The Socio-Economic Impact of the COVID-19 Pandemic on Ceredigion County Households

Dr Aloysius Igboekwu Dr Sarah Lindop Dr Maria Plotnikova



The Socio-Economic Impact of the COVID-19 Pandemic on Ceredigion County Households

This study was funded by Aberystwyth University

Authors:

Dr Aloysius Igboekwu Dr Sarah Lindop Dr Maria Plotnikova

The authors are grateful to Dr Sarah Clarke for excellent research assistance and to a referee for useful comments.

Affiliations:

- 1. Centre for Creativity, Leadership and Regional Economies and
- 2. Centre for Responsible Societies

Aberystwyth Business School Aberystwyth University, Aberystwyth, Wales, SY23 3DY, United Kingdom

The Socio-Economic Impact of the COVID-19 Pandemic on Ceredigion County Households

Executive Summary

In this study, we investigate the socio-economic impact of the COVID-19 pandemic on residents of Ceredigion. With the shutting down of most economic activities across the world and the UK through lockdowns, it was inevitable that the resulting impact would be far-reaching and would reverberate across the globe. Therefore, it was expected that Ceredigion - one of the UK's rural counties, would not be immune to the socio-economic impact of the pandemic. Furthermore, the anticipated combined effect of the COVID-19 pandemic and government restrictions clearly showed the need for a study of this nature.

Ceredigion is situated in the coastal area of Mid-Wales. Geographically, Ceredigion can be described as primarily rural, with towns, villages, and other sparsely populated settlements. Most economic activities include agriculture, hospitality, tourism, retail, civil service, and education, including higher education, selfemployment, non-governmental organisations, and charities. The outbreak of the COVID-19 virus in late 2019 and the declaration of the disease as a pandemic in March 2020 led to the enactment of various restrictions meant to contain it by the United Kingdom and Welsh governments¹. The COVID-19 pandemic outbreak necessitated some containment measures, which had a direct negative impact on the economy, social health, and mental health of the population. Before long, it became evident that there were socio-economic costs to the pandemic, the restrictions, and the lockdowns that the government had put in place. The UK government introduced the stay-at-home measures on Monday, 23 March 2020.

The main objective of this research project is to examine the evidence to understand the socio-economic impact of the COVID-19 pandemic

and the lockdowns on households in Ceredigion. Furthermore, the study seeks to understand the negative and positive developments that occurred during the pandemic and how these could help inform future policy responses by the county council. Additionally, it is expected that this report will be of value to other stakeholders working in the county, such as government agencies, NGOs, charities, and residents. This study is based on a survey of households in Ceredigion, a review of related academic literature, and other studies carried out by government agencies and non-governmental organisations on the impact of the COVID-19 pandemic in the United Kingdom and other countries in the world.

This study investigates how Ceredigion residents' living conditions, employment, earnings, and consumption levels changed since the start of the COVID-19 pandemic. It also examines how Ceredigion residents coped while staying at home, focusing on the effect of school closures, changes to weekly activities, caring responsibilities and digital connectivity issues.

We received a total of two hundred and fortysix (246) responses to our survey. Most of the responses came through the online version of the survey, which was hosted on both the Ceredigion County Council and Aberystwyth University's websites and other social media outlets. During the pandemic, the online platform seemed the quickest and safest way of reaching people hence our decision to conduct an online survey of the residents. Also, we believe that the data collection method did not impede the size and diversity of the data collected. This is because our sample is sufficiently diverse in terms of age, ethnicity, religion, occupation, education, and income levels. Therefore, by convention, the level of response received is more than sufficient for this level of study.

The responses came from residents aged 16 years old and above, of which 73% were females

^{1.} The restrictions included the closure of places of work and worship, namely, shops, businesses, leisure centres, sporting events, non-essential activities and travel, tourist activities, hotels and restaurants, pubs, nightclubs, libraries, museums, schools, and universities.

and 25% were males. Most of the respondents (77%) were between 25 and 64 years old. In addition, 93% of the respondents described themselves as ethnically white, and 3% were ethnic minorities. Our respondents included working residents, full-time students, and pensioners. The occupations of the respondents varied widely. 46% of them worked in education and academia, 13% worked in the civil service, 13% in healthcare and childcare sectors, and 10% in not-for-profit, charities, social enterprises, and voluntary groups. 15% of the respondents earned annual salary of £15,000 or below. 15% earned between £26,000 and £35,000; 16% earned between £36,000 to £45,000, 14% earned £66,000 or above.

Our findings show significant changes in the population's social, economic, and health patterns since the onset of the COVID-19 pandemic in early 2020. Areas such as household spending, care responsibilities, homeschooling, employment situations, mental health, physical and outdoor exercise, and general health conditions have changed considerably during the pandemic. In addition, the need for computing devices, internet connectivity, and digital accessibility have all seen an increase during the pandemic.

Responses from our survey suggest that the various government employment support schemes, whilst helping to alleviate the immediate effects of the pandemic, might have masked the actual implications of the pandemic on the employment situation of Ceredigion residents. Our survey indicates that the impact of the pandemic and lockdown on the employment situation of individuals within Ceredigion varied significantly. For instance, 60% of people in paid employment worked from home since the beginning of the pandemic. 61% continued to maintain their pre-COVID-19 work hours, 5% had reduced work hours, and a further 3% were permanently laid off or made redundant due to the pandemic. Another 3% lost their jobs because their employer had closed due to the adverse effects of the pandemic. Those working in the hospitality, tourism, arts, and entertainment sectors have been the hardest hit due to the government's restrictions and lockdown measures during the COVID-19 pandemic. On the other hand, people in occupations such as teaching, and the civil service continued working online from their

homes. Although it seems that the government Furlough Scheme had cushioned the anticipated adverse impact of the pandemic on employment, there was uncertainty concerning what happened to peoples' employment situation when the Furlough and other employment support schemes were fully withdrawn.

The impact of the COVID-19 pandemic on household income and spending power in the county varied significantly. Our survey shows that 27% made spending cuts primarily because of a reduction in their disposable income due to the effect of the pandemic on their jobs. A majority had to adjust their spending level when they were placed on the Furlough Scheme, reduced their contracted work hours or lost their jobs. Additionally, 8% of the respondents had taken out mortgages, loans, or credit card repayment holidays with their lenders due to reduced income. Overall, 80% of the respondents said they had changed their spending habits - with the most significant increases seen in food items expenditure, household utility bills, internet provision, and online entertainment. Increases in utility bills, internet, and online entertainment were directly linked to individuals spending more time at home and working from home because of the pandemic restrictions. On the contrary, a reduction in spending was seen on outdoor socialising, fuel for commuting, and travelling in general.

During the pandemic, the need to home-school children due to the closure of schools brought increased responsibilities for parents, caregivers, and guardians. This increase in responsibilities is more pronounced for single-parent households, households with more than one child, and where the responsible parent or guardian is in full-time employment. The additional pressure from people taking on other responsibilities resulted in stress and anxiety, further affecting their productivity and performance at work. 40% of households surveyed had children living in them, and many parents struggled to juggle home-schooling with work responsibilities. This is due to the intermittent closure of schools and childcare settings in Ceredigion during the pandemic. For some individuals who fall within the 'key worker/critical worker' (See Appendix 1) category, the situation was even more challenging. The reason is that critical workers continued to work at their workplaces during the pandemic as their services were deemed

essential by the government, so they could not work from home. Although childcare provision was put in place for the children of critical workers, many question the quality of education received during that period. Some of the reasons were that the childcare centres could not have served as care and educational facilities at the same time. At the initial stage of the pandemic, school children of ages from various schools were looked after at the same facility run by Ceredigion County Council. Furthermore, there was confusion regarding who qualified as a 'key worker', especially as the description in the initial government guidance was somewhat ambiguous. For example, while healthcare assistants working within the National Health Service were deemed to have met the criteria, carers working in care homes were not. Childcare and home-schooling were problematic for the latter, who had to continue to work on-site. Additionally, 14% of the respondents cared for adults living at home and other family members while holding other jobrelated responsibilities.

Our findings show that the COVID-19 pandemic has negatively affected Ceredigion residents' mental, physical, and general health. 55% of the respondents indicated that they felt isolated from friends, family, and society during the pandemic. Also, 14% of the respondents had to shield themselves following the health guidance given to vulnerable individuals by the National Health Service. These individuals were not to participate or undertake any physical activity outside their homes. Due to shielding, individuals living alone were further isolated from their wider families, friends, and community. Some believed their mental health was affected due to shielding. Another 33% experienced various degrees of difficulty with their general mental wellbeing, and 18% experienced hardship during the pandemic. Furthermore, 37% of the respondents were unable to carry on with their routine physical exercise due to gym closures and restrictions on using external space outside their homes. Additionally, 42% believed that the COVID-19 pandemic directly impacted their regular physical activity. The above findings showed that while healthcare services were dealing with the effects of COVID-19, other healthcare and wellbeing areas seemed not to have received the attention they deserved.

As with any survey-based data collection method, it is important to note that most of those who completed the questionnaire were likely to be the least affected by the pandemic. This is evident from the demographic and income characteristics of the respondents - so caution needs to be exercised in reading and interpreting the results. In addition, the people hardest hit might have been preoccupied with their current predicaments not to have noticed or were not motivated to participate in the survey. We hoped to draw further evidence from a different data collection method such as inperson focus groups, but this was not possible due to the COVID-19 pandemic restrictions that were in place during the data collection stage.

Finally, the outcome of this study shows that while the containment measures put in place may have been successful in reducing the spread of the COVID-19 virus and the burden on the National Health Service, the socio-economic and general well-being of the population suffered in part, as a result of those measures. For example, the shutting down of economic activities during the pandemic resulted in people's income being negatively affected by the loss of employment, reduced contracted work hours, or reduced wages for workers on the Furlough Scheme. Also, lockdowns and other COVID-19 containment measures had a direct negative impact on peoples' general wellbeing due to physical isolation from families and friends and inaccessibility to physical exercise facilities such as gyms, swimming pools and the use of open spaces. Furthermore, the additional stress of homeworking and schooling had significant adverse effects on the population, leading to other health and social problems. As a result, there has been a multilevel increase in vulnerability for most people. It is expected that social, health and economic vulnerabilities are some of the medium- to long-term impacts of the COVID-19 pandemic. Therefore, organisations, governments and government agencies must be proactive to implement appropriate policy frameworks to tackle the impacts of the COVID-19 pandemic in the months and years ahead.

Table of Contents

Executive Summary	4
Introduction	8
Background	9
Study Method	19
Questionnaire Design	19
Data Collection	20
Results	22
Section 1: Household circumstances and the impacts of the pandemic on the day-to-day lives of residents	22
Section 2: Home-schooling, homeworking, access to computers, and digital connectivity	28
Section 3: Caring responsibilities and home-schooling	29
Section 4: Pandemic Effects on Employment	30
Section 5: General health, mental health, and physical exercise	34
Section 6: Concerns raised by residents as the lockdowns were eased	35
Section 7: General Issues	39
Section 8: Moving forward (Respondents' perspective)	42
Section 9: Vulnerability	43
Conclusions	47
References	51
Appendix 1: Definition of Critical Workers	54
Appendix 2: The Impact of Covid-19 in Ceredigion: Household Survey	55
Appendix 3: Ceredigion County COVID-19 pandemic Timeline	65

Introduction

Internationally, the COVID-19 pandemic has impacted people differently in different countries and nations. Even within the United Kingdom, the pandemic has affected individual counties differently. Residents of Ceredigion faced varying degrees of economic, social, health challenges, and uncertainties since the COVID-19 virus was declared a pandemic in March 2020. The pandemic affected different areas of peoples' daily living such as employment, household income and consumption, spending habits, household debts, education, caregiving, mental and general health. Also affected was access to recreational and physical exercise space and facilities, healthcare facilities for non-COVID-19 related ailments, access to computing devices and internet connectivity, and the use of food banks. Furthermore, government restrictions and other containment measures have indirectly impacted the way people live and go about their daily routines. The shutting down of business and economic activities to contain the spread of the virus had ramifications for the economy and various aspects of everyday life. Workers in sectors or occupations where it was impossible to move operations online faced job losses. The loss of employment in these sectors affected the individuals' and households' economic wellbeing. Some employees were sent on paid leave (Furlough Scheme) by their employers due to reduced business activities or outright shutdown of their businesses. Throughout the period, many people within this category faced a reduction in their disposable incomes. In addition, people saw increased responsibilities, especially parents who had to home-school their children when the schools were shut down because of the pandemic. Overall, there was a general increase in vulnerability of the socio-economic well-being of the people.

