering about a previous one. Similarly, as the data collection period was over a couple of months the area an individual lived in may not have been made to isolate in that period; more lenient restrictions at the time may have influenced participants to judge each rule more compassionately.

After the data had been collected, limitations regarding the dataset and sample were also made apparent. The sample size was less than desirable and was further reduced as many responses were incomplete. The length of time available and lengthy questionnaire contributed to this limitation as many participants began the survey but gave up halfway through. Another issue identified was that the sample was not representative of the general population, as the demographics showed that the group was predominantly young, female, university students. Future research could increase the sample size to avoid such issues.

Other limitations that require consideration were that lockdown might not have been the cause of the apparent increase in aggression. A range of unconnected life events could have led to this change, such as personal or health problems. Further, emotional responses to the lockdown restrictions depended heavily on an individual's priorities. For example, participants with children's concerns would be primarily focused on the wellbeing of their family and financial uncertainty, however, younger participants would have predominantly been concerned about not being allowed to attend festivals or go out with friends. Therefore, obtaining a sample that was representative of individuals in each stage of life was essential, so all feelings were considered and analysed.

Future Research

An in depth understanding of the test results and discussion of the limitations enabled suggestions to be made regarding future research and potential recreation of this investigation. To amend the problems with the sample size and demographics,

a more thorough recruitment process could be conducted; participants could be enrolled through alternative methods such as through the post or on the telephone which would guarantee a more diverse group and greater participation. A larger sample would afford a more generalisable conclusion and more accuracy. Further, to address concerns over honesty, the Brief Social Desirability Scale could have been included to uncover whether participants were answering to adhere to socially desirable expectations. This would enable an understanding of whether participants were being honest and therefore increase validity of the results.

Conclusion

To conclude, this investigation has yielded valuable insights and has made a significant contribution to the existing body of knowledge on the pandemic and its associated measures. The results of the analysis indicated that there is a positive correlation between aggression and the period of lockdown, potentially highlighting an influential relationship. The analysis also facilitated a thorough understanding of triggers to aggression as feelings of anger and frustration, as these emotions were quoted frequently as a response to newly imposed regulations within the results. Due to the nature of the pandemic's growth being so quick, little is known within this area meaning it was essential to fill the gap in this areas collective knowledge. Although more research is required to understand the depth of these phenomena, the present study provides a vital step forward towards enhancing our understanding of the area. By highlighting the pressing need for changes in the government's response to the pandemic and existing support services for victims of violence, this study underscores the significance of protecting vulnerable individuals and rehabilitating perpetrators in the real world.

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