There is growing evidence in the literature that suggests an unequal distribution of the effects of the COVID-19 pandemic on society. For example, Furcieri et al. (2020) and Palomino et al. (2020) observed that workers disproportionately bear the burden of the COVID-19 pandemic in low paid occupations. Undoubtedly, this led to an increase in poverty and economic inequality globally. In addition, the COVID-19 pandemic brought some gender inequality issues to the

open. For example, the closure of schools and childcare provision centres had a drastic impact on working parents – mothers and single-parent households were affected most. Similarly, Alon et al. (2020) show that 'social distancing' measures brought to contain the pandemic affected sectors that typically employed a higher percentage of women, resulting in more women losing their jobs in these sectors due to the pandemic.

One of the critical features of the COVID-19 pandemic was the work-from-home directive which meant that a significant majority of people worked from their homes. In addition, schools and childcare providers were shut down, and school-age children stayed home with their parents or guardians. The closure of schools and childcare providers meant that working parents had to home-school and provide care to children during working hours. Both working from home and home-schooling increased household need for computer devices. A substantial proportion of the families surveyed had to borrow computers for work and home-schooling purposes. The increase in care responsibility brought by these closures of schools and care providers brought additional pressures on families.

Also, there is emerging literature investigating the impact of the COVID-19 pandemic and its containment measures on the general population's mental health. For example, Serafini et al. (2020) investigation focuses on psychological problems, including stress, depression, anxiety, frustration and uncertainty during the pandemic and lockdown restrictions. At the beginning of the pandemic, there were concerns that workers in areas thought to have high human contact may give up their jobs in fear of contracting the virus at work. For these people, it was a case of deciding whether to continue working in these high-risk jobs exposing themselves and their close family members to the virus or giving up their positions. But for the majority of people, giving up their jobs was not feasible due to the loss of income that resulted from that decision.

According to the UK Office for National Statistics (2020), the first few months after the initial COVID-19 lockdown in March 2020 saw a 2.4%-point jump in unemployment in Ceredigion. Consistent with this finding, our study found that employees in the hospitality and tourism,

arts, and music sectors were the hardest hit. Another important finding of the ONS study is the impact of COVID-19 restrictions and the government's work-from-home directive across different sectors of the economy. For example, whilst employees in certain occupations such as education and the civil service continued to work online from home, those in hospitality and tourism could not.

The issues around digital accessibility, training, and infrastructure featured prominently in our survey. Most people surveyed said that slow broadband speeds, lack of reliable broadband or mobile signal, the cost of internet access and the lack of digital skills were some of the challenges they faced while working from home or homeschooling their children.

The primary purpose of this study is to assess the impact of the pandemic on the socioeconomic, general health, and vulnerability of Ceredigion residents through responses from the survey of households in Ceredigion. The impacts are organised around related themes established from evidence in existing literature and studies conducted elsewhere in the United Kingdom during the COVID-19 pandemic. From the results of the analysis of the responses, the study offers suggestions for future policymaking by local government authorities. In addition, the report examines changes to weekly activities, the effect of school closures, home-schooling and caring responsibilities, digital connectivity issues, changes to living conditions and employment, general and mental health impacts and the perceived benefits and drawbacks of the lockdowns.

Finally, this report is organised into four key parts. The first part provides a brief background to the study and summarises the review of closely related literature. Additionally, it explores the current understanding of the impact of the COVID-19 pandemic in the United Kingdom and countries across the world. The second part discusses the study method followed, including questionnaire design and data collection. The analysis of our findings follows in part three, and the discussion sections are organised around the major themes of the study. The conclusion and policy suggestions form the final part of the report. A copy of the survey questionnaire is included in Appendix 2.

Background

Sampath et al. (2021) argue that the term pandemic (sometimes used interchangeably with epidemic) was initially used to describe the spread of disease in a country. However, the meaning of pandemic has evolved over the centuries. Most recently, a pandemic has been defined as an outbreak of an infectious disease that expands to many countries or more than one continent or globally (Sampath et al., 2021; Piret and Boivin, 2021).

There have been less than twenty-five health pandemics and large epidemics recorded in history. For example, there were a total of six pandemics and epidemics that occurred in both the 19th and 20th centuries. Piret and Boivin (2021) record a total of eighteen different pandemics between 541 AD and 2019, including the ongoing COVID-19 pandemic. According to the authors, eleven of these pandemics occurred in the 19th and 20th centuries. However, the recorded epidemics and pandemics are few and far between. The implication is that, unlike economic and financial shocks, there are no extensive datasets available to study the impact of pandemics on the economy, political systems, cultural and social systems, population change dynamics, or the psycho-behavioural changes in a population. This contrasts with substantial scientific progress, advances and innovations made in medicine due to studies carried out during and after pandemics (Huremović D., 2019). The pattern of medical progress seen so far with the ongoing COVID-19 pandemic is no different from those of previous pandemics and epidemics.

The SARS-CoV-2 virus causing the coronavirus disease known as COVID-19, was first reported in Wuhan, China, in December 2019. By February 2020, it was reported that the disease had spread across the globe, including European countries and the United Kingdom. Subsequently, as the disease continued to spread globally, World Health Organisation (WHO) designated the outbreak of SARS-CoV-2 a worldwide pandemic on 11 March 2020 (Anand et al., 2020; Xiong, et al., 2020). However, it was not until Monday, 23 March 2020, that the United Kingdom government passed a stay-at-home directive to all businesses and people in the country. The measure was intended to help curb the spread of the virus across the UK.

Following the implementation of the stayat-home measures, the UK population was concerned about the impact COVID-19 could have on their lives. They worried about how COVID-19 could affect their work. Other concerns included redundancy or closure of own business, education and how school and universities would be affected, availability of groceries, essential items and working around childcare or other caring responsibilities (ONS, 2020a). Four out of five adults that took part in the Office for National Statistics Opinions and Lifestyle Survey covering the 27 March to 6 April 2020 period, immediately following the implementation of these measures, stated that they were worried about the effects COVID-19 was having on their life (ONS, 2020a). Nearly 40% of respondents were concerned about how COVID-19 would affect their work. Their main concerns were reduced hours due to work-based closures, reduced opening hours, or the challenges of working from home. Other issues included potential redundancy or closure of own business, working around childcare, or other caring responsibilities (ONS, 2020a). Over 20% of respondents said they were mostly worried about education and how schools and universities would be affected. Nearly 50% were concerned about the availability of groceries and essential items. Over 10% were worried about changes to their caring responsibilities. Around one in five adults said that the pandemic had affected their household finances, with reduced income, having to use savings to cover living costs, struggling to pay bills, and helping friends and family financially raised as key concerns (ONS, 2020a). When asked about the future, just under half of the adults in the survey thought that their financial position would get worse over the following 12 months, and only 41% expected that they would be able to save over that period (ONS, 2020a). A large proportion of the respondents were pessimistic about the future of the economy and expected the country's economic situation to worsen over the succeeding 12 months. Very few respondents thought now was the right time to increase consumption and make big purchases such as furniture and electrical goods (ONS, 2020a).

Income

The pandemic and the stay-at-home measures dramatically affected household income and spending. Aggregate statistics on income and expenditure and employment status hide the variations between households and within the population (Bank of England, 2020).

Bank of England (2020) found that furloughed and self-employed workers were most likely to have experienced a reduction in income. In contrast, only a small number of those remaining in employment saw their earnings fall. Households with limited savings struggled to make ends meet, and government support schemes and payment holidays were essential for those in financial difficulty (offering them substantial support).

The government introduced the following support schemes to mitigate potential loss in income:

- the Coronavirus Job Retention Scheme (CJRS)
- the Self-Employment Income Support Scheme (SEISS)
- temporary increase in the Universal Credit standard allowance by £20 per week
- temporary increase in the basic element of Working Tax Credit by £20 per week
- temporary suspension of the Minimum Income Floor in Universal Credit
- increase in the Local Housing Allowance to the 30th percentile of market rents in the 2020-21 fiscal year

HM Treasury (2020) looked at the impact of COVID-19 on working households' income at the end of May 2020, focusing on the effects of government support on the impacts of the pandemic on earnings and job losses. The results showed an overall decrease in the percentage change in working household net income over the period examined². However, the government interventions supported the poorest households the most. On average the government support measures were worth about a fifth of household income and reduced the scale of losses for working families by up to two thirds (HM Treasury, 2020).

^{2.} HM Treasury (2020) Impact of COVID-19 on working household incomes: distributional analysis as of May 2020 Impact_of_COVID-19_on_working_household_incomes.pdf (publishing.service.gov.uk). Accessed on 6 December 2022.

Institute for Fiscal Studies (IFS) (2020) found that the crisis led to abrupt fall in employment, earnings, and incomes by April 2020. The earnings/income of the poorest households was impacted the most. However, as highlighted above, the total income of these households was supported by government interventions. Thus, the benefits system helped replace to some extent the lost income of the poorest families. But, non-payment of household bills increased sharply after lockdown, suggesting that households struggled to make ends meet, with poorer households falling behind on utility and council tax bills or taking payment holidays. This was also confirmed by Which? (2020b).

According to Which? (2020b), furloughed workers were three times more likely to have missed a household bill, loan, or credit card repayment in the past month. The study highlighted the financial difficulties faced by workers on the Furlough Scheme, those who were put on enforced leave or had their working hours reduced who had to change their spending habits to make ends meet, cutting back on essential spending, using an overdraft or taking money from savings.

The findings highlight the unequal effects the COVID-19 pandemic had on personal finances and the potential disparity between those that were on the government Furlough Scheme and those that continued to work. Moreover, this disparity was expected to widen once the Furlough Scheme ended as income could be further strained if working hours were reduced permanently or workers continued to be unemployed (Which? 2020b).

Payment holidays for up to six months were introduced for mortgages and other types of credit (e.g., loans and credit cards) to help those who struggled with finances due to the pandemic. The idea was that monthly repayments could be paused, and finances could be allocated to essential spending. The Bank of England survey (2020) found that 10% of mortgage borrowers took mortgage repayment holidays in April 2020. This appears to be one reason why these households did not make more significant cuts to their consumption, suggesting that repayment holidays helped to reduce the extent of the economic hardship.

However, IFS (2020) highlighted that although payment holidays were a temporary fix to survive the immediate impact of the pandemic, it resulted in additional, not sustainable debt, underlining the importance of a quick recovery in household incomes.

Changes in consumption levels/patterns

Consumption patterns were not only affected by falling incomes, restrictions on movement also had impacts on them. In their survey of British households, the Bank of England (2020) found that many households had reduced spending, even if their income did not fall. As a result, these households whose income had not changed but whose spending had fallen would see an increase in their savings, leading to an improved financial situation.

To help stop the spread of COVID-19, the government introduced strict measures that limited the number of times residents could leave their homes. Non-essential shops were closed, meaning shopping trips were put on hold. Individuals changed how they spent their leisure time and socialised. Trips to the cinema, pub, theatre, restaurants, cafés, non-essential shops, exercise classes, sports clubs, trips to the gym, swimming pools, museums, libraries, zoos, and theme parks were all restricted or prohibited during the COVID-19 pandemic. Thus, spending on this kind of activity was either paused or stopped.

Increased time at home, with increased use of electricity, heating, food consumption, downloads from the internet, gaming, and subscriptions to online streaming services changed the spending pattern of individuals. As a result, what people spent their money on, changed.

HMRC provided tax relief to workers for job expenses incurred while working from home. Individuals could claim tax relief for additional household costs if they were working from home because of COVID-19 and could claim relief for gas and electricity, metered water, business phone calls, and internet usage³.

At the start of the lockdown measures, the initial worry was the availability of food, medicines,

^{3.} The maximum amount that could be claimed was £6 a week from 6 April 2020 (for previous tax years the rate was £4 a week). Individuals were required to provide evidence of the extra costs (GOV.UK, 2021).

and other essential items (ONS, 2020a). Hence the onset of panic buying of items such as toilet rolls, pasta, hand wash, paracetamol, etc. Thus, the food sector faced increased demand - with increased demand came increased prices. The overall price for online high-demand products (e.g., beans, rice, hand wash, nappies, pet food, antibacterial wipes, and spray) increased as the lockdown/stay-at-home measures were implemented (ONS, 2020b).

Changes to Shopping/weekly activities

COVID-19 affected the population's shopping habits and changed the grocery shopping landscape. Despite government assurances and intervention, households reacted by stockpiling foods or visiting food banks if they had limited funds. The initial worries were the availability of food, medicines and other essential items (ONS, 2020a). Hence, at the beginning of the lockdowns panic buying of products increased and the food sector faced increased demand as a result. Retail outlets felt the strain as a result of the panic buying and stockpiling of food products (Guardian, 2020).

With the closure of non-essential shops, the social distancing measures imposed in grocery stores and the reduced numbers of customers allowed on the premises resulted in long queues. In addition, worried about the health risk of shopping in person, many customers turned to online shopping.

The high demand for food products also affected online food delivery, with companies struggling with demand for home deliveries and deliveries arriving late or not at all (Nicola et al., 2020). Furthermore, donations to food banks were affected as panic buying and stockpiling of food items resulted in reduced donations (BBC, 2020a).

As a result, the UK government introduced free food parcels and meals for the high-risk, vulnerable and school children from low-income families (BBC, 2020c). Reassurances were given to the British public that there were no food shortages, even if local stores had a low stock of some items, and stores started to restrict the amount of each product that customers could buy. In addition, there were special hours set aside for the elderly and National Health Service staff to shop.

The government introduced strict measures that limited the number of times residents could leave their homes. This resulted in changes to how individuals spent their leisure time and socialised. As a result, individuals had to find new leisure activities/ hobbies to cope with the situation.

The Opinions and Lifestyle Survey covering the period 27 March to 6 April 2020 revealed that spending time with family members helped people cope during the lockdown and that leisure activities such as watching films (55.5%), reading (39.2%), gardening (37.6%) and cooking (34.2%) were also popular (ONS, 2020a). In addition, physical exercise was one reason individuals were allowed to leave their homes. Nearly half of the adults in the survey stated that exercising was one coping mechanism they had employed during the lockdown (ONS, 2020a).

School Closures: Socio-economic implications

COVID-19 impacted all levels of education around the globe. UNESCO estimated that about 900 million learners were affected by the closure of educational institutions worldwide (UNESCO, 2020).

The UK government closed schools during the lockdowns. This policy had several socioeconomic implications, including social isolation, limited availability of free school meals to children from low-income families, reduced engagement with schooling, and an increased dropout rate (Nicola et al., 2020).

Other implications included increased childcare responsibilities for families with young children or the need to work around childcare and home-schooling. The aforementioned resulted in reduced working hours and reduced income for some households. This reduced household income impacted the ability of students and children to access technology that ensured the continuation of education digitally throughout the lockdown. In addition, families and individuals with higher incomes were more likely to have had access to this technology, unlike those on lower incomes (Nicola et al., 2020). As observed by Van Lancker and Parolin (2020), digital learning environments require computers and reliable internet connectivity. Overall, school closures widened the learning gap between children from lower-income households and

children from higher-income families. Lowincome households were more likely to live in conditions that made home-schooling difficult.

With people having to work and study from home, most people had to rely on the internet to work, study, communicate and interact and continue with their job and study responsibilities. Internet services saw rises in usage from 40% to 100%, compared to pre-lockdown levels and video-conferencing services like Zoom saw ten times increase in usage (De, Pandey, and Pal, 2021). The surge in home network usage caused problems around the globe. From a survey examining broadband users' recent experience of 600 consumers within the US and the UK, of those that experienced technical difficulties, 58% could not connect to the internet, 59% experienced slow broadband speed, 27% had modem or router issues and just under 20% could not connect to online services (Advanced Television, 2020).

In addition to issues surrounding technology and a reliable digital learning environment, homeschooling had broader implications. Students struggled with self-isolation, separation from friends and classmates, and disruption to their typical daily structure. Parents were left with the primary responsibility of home-schooling, juggling work with teaching responsibilities, which resulted in increased stress, worry, social isolation, domestic conflict, increased alcohol, and drug abuse. These will have a long-term impact and will exacerbate existing social inequalities (Thorell et al., 2021) and will widen the existing educational gap (Letzel et al., 2020).

The ONS (2020c) study looked at an analysis of home-schooling in the UK between April and June 2020 and observed that:

"Over half (52%) of parents with school-aged children said a child in their household was struggling to continue their education while at home, with just over three in four of these parents (77%) giving lack of motivation as one of the reasons. While under 1 in 10 (9%) parents with a child who was struggling gave a lack of devices as a reason for struggling, this was significantly higher for households with one adult (21%) than households with two or more adults (7%). Of parents home-schooling between 3 April and 10 May 2020, one in three are women (34%) and they agreed that home-schooling was negatively affecting their wellbeing compared with the men (20%). Also, 43% of home-schooling parents agreed that it was negatively affecting the wellbeing of their children."

Schools are a place of education but at the same time provide a reliable source of nutritious food in the form of a healthy school meal. Research suggests that food insecurity is associated with poor attainment and a lack of engagement by the child. Van Lancker and Parolin (2020) state that 5.5% of UK households with children cannot afford a meal that contains meat, fish, or vegetarian equivalent for two consecutive days, suggesting that the number of children facing food poverty is substantial.

Closing schools for extended periods had detrimental social and health consequences for children living in poverty, which exacerbated existing inequalities, such as food poverty, and increased food insecurity, unhealthy or irregular diets in children from low-income families (Van Lancker and Parolin, 2020).

The importance of free school meals to children from low-income families is evident. Parnham et al. (2020) investigated access to free school meals for eligible children in the UK during the COVID- 19 pandemic. They concluded that onehalf of the eligible children could not access the scheme and that the accessibility differed by income level, country, and school type. The inability of eligible children to access school meals during the closure is associated with an increase in the use of food banks during the lockdowns (Parnham et al., 2020). According to the study, 49% of eligible children did not receive free school meals. The voucher scheme introduced during the pandemic was not adequate and more needed to be done for those families with low income. Children in Wales were less likely to have access to free school meals during the lockdowns than those in England. There was a monotonic rise in the number of children needing free school meals for the three years preceding 2021. 10.5%, 12.9%, and 13.8% of the pupils in Ceredigion were eligible for free school meals in the 2018/2019, 2019/2020, and 2020/2021 school years respectively. A similar trend was reflected in statistics for Wales.

Caring Responsibilities and home-schooling

Of the 40% of respondents who were worried about work, one of the key reasons for reducing work hours was to work around childcare or other caring responsibilities (ONS, 2020a).

The closure of schools and nurseries increased

childcare needs substantially, impacting working mothers (Alon et al., 2020). However, some employers adopted flexible working hours and working from home policies (where it was feasible) to adapt to the COVID-19 situation. Childcare responsibilities were a source of stress for working households especially single parent households during the pandemic. In addition, home-schooling was a critical issue for working parents even more so for single-parent households.

Living conditions

During the pandemic, London and other densely populated parts of the country were highlighted as COVID-19 hotspots, with overcrowding blamed for accelerating the spread of the virus. The poorest parts of Britain's cities with cramped living conditions, multiple occupancies, older people living in proximity to younger people and sharing facilities (bathrooms and kitchens) were thought to have caused a surge in infection. The top five most-crowded areas in the country saw 70% more coronavirus cases than the five least-crowded where better-off homeowners had extra rooms and more than one bathroom which allowed the opportunity for self-isolation if needed (The Guardian, 2020).

According to Which? (2021), the housing market experienced a boom; despite COVID-19 measures being in place, buyers could still move home, and house prices increased. The government

reduced stamp duty in July 2020 and extended the stamp duty holiday until June 2021, which increased demand for housing. The number of houses sold rose significantly when the stamp duty reduction came into force (Which? 2021). But the increased demand was not matched by an increase in supply; hence, the imbalance kept the prices high. However, experts predicted that the growth in house prices would slow after the extended stamp duty holiday ended and as the COVID-19 financial support schemes such as Furlough came to an end (Which? 2020a). In addition, due to the pandemic, furloughed workers faced fewer options when applying for mortgages as mortgage lenders prepared for the end of the government's job retention scheme (Which? 2020a). Some of the biggest lenders refused to consider furloughed applicants or only accepted furloughed applicants if the application was made with another applicant who was not furloughed. Thus, many furloughed workers had to put their plans on hold until their employment situation became more certain (Which? 2020a).

Employment

As a consequence of the pandemic, many working households had disruptions to their employment status and working hours. Some employees were able to work from home on full wages, but many had working hours reduced and some employees were furloughed. The scheme was introduced in March 2020 and ended on

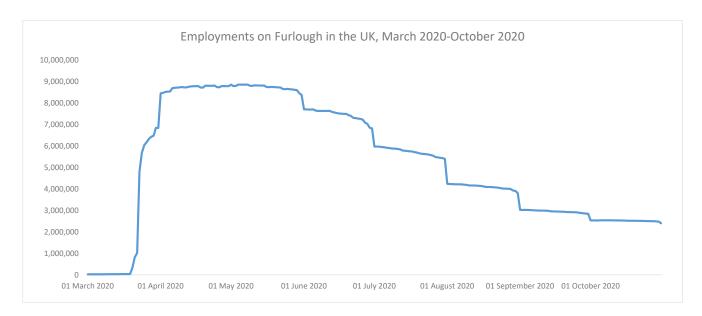


Figure 1: Employment on Furlough, March - October 2020

Source: HMRC, Coronavirus Job Retention Scheme Statistics 2021

30 September 2021. As part of the Furlough Job Retention Scheme, employees received up to a maximum wage of £2,500 a month. During the period that the Furlough lasted, the government contributed between 60% and 80% of the employee's wage up to the maximum. Employers were allowed to decide whether they topped up their employees' wages to 100% in addition to their pension and National Insurance contributions. Employees would be worse off if they received the government's Furlough contribution only.

As shown in Figure 1, employment on Furlough increased sharply from March and peaked in April, and then plateaued till June at just under nine million workers, after which it fell monotonically through to October 2020.

The table below looks at the Furlough Scheme taken up in the UK by age and gender from July to October 2020. The distribution shows a higher percentage of Furlough take-up for younger and older workers. While the proportions of men and

women on Furlough tend to be equal in total, the take-up for younger ages is higher for women and the take-up for older ages is higher for men. This reflects sectoral employment structure with women employed in sectors that were shut such as retail and hospitality (HMRC, 2021).

Fana et al. (2020) find that the most damaging effects of the pandemic are concentrated on the most vulnerable and disadvantaged workers in low-productivity services. The impact of the pandemic increased the vulnerability of lowpaid workers because they faced uncertainty about whether closed workplaces would reopen after the restrictions were lifted and whether they would keep their jobs. For the low-paid workers, their Furlough payments provided by the government were a maximum of 80% of their wages. Even though the scheme provided some financial support to these workers, it was less than their pre-COVID income except if their employer paid the remaining 20%. This category of workers was at a high risk of falling into income poverty and vulnerability.

Age	Female vs. Male take-up rate 31 July	Female vs. Male take-up rate 31 August	Female vs. Male take-up rate 30 September	Female vs. Male take-up rate 31 October
Under 18	35% 33%	21% 20%	14% 13%	12% 11%
18 to 24	25% 24%	17% 15%	12% 11%	10% 9%
25 to 34	17% 16%	13% 11%	9% 9%	8% 7%
35 to 44	16% 15%	12% 11%	9% 8%	8% 7%
45 to 54	14% 14%	11% 10%	8% 8%	7% 7%
55 to 64	16% 17%	12% 12%	9% 10%	8% 8%
65 and over	21% 23%	16% 17%	12% 13%	11% 11%
Total	17% 17%	13% 12%	9% 9%	8% 8%

Table 1: UK Employment Furlough uptake July-October 2020

Source: HMRC Coronavirus Job Retention Statistics data and PAYE Real Time Information

Cho and Winters (2020) document the employment losses in April 2020 across various groups using the US Current Population Survey. The unemployment rate understated employment losses because some of the formerly employed individuals exited the labour force. Young persons experienced the most significant employment losses. Individuals with less education and lower family income experienced much more substantial employment losses than their more educated and higherincome counterparts. Hispanics and Black people were more adversely affected than whites. A UK study by Platt and Warwick (2020) corroborates the findings of Cho and Winters (2020) in the US. Platt and Warwick (2020) find that persons of ethnic minority origins such as Black Africans, Caribbeans, Pakistanis, Bangladeshis and Indians are more likely to have suffered employment vulnerabilities than white British persons during the lockdowns.

COVID-19 had particularly damaging effects on vulnerable groups and those who were advised by the NHS to shield against the virus. Kemp and Davidson (2010) and Grant (2011) show that people with disabilities or health issues usually struggle to find employment during and after a period of economic crisis. Also, this group tends to have long spells of unemployment because they face difficulties in finding new employment. So, if this category of workers had to stop working during the COVID-19 pandemic, then, by extension, they

would likely face a long job search post-COVID-19.

Women's employment tends to be concentrated in sectors strongly affected by the pandemic's shutdown and social distancing measures. Bluedorn et al. (2021) identified these sectors to include 'contact-intensive' industries such as restaurants, hospitality, and retail. At the same time, women are also concentrated in important sectors such as healthcare and had to work more during the pandemic. Moreover, as schools and nurseries were closed, women provided the majority of additional childcare during the pandemic.

More generally, the impact of the pandemic on employment is determined by local economic conditions and institutions. Andersen et al. (2020) suggest that employment effects vary by sector and occupation and are determined by structural and institutional differences such as economic specialisation, social protection, and labour market regulation.

Looking at unemployment rates and claimant counts from the UK, Wales and Ceredigion, the administrative data focusing on claimant count indicates that the unemployment rate precipitously increased in the first quarter of 2020 from 3% to 6.4% in the UK, 3 to 6% in Wales and 2% to 4.3% in Ceredigion (Figure 2). Gradually, the claimant counts started to decline as the economy began to reopen. However, they are yet to reach pre-pandemic levels.

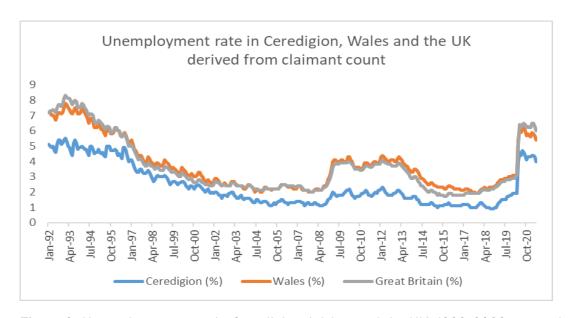


Figure 2: Unemployment rate in Ceredigion, Wales, and the UK, 1992-2020 quarterly data Source: ONS Claimant Count, Feb. 2022 release

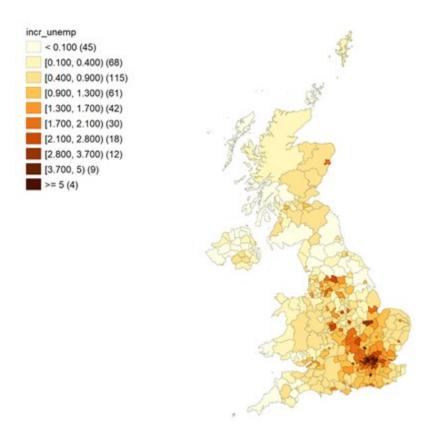


Figure 3a: UK % change in claimant count unemployment level by localities between April 2020 and April 2021

Source: own elaboration using ONS claimant data, natural breaks map

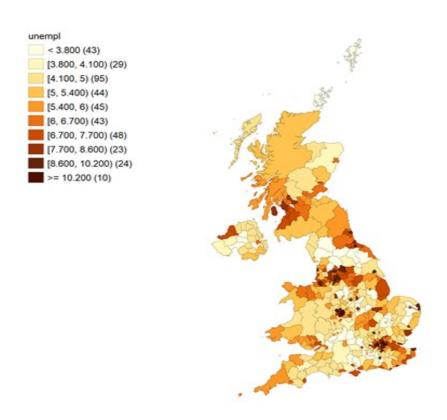


Figure 3b: UK % claimant count unemployment level April 2021

Source: own elaboration using ONS claimant data, natural breaks map

Figure 3a (p. 17) shows that from April 2020 to April 2021, the increase in the level of unemployment was highest in the central and southeast areas of England, as well as in cities. The pattern of the increase does not resemble the resulting pattern of unemployment levels in April 2021 (Figure 3b) however the cities including London have higher unemployment levels reflected in darker shaded colours. In comparison to other counties, Ceredigion did not experience a high increase in unemployment and the April 2021 level of unemployment is at the lower end of the distribution.

Lockdown: Benefits, drawbacks, and worries

The Opinions and Lifestyle Survey covering 27 March 2020 to 6 April 2020 period highlighted the use of exercise as a coping mechanism and the time spent with family/household members. Community belonging was also a critical coping mechanism during the pandemic. Respondents said they felt a sense of belonging with other community residents and were doing more to help others in the community since the pandemic started. For example, over one-half of the respondents had checked on neighbours and carried out shopping or other tasks for them (ONS, 2020a). A similar study was conducted by the ONS using survey data from 3 April to 13 April 2020. The results corroborated their earlier findings. In addition, the April study found that 64.1% said other local community members would support them if they needed help during the COVID-19 pandemic.

There were several drawbacks resulting from the pandemic and the lockdowns. Not being able to meet with family members and friends was a major issue. The lockdowns had adversely affected mental health. This was mainly a result of increased isolation from people – neighbours, colleagues, friends, and family members. Both working from home and home-schooling brought untold stress to many households.

General health, mental health, and physical exercise

The impact of COVID-19 and the effects of the lockdown on residents' mental health and general wellbeing were of increasing concern during the pandemic (Knolle et al., 2021). Hossain et al. (2020) even go as far as to say that there was a psychiatric epidemic co-occurring

with the COVID-19 pandemic as people affected by COVID-19 had a higher burden of mental health problems, including depression, stress, panic attacks, sleep disorders etc. Looking at results from research with almost 12,000 people, the Charity 'Mind' found that those struggling with mental health before the pandemic were most affected and reported an increase in the severity of challenges they were facing and that they were concerned about the future (Mind, 2022). Around a third of adults and young people said that their mental health became worse since the start of the pandemic and that health services would need to cope with the increased severity of mental health problems (Mind, 2022). Some groups had been hit harder, with those receiving benefits experiencing increasingly severe and complex problems, highlighting that the pandemic heightened preexisting inequalities (Mind, 2022).

Health services across the UK entered the pandemic with a backlog of care which meant that the services could not cope with the increased demand caused by the pandemic (BMA, 2022). The negative effects of the pandemic on peoples' health, especially from the limited access to health services for non-COVID-19 illnesses have been widely documented (Mansfield et al., 2021). For many people, non-COVID-19 illnesses were not screened, detected, or treated whilst patients experienced longer waiting times as health services focused mainly on dealing with the pandemic. A lack of system capacity meant that all but the most urgent non-COVID care had to be cancelled, including many cancer treatments, significantly impacting patients' mental and physical health (BMA, 2022). To mitigate infection risk, General Practice moved to remote consulting, which exposed the limitations of IT infrastructure. Demand for these services increased as a result of cancellations elsewhere as many patients whose health issues had deteriorated over lockdown had nowhere else to go (BMA, 2022). This has resulted in an increased backlog of cases that the NHS must work through for the foreseeable future (UK Parliament, 2021).

Study Method

This study aims to determine the economic impact of the COVID-19 pandemic on households in Ceredigion in Mid-Wales. Specifically, the report seeks to understand how the pandemic affected various aspects of household life, including income and consumption, childcare, education, living conditions, employment status, general health conditions, social capital, and confidence in the future. The report seeks to gather evidence linking the pandemic to increasing vulnerability, poverty, and population dynamics within Ceredigion. Additionally, the study hopes to gather evidence to help policymakers prioritise areas of intervention in the post-COVID-19 pandemic world. To obtain the information needed to complete this report, a questionnaire was designed and administered to all households in Ceredigion. There were a limited number of ways to collect data during the pandemic, mainly due to restrictions on movement and mixing of people from different households. The questionnaire was posted online on the Ceredigion County Council and Aberystwyth University websites and was shared on social media to ensure that as many people as possible had access to it. Further, a provision was put in place for hard copies of the questionnaire to be sent to people who did not have access to the internet. A press release and a supporting statement accompanied the questionnaire explaining its purpose and informing members of the public why participating in the survey was important. One of the main advantages of the internet-mediated approach in administering questionnaires is reaching a large audience and achieving a reasonable response rate. To create awareness and publicity for the project, the dissemination of the questionnaire was supported by electronic, internet, and print media campaigns.

The design and development of the questionnaire, sampling procedure and the demography covered in the data collection process are discussed below.

Questionnaire Design

The questionnaire was designed to gather information on how the COVID-19 pandemic impacted the socio-economic status of

Ceredigion households. The questions were grouped within themes to provide clarity for respondents. Further details of each of the themes are provided below.

Part one captures basic demographic information of the people resident in Ceredigion. This part collects information on the respondent's age group, gender, religion, ethnic group or background, number of children and their age, number of persons, adults, and retirees residing in a household, those in full-time education and the household income. This provided crucial information about population, age, and income distribution within the county.

Part two gathered information about the respondent's living conditions. Respondents were asked to provide information regarding ownership of their current accommodation, whether they live with their parents, geographical description of the area where they live, and whether they plan to move to a new location within the county. This set of questions provides socio-economic insights into the county and the potential impact of the pandemic on these.

Part three primarily collected information about the respondent's employment status. The questions addressed whether a respondent was employed or self-employed before the COVID-19 pandemic, whether the respondent had lost their job during the pandemic, and information regarding working from home. Also, there were questions regarding employment hours, the Furlough Scheme, unemployment benefits, the government's Universal Credit Scheme, self-isolation due to the virus, wages, and taking leave because of the pandemic with or without wages and caring for children or other members of the family.

In part four, the respondents provided information regarding the industry sector in which they worked. Questions covered occupation, employment sector, whether they were classified as 'critical workers' during the pandemic, whether they would return to their pre-COVID-19 pandemic place of work or continue to work from home, and whether the pandemic encouraged them to start their own business. These questions were designed to understand the respondents' work situation before and during the pandemic. Also, to understand if they had any plans to transition to new occupations post-COVID-19.

Part five of the household questionnaire focused on self-employment. Respondents were invited to answer questions about whether they were self-employed, whether their business closed partially, temporarily, or permanently due to the pandemic, and whether they were eligible for the government's business and financial support schemes. Other questions included whether the customer base declined during the pandemic, did their business apply for bankruptcy, whether their business revenue increased or diminished during the pandemic, did the business suffer a shortage of supplies due to the pandemic and whether there was a need to access work hubs or premises away from home as a result of problems with the work from home directive⁴.

Part six asked the respondent to provide answers to further questions on general employment matters. The questions included whether they have returned or plan to return to their pre-COVID-19 job, taken on new employment and future employment plans.

In part seven, the respondents provided information regarding their income and consumption. The questions cover changes in household income levels, the impact of the pandemic on household consumption levels, any changes in spending habits because of the pandemic, application for payment holidays for loans and advances and the use of food banks during the pandemic.

Part eight looks at the respondent's general health conditions. The respondents were asked if they went into shielding because of the COVID-19 pandemic, whether they had experienced mental health issues and whether they had experienced feelings of isolation and family hardship. They were asked whether they were able to engage in their pre-COVID-19 physical exercise routines, whether they developed any new serious ailments and if they could access community health and social care services compared with the level of access to the same services before the pandemic.

Part nine included questions focusing on social capital, seeking to find out if respondents helped to care for other people's children during the

pandemic, whether the respondent received help from someone outside of their household and whether they carried out online food shopping. Other questions covered home-schooling, whether the respondent was a single parent with caring responsibilities, and whether the children were eligible for the government's free school meals. Also, respondents were asked whether there were enough useable computers for every member of the family to use during the day; if there were digital connectivity issues during the pandemic, and if there were any significant changes in the weekly routine activities for the household.

Part ten of the questionnaire asked general questions not previously covered. The respondents were asked if they felt worried when the first lockdown was lifted; if their approach to subsequent lockdowns was similar to the first lockdown; if they thought there were any benefits or drawbacks to the lockdowns; and if they had suggestions to make to the government regarding future lockdowns. Finally, they were asked if they would be willing to participate in any future focus group to explore the findings of this survey in more granular detail.

Data Collection

The project sample comes from a survey of households in Ceredigion. The areas covered in this study included main settlements such as Aberaeron, Aberporth, Aberystwyth, Borth, Cardigan, Lampeter, Llanarth, Llandddewi Brefi, Llandysul, Llanilar, Llanrhystud, Llanon, New Quay, Tregaron, and other villages and parishes⁵.

Although the survey was mostly conducted via online channels, respondents had the option to respond via paper copies. The residents of the county were made aware of the importance of contributing to the project by completing the survey. The publicity and awareness campaigns were conducted via joint press releases by Aberystwyth University and Ceredigion County Council. Additionally, local newspapers, the internet and electronic media campaigns were also used to increase awareness. Information was made available online and in print copies for the public explaining the aims and the contribution

^{4.} Note that the results from this part are discussed in the report entitled "The Economic Impact of the COVID-19 Pandemic on Ceredigion Businesses and Self-employed".

^{5.} According to the Office for National Statistics, the 2011 census shows that 75,922 people lived in Ceredigion.

the project was expected to make to the county. The survey ran between April and June 2021.

Other methods of obtaining data were considered, such as face-to-face interviews. However, considering the scope of the study and the existing government's restrictions on movement and personal contacts due to the COVID-19 pandemic, an online survey was adopted as the main method of data collection. The survey was made available in print to ensure that those without access to the internet or computer equipment would not be disadvantaged. However, our data collection

method would undoubtedly have had limitations in reaching some groups.

Sample demography

A total of 246 responses were received from the household survey. Table 2 below shows the sample demographics by age and gender, while Tables 3 and 4 show the ethnicity and religion of the respondents, respectively.

Gender/Age	16-24 years	25-44 years	45-64 years	65+ years
Male (25%)	3%	8%	9%	5%
Female (73%)	4%	26%	34%	9%
Prefer not to say (2%)	0.2%	0.7%	0.7%	0.4%

Table 2: Age and gender of the respondents

Ethnicity	Percentage
White	93.5%
Black, Black British, Caribbean, or African	1.6%
Mixed or Multiple ethnic groups	1.2%
No ethnicity given	2%

Table 3: Ethnicity of respondents

Religion or belief	Percentage
Christian	43.5%
No religion	37.5%
Atheist	9%
Prefer not to say	6%
Muslim	1%
Catholic	0.5%
Pagan	0.5%
Buddhist	0.5%
Humanist	0.5%
Quaker	0.5%
Spiritual	0.5%
Agnostic	0.5%

Table 4: Religion or belief of respondents

Results

We report below the results of our survey on the socio-economic impact of the COVID-19 pandemic on Ceredigion households and residents. The results and discussion are organised around the main themes of the study under nine sections. These are focused on household circumstances and the impacts of the pandemic on the day to day lives of local residents (Section 1). The impact of home-schooling and online working and the issues faced regarding digital accessibility and access to equipment (Section 2). The caring responsibilities for both children and vulnerable members of the communities experienced by respondents (Section 3). The effects and impacts of the pandemic on employment and unemployment for residents (Section 4). The general impact on health and wellbeing, including impacts on physical exercise (Section 5). The concerns and worries of residents when restrictions were eased (Section 6), general issues including the housing crisis (Section 7), suggestions from local residents about how to move forward after the pandemic (Section 8) and the impacts of the pandemic on vulnerable residents (Section 9).

Section 1: Household circumstances and the impacts of the pandemic on the day-to-day lives of residents

This section focuses on accommodation, household income, spending habits, debts, use of food banks, online food shopping, changes to routine activities and circumstances of Ceredigion residents.

Accommodation

Our survey results suggest that more than 70% of the respondents own their house either outright or with a mortgage. Also, a sizeable number of respondents were privately renting. A small proportion of the respondents were either living in social rented properties or renting houses in properties with multiple occupancies. 4% of the survey respondents live in social rented properties, which is lower than the Ceredigion figure of 10% (Statistics Wales, 2021). Table 5

shows the distribution of accommodation circumstances in the survey.

Our survey data shows that 11% of respondents were in full-time education. Some of them resided in houses of multiple occupancy and were living off student incomes, including student loans and income from part-time jobs. Fourteen per cent of respondents were retired, and 86% were either of working age, in full-time education, or responded 'other'.

Household income

The survey results showed that income ranged widely from up to £15,000 to over £66,000 per annum. Figure 4 below shows the income distribution of our sample respondents. The range of household incomes is evenly distributed

Housing circumstances	Percentage
Own house outright	37%
Own a house with a mortgage	37%
Privately renting	16%
Renting houses in multiple occupancies	4%
In social rented properties	4%
Living in family-owned houses or living with parents	1%

Table 5: A breakdown of respondents' housing circumstances

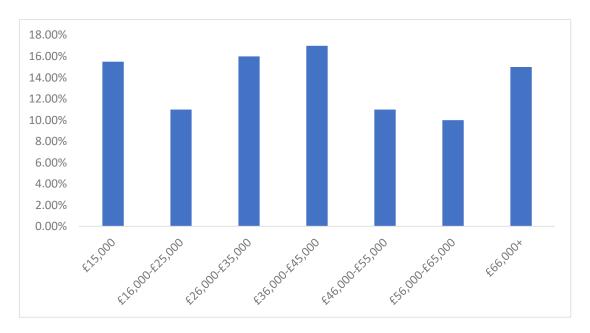


Figure 4: Household income of respondents

across our sample. 25% of the households earned below £25,000, 33% earned between £25,000 and £45,000, and 36% earned £46,000 and above.

As a result of the pandemic and changes to employment situations, respondents were asked if they had seen any changes to their household income. 73.5% had either seen a decrease in household income or their household income remained unchanged during the pandemic, however, 23% saw an increase in household income. This increase was seen in respondents working in sectors such as Higher Education and the education sector, local government, the National Health Service and the food, and hospitality sectors.

Some households also saw reductions in their income due to members of the household having to self-isolate and receiving statutory sick pay for this period instead of full pay⁶. Statutory sick pay was £96.35 per week for up to 28 weeks (GOV.UK, 2021), a big drop in most households' weekly income.

Household spending habits

When asked if households had to reduce their consumption during the pandemic, 27% reported that they made some cuts to their pre-COVID-19 consumption levels, while 70% did not have to reduce consumption. 8% of respondents who had to reduce consumption either had their working hours cut; were made redundant or laid off; lost their jobs or were put on the Furlough Scheme. The employees who reduced their spending included respondents who were working in the following sectors: education, retail, food, events and hospitality, childcare, care workers, civil service, transport and coach hire, arts, hairdressing, defence, music, research, software development, media, property maintenance and financial services.

When Ceredigion respondents were asked if their spending habits had changed because of the COVID-19 pandemic, 80.5% said that their spending habits had changed. The remainder either did not comment on this question or reported that they had not seen any change in their spending habits or were spending less during the COVID-19 pandemic.

^{6.} Employees are entitled to statutory sick pay from the first 'qualifying day' that they were off work if they were off work because of coronavirus and if they were self-isolating for at least four days in a row, including non-working days and any of the following applied: They or someone they lived with or in their extended household had COVID-19 symptoms or had tested positive for COVID-19 (effective from 13 March 2020, extended household from 6 July 2020), been notified by the NHS that they were in contact with someone with COVID-19 (effective from 28 May 2020) or they were advised by a doctor or healthcare professional to self-isolate before attending hospital for surgery (effective from 26 August 2020) (GOV.UK, 2021).

When respondents were asked about changes to their spending habits and what they were spending more on, a significant number of respondents reported increased spending on the following:

- The biggest increase in spending was seen on food, for example buying food locally, buying takeaways to support local businesses, buying food online via home deliveries and buying more specialised food and drink, including alcohol.
- The second most common response was an increase in household utility bills including electricity, heating, water, and gas. This was a direct result of working from home and everyone remaining at home during the working day, when many residents would normally have been out at work, out and about, or in an educational setting and not having to heat or light their homes.
- Other increases in spending included increased internet provision, online home entertainment including Netflix and Sky, and subscriptions to online gaming and online classes.
- Also, spending increases included more online shopping for clothes, alcohol, nonessential items, books, hobbies and crafts, cosmetics, sporting equipment, gardening products, household renovations and items, PPE, facemasks, and antibacterial wipes for cleaning in line with the COVID-19 protocols.

When asked about changes to spending habits and what respondents were spending less on, there were several areas a significant number reported reduced spending on.

- The number of people eating and drinking out in cafes, pubs, and restaurants fell dramatically. This included coffees and lunches out, eating out with friends or whilst at work, drinking with friends, and buying takeaways.
- Socialising and going out or spending money on days out, as well as other forms of entertainment, such as sports activities, children's activities, and visits to cinemas, theatres, and museums also featured in many responses.
- Fuel and transport costs to and from work or

- other activities reduced dramatically. Evidence from the survey suggests that individuals were able to make substantial monthly savings and pay off other debts as a result of the reduction in commuting fuel costs.
- Travel and holidays were other areas where people had spent less during the pandemic, both in the UK and abroad.
- A significant number of respondents mentioned that they were spending less on clothes, including work clothes and shoes, as well as spending less on make-up, haircuts, and other beauty treatments.
- Several other respondents mentioned that they were no longer spending money on impulse buys, presents, non-essential household items, and charity shop items, which they might have done if browsing in shops locally or on day trips in the pre-COVID-19 period. A reduction in childcare costs was also reported, as many children remained at home with their parents, carers or guardians.

Household debt

8.5% of the respondents took a mortgage, loan or credit card repayment holiday as a result of the COVID-19 pandemic while a majority (89%) did not. These respondents had wideranging incomes and circumstances; with incomes ranging from below £15,000 and up to £66,000 per annum and above. The respondents that took repayment holidays included 6% who owned a house with a mortgage, 2% who owned their house outright and 0.5% of those who were in private multiple occupancy rental accommodation. The respondents who took repayment holidays worked in a range of sectors: education, government, care and healthcare, arts and photography, hospitality, law, property maintenance and some were unemployed due to the loss of their job during the pandemic.

Whilst many residents saw changes in their spending habits and had reduced spending on some goods and services due to increased household bills, a few respondents managed to save money during the pandemic and paid off some of their debts. One per cent reported that they had paid off or significantly reduced their credit card debt or loans.

At the same time, as many residents were put

on Furlough or saw a reduction in household incomes due to reduced working hours, food costs increased across the UK. In Ceredigion, there was evidence of increased use of food banks within the county (Trussell Trust, 2021). Responses from the survey suggest limited use of weekly food banks, but a number of respondents were helped with food deliveries to their homes from a local food bank distributor. The results suggest that the survey did not reach many of the families and households that were struggling and could have used food banks locally, as the use of food banks across Ceredigion saw a dramatic increase prior to and during the pandemic (Trussell Trust, 2021).

Shopping for food online

As the COVID-19 pandemic took hold and residents were asked to stay at home, except for essential purposes, shopping for food became one of the main reasons for residents making journeys away from home. For some, who shielded, or self-isolated, this became a critical issue, as access to purchasing food in the usual manner became difficult. Vulnerable and shielding residents relied on help from family, friends, and neighbours, as well as shopping locally where possible, or turning to online shopping and delivery of food supplies. Delivery slots were made available to vulnerable residents. Issues were, however, encountered in the early stages of the pandemic with shortages of delivery slots and drivers available to deliver food to residents by mainstream supermarkets. Many small local food and hospitality businesses and small food shops provided essential alternatives for food delivery and provision to residents in Ceredigion. They provided home deliveries to many houses in towns and outlying villages.

When respondents were asked if they had shopped for food online during the pandemic, 59% responded positively. In contrast, 41% had not shopped for food online during the pandemic but had either continued shopping in supermarkets, as before or had bought food from small local food businesses closer to home. Of the 59% that had shopped for food online during the pandemic, 38% had not shopped for food online before but turned to online platforms to purchase food during the lockdown. Twenty-one percent had previously shopped for food online prior to the pandemic

and had continued to do so. Therefore, a marked upward shift was seen in the number of people in Ceredigion who started shopping for food online during the pandemic, as well as a move by local businesses to provide online deliveries of groceries and takeaway food deliveries from both large and small food businesses, providing customers with products and cooked meals.

Changes to routine activities and circumstances

As a result of the strict measures which were put in place and which prevented residents from leaving their homes, many people saw abrupt changes to their normal day to day activities. When respondents were asked if they had seen any change to their routine weekly activities, 73% of respondents surveyed said their routine weekly activities had changed during the pandemic, whilst 24% had not seen any change to their weekly activities.

When asked what activities had been added to the daily or weekly schedule, 54% of the respondents' reported changes to their weekly routine as seen in Figure 5 (p. 26):

- 43% reported an increase in physical activity including walking, cycling, running, joining online exercise classes, yoga, and wild swimming, whilst 9% enjoyed gardening and DIY projects around their property. Although many found the time to increase their physical activity during the lockdown, some found less time or had no time for activities, due to added pressures of working from home, alongside home-schooling, meaning it was difficult to find the time to increase or even get adequate exercise for some residents. Others found it difficult to exercise in their local area due to the inaccessibility of safe places to exercise, including many footpaths being closed and finding local roads were not safe for exercise activities.
- For 21% who worked from home, there was an increase in time spent in online meetings with colleagues on Microsoft Teams or Zoom. Some of the teachers delivered online lessons, and the students attended lectures and tutorials online. Reports of increased workloads, preparing for classes online, and screen fatigue were noted as being added to the normal daily or weekly schedule.
- 19% said that more time was also spent online

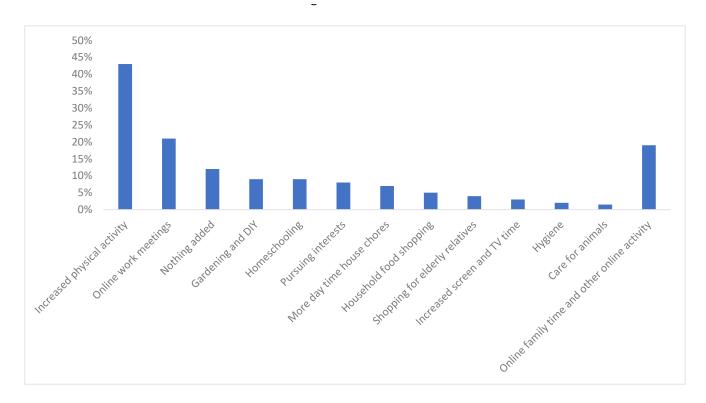


Figure 5: Activities added to the normal day to day schedule during the COVID-19 pandemic

talking to friends and family on Zoom or via other modes of video chat, as well as online shopping for food and other items, attending online classes and lessons, online church services, and joining in on family online quizzes.

- 12% of respondents added nothing to their daily or weekly schedule, whilst others found a more succinct schedule and felt more relaxed.
- 9% reported added pressures of juggling work and home life, including home-schooling children online. This resulted in difficulty in maintaining boundaries between home and work life and was exacerbated by further pressures on families with connectivity issues from poor internet infrastructure and provision, making life for many very challenging. The upside was the flexibility, but the downside was that people felt like they were never switched off from work.
- 8% of respondents found time to pursue other interests including learning to play musical instruments, attending courses in textiles, sewing, knitting, reading, learning Welsh, baking, and more time playing together and playing family games.
- 7% reported that they had found more time for daytime household chores and cooking, whilst others found that this workload increased with more time spent at home with the family. As some respondents put it: chores could be done during the day, for example, being able to hang the washing up during lunch breaks, which was beneficial, as well as having more time for house chores. However, others found that there was more domestic cleaning, washing, and ironing to do than previously as everyone was home. Some found that they cooked more, some by choice, but for others, this increased as hungry homebound family members were unable to purchase food easily from outside, as they may have done before the pandemic. These added to the burden experienced by some working families.
- 5% reported that food shopping became a more important part of the routine, with some respondents only venturing out into the town to shop for food once a week, whilst some used wholesalers for groceries.
- 4% of respondents shopped for elderly parents, elderly neighbours and others which became a regular addition to their weekly routine.

- 3% saw an increase in screen time, including watching television, Netflix and watching more news, whilst others found extra time for reading.
- The threat of the virus and the uncertainty of its impact was high during the early stages of the pandemic and anxiety about catching the virus was a real concern for many. The advice included washing hands regularly. 2% of respondents reported that more emphasis was placed on hand hygiene, especially when coming in from outside the home, and that hand washing was carried out more frequently than might have previously occurred. As well as keeping their distance from people, many were reluctant to touch anything which may have been handled by someone else. Some residents were bleaching and sterilising everything, which was bought online or via 'click and collect', and food parcels when delivered were often left untouched for several days or were sterilised for possible contamination for the fear of catching the virus from the packaging. As well as causing anxiety this added to the daily or weekly routines of several households.
- A small number of respondents volunteered and provided extra time and effort to organise a group of helpers that could be called on for help with picking up prescriptions, food shopping and posting parcels and letters.

• 1.5% of residents reported that one of the benefits of lockdown included having more time for animal and livestock care.

As well as adding activities to daily or weekly routines, respondents were asked what activities had been removed from their usual schedule due to the COVID-19 pandemic. The following activities were listed by 64% of the respondents as being impacted or removed. This is shown in Figure 6 below.

- 68% of respondents said that the opportunities to attend social activities such as sports and social clubs, children's activities, swimming, and dance classes, attending church services in person, running clubs, organized activities, going to pubs and restaurants and days out, were activities which were removed.
- 29% said that meetings with family and friends were removed from daily activities, with lockdown restrictions preventing people from visiting each other's houses, travelling for non-essential purposes, or travelling out of the area.
- 20% reported changing their shopping patterns and not visiting the town so regularly, reducing shopping for non-essential items such as clothes. Browsing in person in shops was also noted to have been removed from usual schedules.

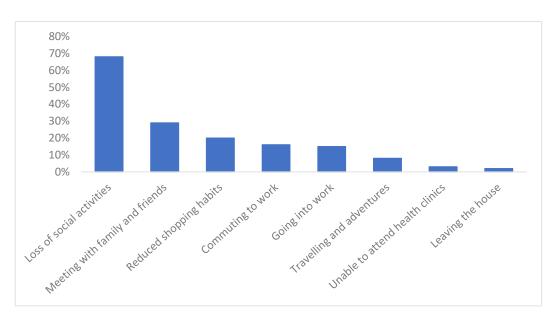


Figure 6: Activities that were removed from the usual schedule during the COVID-19 pandemic lockdowns

- 16% said that commuting to and from work, as well as working in the office, had impacted on usual activities.
- 15% said that going to work was not an option and was therefore no longer part of their daily routine.
- 8% said travelling, holidays, and adventures were removed from usual routines.
- 3% reported being unable to attend pain clinics, fertility clinics and acupuncture clinics.
- 2% of respondents cited the removal of anything that involved leaving the house or doing anything outside the home.

And finally, it was noted that residents were not able to invite service providers into their homes to help with household chores. For example, a cleaner who usually worked once per fortnight could not work, as no one was allowed to enter another home during the lockdown. This would not only have negatively impacted the income of the cleaner, but some residents may have struggled to keep on top of their household chores, especially if they were disabled or overburdened with other demands.

Section 2: Home-schooling, homeworking, access to computers, and digital connectivity

With the pandemic and subsequent lockdowns forcing the closure of schools and workplaces, resulting in people having to work and study from home, most people had to rely on the internet to work, study, communicate and interact and continue with their job and study responsibilities.

When asked about access to computer equipment in residents' homes, 92% of respondents surveyed in Ceredigion said they had some access to a usable equipment. The majority, 81%, had enough equipment for those that needed access during the day. 12%, however, did not have enough equipment for their household needs during the pandemic. Of the 12% of respondents who did not have enough computer equipment, 76% were home-schooling children.

Schools and some workplaces provided equipment where needed. 18% of households had to borrow equipment while 69% did not need to borrow equipment. The need to borrow or access computer equipment spanned the range of incomes and did not seem to reflect household income. Despite being able to borrow equipment from schools and workplaces, many households found themselves juggling the availability of equipment in the household, to allow adult home workers and children to access schoolwork online. Many school children

accessed learning materials on small mobile devices, and many did not have access to printers to print off their work to make it more accessible, compounding the difficulties faced by adults and children working from home.

As well as access to computer equipment (to allow working from home), digital connectivity, technical issues, or lack of digital infrastructure caused additional problems during the pandemic. These problems were exacerbated in rural and remote areas and were a major concern for many. The following responses were recorded as issues with connectivity. Slow broadband speeds and a lack of reliable broadband or mobile signal were cited as the biggest issues (Figure 7). Other issues included the cost of broadband and mobile access, the lack of digital skills or training opportunities to improve digital skills, poor customer service from broadband providers and connection issues.

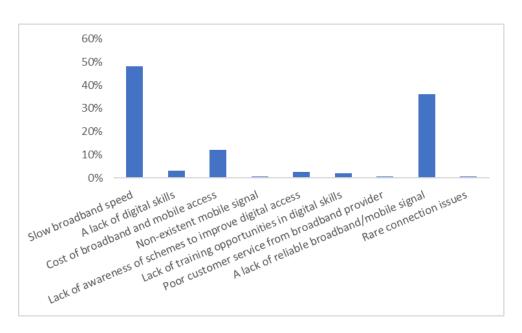


Figure 7: Digital connectivity issues experienced by respondents

Section 3: Caring responsibilities and home-schooling

The COVID-19 pandemic and the lockdowns affected households in many ways. Pressures and circumstances of residents living within households differed across ages and levels of vulnerability. Some households faced varying levels of difficulty in balancing work with childcare responsibilities or caring for relatives or helping elderly residents or vulnerable neighbours.

As stated previously, one problem facing households was the extended closure of schools and childcare facilities. Many parents were left juggling home-schooling and childcare alongside working responsibilities, which added to the lockdown pressures. When asked for details of household circumstances and caring responsibilities, our study showed that 40% of households had children living in them of which 17% of households had one child living in the home, 14% had two children and the remaining 9% of households had between 3 and 9 children living in them. In Ceredigion, 30% of households surveyed were home-schooling children during the pandemic, whilst younger children, who were not yet at school, also remained at home. The percentage of the households that had schoolaged children living in them can be further broken down into 18% of households that had

one school-aged child in the household, 11% that had two school-aged children, 3% who had three school-aged children and 1.6% of households that had between four and six school-aged children living in the house.

For many working parents juggling homeschooling and working from home was difficult to manage, and single-parent households made up 3.6% of the respondents in this survey. Whilst for some households, one or both parents were key workers, often leaving either one parent juggling working, alongside childcare or making the difficult choice of sending children to school and potentially being exposed to the virus. The availability of parents to help their children with their schoolwork during the pandemic was impacted by the nature of the parents' work, the number of hours they worked and their knowledge of the various school subjects. Thus, children's education was impacted in households where parents were unable to offer all the children in the household the level of help they needed resulting in some children struggling to catch up.

The increased cost of feeding families that were home all day was noted as one of the impacts of the pandemic on Ceredigion households. A few of the respondents had children who were eligible for free school meals and would have received at least one meal at school each day. Families had to incur additional costs to provide breakfast and lunch for these children. The numbers reported in our survey were low when compared to the Welsh average of 20% in 2020 (Statistics Wales, 2022). It is possible that families with children eligible for free school meals did not complete our survey.

Furthermore, one of the big concerns due to the COVID-19 virus was the danger it posed to vulnerable people getting seriously ill, and this was particularly relevant to older people and those with underlying health conditions. Issues relating to the care system in the UK were highlighted during the pandemic. 27%

of respondents had between one and three adults over the age of 65 living at home. When Ceredigion residents were asked if they had caring responsibilities, 14% reported having cared for someone other than children during this period. Caring for others included looking after a spouse or partner, adult children, aged parents, aged grandparents, or parents-in-law, siblings, friends, neighbours, someone else, and being paid to care for someone.

Respondents were also asked if anyone from outside of the household had helped them during the pandemic, 27% had help from someone outside of their household while 69% did not have outside help during the pandemic. This shows that communities came together to help those in most need during the pandemic.

Section 4: Pandemic Effects on Employment

Some of the occupations that were most adversely affected as a result of the pandemic included those in the hospitality and tourism, as well as those in the arts and music sectors. Employees in some occupations were able to continue working online from their home, such as those working in education and the civil service.

The occupations of respondents in the survey varied widely (Figure 8). The figure shows respondents worked in the education sector (17%), in administrative roles (13%), in healthcare and childcare (13%), management roles (12%), civil service (6%), and students (6%). Others were in occupations such as IT and software companies, researchers, hospitality, and the arts and media sectors.

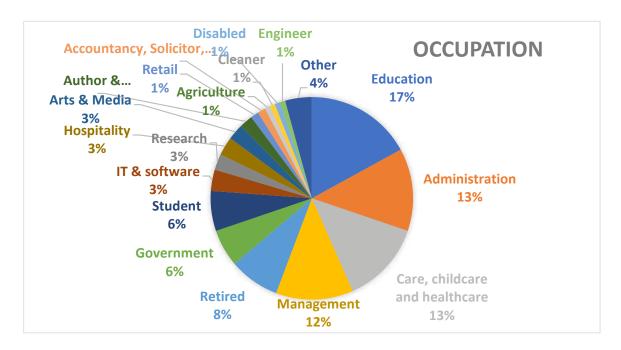


Figure 8: The distribution of Ceredigion respondents' occupation by industry sector

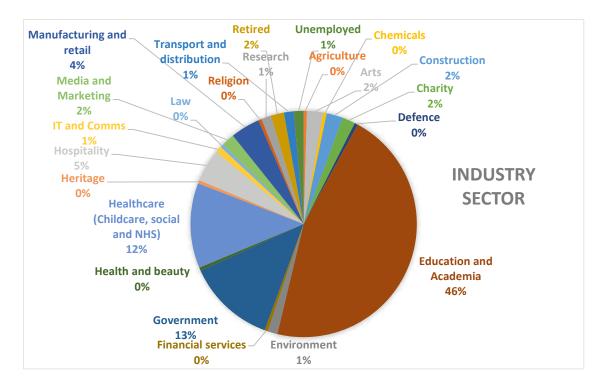


Figure 9: Industry sectors of employed residents of Ceredigion respondents

The Ceredigion residents that responded to this survey predominantly worked in the education and academic sectors (46%), government bodies (13%), childcare and social care (12%), hospitality (5%), and manufacturing and retail (4%) (Figure 9).

51% of respondents worked in the public sector, 21% in the private sector and 10% in the 3rd sector i.e., not-for-profit, charities, social enterprises, and voluntary groups.

Of the residents who responded to this survey, 76.5% were in paid employment, before the COVID-19 pandemic began in March 2020, and 22% were not in paid employment. The 22% not in employment were self-employed individuals, retirees, and students. 15% were in self-employment before the pandemic. Of the 15% in self-employment, 7% were in self-employment only, and 8% were in both self-employment and part-time paid employment.

A small number of respondents were either not in work prior to the pandemic lockdown (1.6%) or were retired (2.8%). Additionally, 2% had chosen to pursue further education - this included those studying for a master's level course and embarking on PhD study.

Respondents that were either in paid employment or self-employment before the COVID-19 pandemic began were asked to select the options which applied to them regarding the impact on their employment status. The following impacts were noted:

- 61% of those in employment continued to work the same number of hours as they did before the pandemic.
- 60% of those in employment worked from home since the onset of the pandemic.
- 11% of those in employment were also caring for children or other members of the family.
- 9% of the employed were put on a Furlough Scheme but returned to work afterwards.
- 5% had their hours reduced by their employer.
- 3% lost their job due to the company folding or closing.
- 3% were permanently laid off or made redundant by their employer (Figure 10).

The employees who were put on Furlough included those working in retail, transport, health, hospitality and leisure, market research, education, arts, civil service, and construction. Some employees working in education,

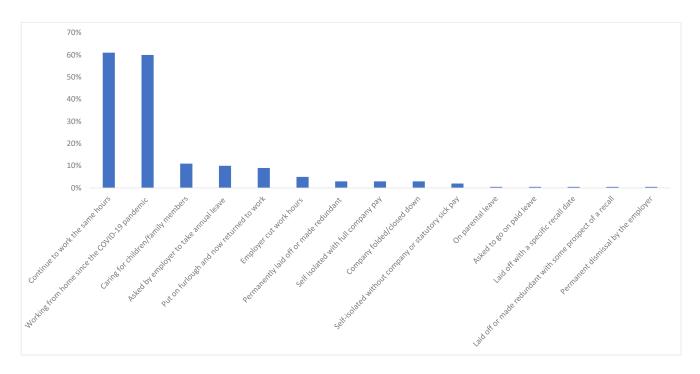


Figure 10: The impact of COVID-19 on the employment situation for individuals in paid and self-employment

hairdressing, the music industry, retail, software development, photography, mass media, caring, and the construction industry had their hours reduced during the pandemic. Loss of employment due to the closing down of the company or department was seen in employees working for the local authority planning department, retail, public relations, higher education, and the music sector. Employees that were made redundant or laid off included those working for the government, in education, local council services, food, and the transport sector.

Many working residents in the UK and inter alia Ceredigion were asked to work from home, if possible, but critical workers continued to work under the COVID-19 safe regulations in a number of roles. The respondents to this survey included 21.5% whose jobs were classified as critical workers during the COVID-19 pandemic. Of the remaining working respondents who were able to work from home, 33% planned to return to their normal place of work after the pandemic, 11% did not plan to return and 26% did not know if they would be returning to their normal place of work. That last group were predominantly working in the education sector (11%), local government (10%), and the third sector (3%), and a few were working in private businesses (1%). The decisions about returning to the workplace or continuing

to work from home in these sectors were dictated by local and Welsh government policies.

At the time of this survey, when respondents were asked if they had returned to their pre-COVID-19 jobs, 53% answered yes, while 19% answered no. These jobs included education, higher education, civil service, students with part-time jobs, retirees, care workers, student support, childcare, photography, media, hospitality, charity, research, music, cleaning, library, and transport. For 28% of respondents, this question was not applicable because some respondents had already retired, whilst some were in full or part-time education, and a few were on benefits and, therefore, would not be returning to pre-COVID-19 jobs.

When respondents were asked if they planned to return to their pre-COVID-19 job, 32% answered yes. The 50% who did not answer this question were either already retired, were not currently in a job which they could return to and included those who continued working throughout and, therefore, did not consider themselves as returning to their current job. The remaining 18% said they did not plan to return to their pre-COVID-19 jobs. The reasons given for not returning to pre-COVID-19 jobs included finding alternative employment, which included new

jobs, changing careers, changing job roles within the same company, finding new employment after being made redundant and moving into higher education⁷. 11% of respondents had not yet secured new employment and 7% had secured new employment. The 7% that had secured new employment continued to work in the same industry, albeit in new jobs or roles, while 9% had found employment in a different industry. Of the respondents that had not yet secured new employment, 5% planned to find a new job, and 9% had no current plans to secure a new job.

When respondents who were not previously self-employed were asked if they would consider starting their own business, 4% of respondents said they would consider this, but 58% said that working from home had not encouraged them to start their own business.

The COVID-19 pandemic negatively impacted the employment of 4.5% of respondents. Examples include shop managers; freelance event staff; musicians; those working in media; care workers; and the self-employed (who found other employment). Some respondents were made redundant due to shop closures or reduced demand for services impacted their role. Event management firms and firms in the music industry reported putting their employees on the Furlough Scheme because of lack of business. These impacts were due to COVID-19 restrictions, as well as issues over freedom of movement and visa requirements for Europe which caused large scale disruptions to the music industry.

Other respondents reported that contracts had been terminated, contracts were not being renewed, staff were fired just before lockdown, contracts were ending in the hospitality and higher education sectors. These were highlighted as major issues for those staff members working on short term and zero-hour contracts with little job security even under normal circumstances. The closure of many businesses

during the pandemic made their employment status even more precarious. A high number of redundancies, changes to job roles and added pressures due to lower staff numbers affected post-COVID-19 employment.

In the Background Section of this report, unemployment rates and the benefits uptake in Ceredigion, Wales and the UK were reported. Our results corroborated the claimant count numbers shown in Figures 3a and 3b in the Background Section. 2% of the Ceredigion respondents had registered for unemployment benefits while a further 2% were on Government Universal Credit Scheme. The majority of respondents, 95%, who responded to this survey had not registered for any unemployment benefits. Just over one-half of respondents on unemployment benefit were not employed before the pandemic and were already on benefits while the remaining 50% were employed. Our results showed that benefits claimants as a result of the pandemic came from a variety of employment backgrounds for example, former managers and well-paid public transport workers.

The 2% of the respondents on the Universal Credit Scheme had all been working before the pandemic in either paid employment or in self-employment. Out of these respondents, 60% remained employed, one respondent was a student, and one respondent was made redundant as the company folded.

^{7.} The Guardian (2021) observes that there was an increase in the number of people who enrolled in postgraduate studies in 2021. The article states that the sudden increase in the number of people going on to postgraduate studies was a result of the economic downturn caused by the pandemic. Also, the article quotes a study by the Institute of Student Employers, which shows there was a 12% fall in graduate job vacancies – the highest fall in recruitment since the 2008/2009 global financial crisis. The Welsh Government Office for National Statistics state that enrolments at Welsh higher education providers increased by 6.5% from the 2019/20 to 2020/21 academic year (Welsh Government 2021b). During this period, the number of postgraduate students grew by 16%, while the undergraduate student numbers grew by 3.2%. This evidence corroborates responses from our survey, which indicates that more people enrolled on postgraduate courses during the COVID-19 pandemic.

Section 5: General health, mental health, and physical exercise

The impacts of COVID-19 and the effects of the lockdown on residents' mental health and general wellbeing were far-reaching. As many residents remained at home or shielded during the lockdown, the effects of isolation and loneliness on the elderly and vulnerable members of the population or single person households became worrying. The mental health of young people unable to go to school or to meet up with friends during the lockdown, alongside the increased workload pressures, that many working residents experienced worsened the situation. Other issues included the lack of access to health care facilities for non-COVID-19 illnesses and the impacts of the disruption on routine physical activities. This was especially relevant for those who relied upon access to leisure facilities for exercise and companionship. Residents were asked about the impact of COVID-19 on their health and wellbeing and the impact they had experienced during the pandemic. The following responses were recorded:

- 14% shielded while 83% of respondents did not have to go into shielding.
- 33% experienced mental health difficulties during the pandemic, whilst 65% did not experience mental health difficulties.
- 55% of respondents felt isolated and lonely during the COVID-19 pandemic, compared to 43% who did not feel isolated or lonely.
- 18% said their family had experienced hardship during the pandemic.
- Impacts on daily routines and access to leisure facilities were restricted and 37% felt they were unable to carry out their routine exercise while 42% felt that COVID-19 had negatively impacted their routine physical exercise.
- In comparison, 61% felt able to carry out their routine daily exercise and 56% who felt that COVID-19 had not negatively affected their routine exercise. These results would rely heavily on the type of exercise that each respondent usually partakes, and the impact would be most keenly felt by those that relied on exercise classes and swimming

- facilities provided by leisure centres and other community facilities in Ceredigion, all of which were closed from March 2020 to early 2022.
- Concerns over illnesses other than COVID-19 were an issue and 7.7% stated that they had developed serious ailments during the pandemic.
- Almost a quarter of the respondents had accessed community health services during the pandemic e.g., local GP services, NHS 111, local Coronavirus support groups, and social services.

Section 6: Concerns raised by residents as the lockdowns were eased

When asked if they were worried when the first lockdown was lifted, 60% answered in the affirmative. The responses according to age were: 62% of those aged 65 and above answered yes, 63% of respondents aged between 45 and 64 years answered yes, 60% of those between the ages of 25 and 44 and 50% of the 16-24 years answered yes.

The following responses were recorded as concerns about the easing of restrictions (Figure 11):

- 33% were worried about the behaviour of other people, causing a spike in cases, and not abiding by social distancing rules.
- 29% felt that lifting the lockdown was too early and that they were worried about having to go into another lockdown.
- 28% were concerned about catching the virus themselves and/or spreading it to vulnerable family members.
- 25% were worried about the arrival of visitors to the area, bringing the virus to Ceredigion and increasing the spread.
- 14% felt anxious about several issues, including being out and about with lots of

- people, going back to the office, job losses and financial security, the mental health of family members, and going back to driving a lot and the busyness of life.
- 4% of respondents had issues trusting the Government's (local, central, and national) ability to make the right decisions, based on the science, rather than because of pressures relating to the economy.

When asked if respondents treated the subsequent lockdowns in the same way as the first lockdown, the majority (67%), said that they had been just as vigilant in subsequent lockdowns and remained locked down as seriously as the first one. They stated that they had self-isolated since the first lockdown and maintained a similar level of caution even when the rules were later relaxed. There seemed to be a consensus that levels of concern remained the same and that they would continue to work from home and not socialise in groups. Further to that, even with the rollout of vaccines, many residents were still concerned about the virus, remaining just as vigilant, mainly because of concerns about future surges and new variants.

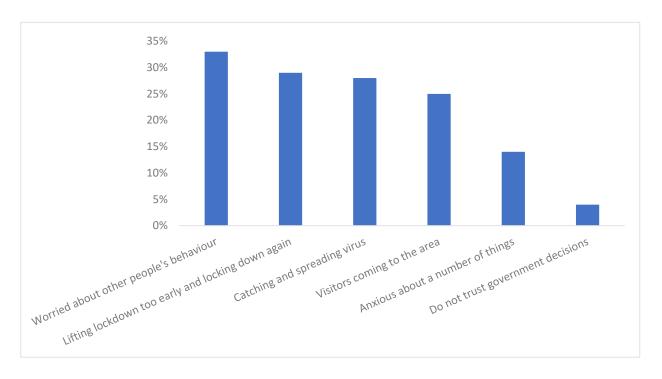


Figure 11: Worries and concerns when the first lockdown ended

Some respondents indicated that they had been even stricter with the subsequent lockdowns, as they were very concerned, stating that they took it even more seriously due to the second wave. This is evident from the quote below:

"Took first lockdown very seriously but hardly went out at all during second - not even for permitted reasons."

In contrast, 18% said that they had not treated the subsequent lockdowns in the same way as the first one, and respondents reported that they were more relaxed in subsequent lockdowns because they knew what to expect and what was expected of them. Respondents reported being more at ease because it was not such an unknown quantity anymore. Others admitted to breaking more rules in the second and third lockdowns, and many felt meeting up with people was more important as time went on, arguing that it was better to see people and be able to go out and about freely. For others, meeting people was key to improving their mental health, for example, "I would sometimes see my friends as the lockdown was making me feel very lonely and isolated, which played a big role in the worsening of my mental health." For some less fortunate people, remaining at home was not always a comfortable thing to do as the cost of keeping warm increased. One of the respondents stated: "I got tired of the lockdown over winter because my house is very cold and uninsulated." The choice to remain at home in the cold or go out was a dilemma faced by some residents.

For many families with children who were unable to meet with their friends or extended family members, the closure of leisure centres and playgrounds had further negative impacts on their wellbeing. As a result, some families with children treated subsequent lockdowns very differently from the first and parents were "utterly fed up" and "felt completely let down by Ceredigion County Council in terms of support for the younger generation."

Some respondents believed that there were both benefits and drawbacks to lockdown and when asked what Ceredigion respondents thought to be the benefits of lockdown the following were reported by 85% of respondents (Figure 12).

• 39% saw the benefits of having more time to spend with family, partners, children, and pets,

- as well as more time for self and more time to pursue leisure activities, including gardening or new hobbies and crafts. Respondents appreciated having a more relaxed approach to life and not having to rush around as much. Many enjoyed the opportunity to slow down the pace of life and spend quality time with immediate family.
- 29% reported that less traffic on the roads, no planes in the sky, and noticeable peace and quiet were other benefits experienced during the first lockdown. Also, being able to explore local areas by exercising locally, going out into nature (e.g., visiting private gardens and hearing singing birds), and reduced noise pollution were seen as benefits. Following the first lockdown, most people enjoyed healthier lifestyles; getting out more for walks and speaking to neighbours, and noticeably more acts of kindness were seen in communities. Residents enjoyed being able to cycle on safer, quieter roads and beaches. The environment seemed to have thrived - less pollution, less litter, less crowded areas, quieter supermarkets, and fewer tourists.
- 11% thought that one of the benefits of remaining at home was the reduced risk of catching and spreading the virus, as well as keeping the virus under control, by limiting people mixing between households. It was argued that this helped to keep levels of infection low in Ceredigion, as well as keeping the pressure off the NHS in general. Many believed lockdown was necessary to stop the spread and the risk of the virus, particularly in the early stages of the pandemic.
- 11% found working from home to be of significant benefit - enjoying the flexibility of setting their own work schedule and finding a better work/life balance. One respondent said it is "easier to park outside my house." Furthermore, being able to do some household jobs whilst being at home at lunchtime, such as hanging out laundry, was seen by some as beneficial and a good use of time. Others enjoyed being able to walk their dog at lunchtime. Also cited was not having to interact with so many people and "put a face on for work." Spending much less time with stressed out colleagues and, therefore working more efficiently without this added stress was also seen as a benefit.

- Whilst many enjoyed the flexibility of working from home and the time to try new hobbies, as well as enjoying the peace and quiet and increased family time, some found few or no benefits to lockdown. Comments made included: "to the life it has taken away" and "the effects it had on businesses and people's health and wellbeing, especially in later lockdowns", with "some feelings of frustration expressed at the levels of bureaucracy layered on by Ceredigion County Council on top of the central regulations".
- 8% reported that one of the benefits of lockdown included spending less time travelling to work and reduced expenditure on fuel. It was noted that commuting was a burden and how much more time was available to do other things when not commuting to work daily.
- 6.5% reported saving money as a result of the lockdown, due to a reduction in spending on transport and going out. This enabled some residents to save money. Savings were used for house improvements, reducing debts, and improving their financial situation.
- 3% thought the ability to stay at home and connect online in a more relaxed atmosphere was a bonus. This included opportunities

- to meet new people online through new and evolving online social clubs, as well as connecting with friends and family. The increase in the number of online shows, online learning, opportunities for online worship and learning new skills online, including digital skills were seen as a benefit of lockdown, especially for those who were unable to leave their house. "Increased opportunities to connect online, especially for those who are housebound or those who may have social anxiety" was seen as a positive outcome of lockdown.
- 2% saw an increase in online purchases as a positive, which meant "supporting local shops more during the lockdowns".
- 2% preferred the less crowded supermarkets and shops.
- Others felt less pressured to go out and socialise and found time to do crafts and hobbies, write diaries and for introspection.
 For example, quotes such as, "a good reason to stay put" and "not having to see people when I don't want to," suggested "less social anxiety".

Despite the benefits there were also drawbacks to the lockdowns. When asked about the

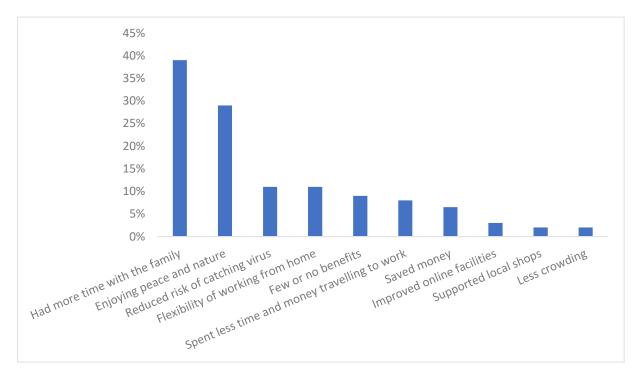


Figure 12: Socio-economic benefits of lockdown

drawbacks of lockdowns 85% of the respondents listed the following (Figure 13):

- Social isolation and loneliness caused by lack of social interaction were major drawbacks for many. 69% said that the drawback included not being able to meet with family and friends, feeling isolated, lack of social interaction and missing meeting family members in person. Inability to see family members or friends who live further away was seen as a drawback as travel restrictions went on for over 18 months in some cases.
- 20% said that there was a negative impact on mental health/wellbeing. Whilst many enjoyed the initial slowing pace of life, connecting with immediate family members and enjoying the local area, some people were socially isolated throughout the pandemic and became increasingly anxious about meeting people. Young people struggled with not being able to meet up with friends or attend schools and clubs. Parents juggled work and homeschooling and were unable to rely on help with childcare from family or friends. Many elderly people were unable to see their families and/ or friends. Financial pressures caused by the

- lockdown affected many households and peoples' mental health and wellbeing.
- 14% cited juggling working from home with home-schooling as being a major drawback of the lockdowns. After the initial enjoyment of the first lockdown with the slowing pace of life, the pressures of increased workloads, homeschooling, and lack of digital accessibility caused extra stress for many households. Difficulties maintaining a work-life balance when working from home impacted many households as lockdown continued.
- 13% said that lack of access to open spaces for exercise, no access to swimming facilities, gyms or play parks closed by Ceredigion County Council for the duration was an issue. Many public footpaths were closed, especially during the first lockdown, leading to a reduction in physical exercise for some. Also, there was a reduction in physical exercise particularly for those needing more specific facilities for activities. Families with young children struggled to entertain their children without access to the clubs and sporting facilities which were available prior to the lockdown. The lack of access to playgrounds

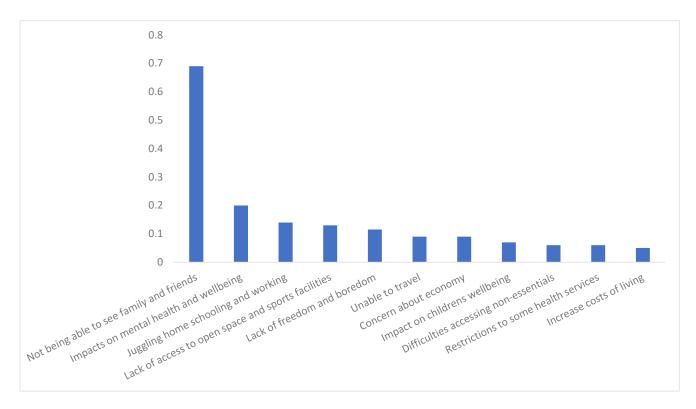


Figure 13: Drawbacks of lockdown

for a significant period over the first 18 months of the lockdown made this even worse.

- 11.5% reported that the lockdowns were too restrictive. The lack of freedom and the boredom it created caused a reduction in quality of life. There was a general dissatisfaction with the way the government and council had handled the lockdowns and their duration.
- 9% reported that a major drawback of lockdowns was being unable to travel, especially to see family members who did not live locally.
- 9% shared their concern for the economy and the impact on local businesses and businesses owned by family or friends.
- 7% voiced concerns over the impact on children's wellbeing and social interaction as a result of the lockdown.

- 6% thought that a major drawback included the difficulties accessing non-essential items, wanting to support local shops, but being unable to buy non-essential items from anywhere apart from supermarkets, reduced opening hours for local shops, shopping online and getting online deliveries.
- 6% struggled with the restrictions to some health and social services, including difficulties getting dental treatment or seeking medical advice. Some respondents stated they had seen a decline in their health as a result of these restrictions.
- 5% reported increases in living costs and loss of income, jobs, and businesses.

Section 7: General Issues

One of the major impacts of COVID-19 and the stay-at-home measures was working from home and home-schooling, both of which require a reliable digital working or learning environment. This increased use of technology and reliance on internet connection and speed resulted in residents wanting to move to areas with adequate internet provision.

Stay-at-home measures and restrictions were placed on individuals' movements and included travel restrictions. The various impacts of COVID-19 have been far-reaching, and individual circumstances have impacted the lived experience of everybody. Both residents living in urban and rural areas have faced difficulties during the pandemic. Those living in more urban areas faced difficulties accessing green spaces for exercise and being able to socially distance themselves from others. Those living in more rural locations faced difficulties that included digital accessibility issues. Isolation issues were seen in both urban and rural locations. Our survey results show that 38% of residents live in town; 37% live in a village, and 24% live in the Ceredigion countryside.

As a result of changing circumstances, due

to COVID-19, with many people working from home, some residents considered moving and changing the location or the size of their property. 15% of the respondents planned to move home within the area.

Evidence from our survey shows that the following reasons were given for moving home during the pandemic: 39% wanted to move closer to town, 35.5% wanted to move into a bigger property, 22.5% wanted to move into a smaller property, 22.5% needed more space for working from home, 13% needed more green space, 10% wanted to move further away from town, 6.5% wanted to move to an area with better broadband connectivity and 3% wanted to move closer to onsite services in towns or villages (Figure 14).

When asked about the difficulties respondents were experiencing regarding moving house; 4.5% reported that they were struggling to find a place to rent; 7% were struggling to find a house to buy, 0.4% were struggling to sell their current house and find a house to buy, and 0.8% were struggling to find a house to either buy or rent. While only 0.4% of those sampled said they were struggling to sell their property, a combined total

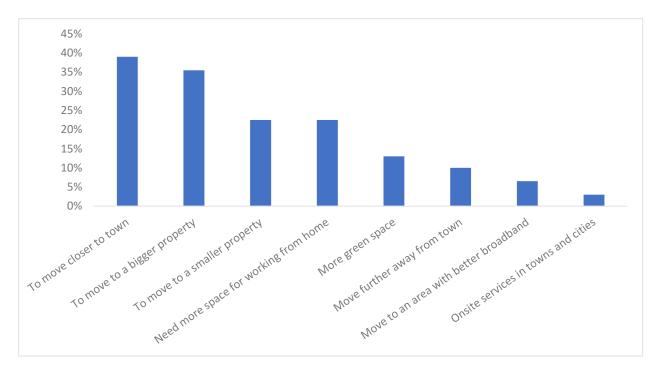


Figure 14: Reasons for wanting to move home

of 12.1% are either struggling to buy or rent a residential property over the same period. These responses are an indication there was a clear imbalance in the demand and supply of houses in Ceredigion during the period of the pandemic.

When respondents were asked if they were struggling to find a house to buy or rent and what issues they had experienced, of the 12.1% of respondents who were struggling, the following responses were given by these residents: 92% cited affordability - house prices were seen as too high. 33% faced competition with other buyers, especially cash buyers moving into the area from cities. 21% mentioned a lack of schemes and affordable options for first-time home buyers. 17% faced difficulties finding a property to suit their individual needs, while 12.5% cited the lack of housing due to high levels of student accommodation being an issue (Figure 15).

The following quotes were reported in the survey regarding issues of moving home and affordability: "inflated house prices", "properties being too expensive", "a shortage of houses in affordable price ranges and prices being driven up by cash buyers". Other factors included: "the cost of the deposit which rose during the pandemic", and "house prices rising by at least 10%; with the market which has gone absolutely crazy". The cost was seen to be one of the key

issues impacting residents' ability to buy or rent a new property.

Buyers and renters reported that "it was hard to find properties that were suitable and within their price range", and reasons given for this included, "the speed at which properties were being sold to people relocating from urban areas", "competition with other buyers, especially cash-buyers", "loads of city people buying up properties and jacking up house prices for locals", "people moving to the area and buying a second home", and "many people from away appear to be trying to move to the area".

The respondents expressed frustration over the lack of affordable options for first-time buyers, a lack of local authority support for locals buying homes, difficulties with help-to-buy schemes and a limited number of houses coming onto the market during the pandemic. Others reported that there were few suitable properties available on the market that met their needs. These were all cited as problems associated with moving to a new property during the COVID-19 pandemic. There were difficulties finding rental properties that accepted pets. Another issue was availability of properties in their area of choice, including the availability of land for self-builds. Others struggled to find a property for a family or a suitable property with a garden or access to public transport and a place to store a bicycle.

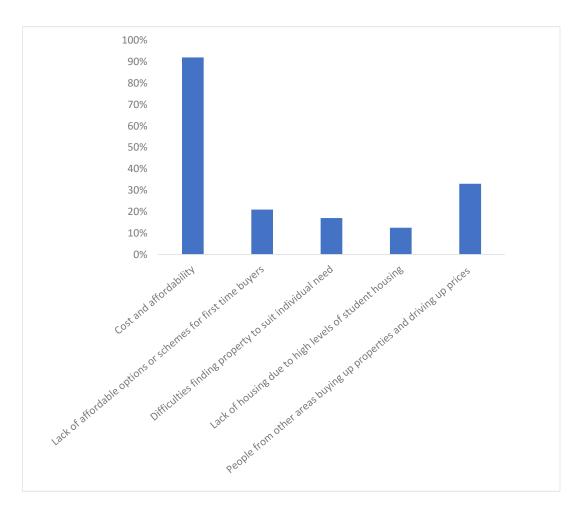


Figure 15: Barriers to buying and renting properties in Ceredigion during the pandemic

Further, respondents reported needing to find a property that allowed easy access to medical facilities due to disabilities, but they struggled to find suitable and affordable ones. Job insecurity was also cited as a reason for struggling to find a property, as the situation was affecting their ability to get a mortgage.

Respondents reported that there were too few houses available to buy or rent and that prices had gone up during the pandemic. Additionally, pressures caused by buyers from other areas looking to move to a more rural location, and the lack of affordable houses were also seen to be caused by the many student properties currently in the location. Respondents stated that student flats drive up prices and that there was a shortage of non-student flats, due to the student rental sector and speculative investment.

While the survey did not ask about the location to protect the confidentiality of respondents, the issue of unaffordability of local housing highlighted in survey responses may be especially pronounced in high price hotspots where holiday letting has been an important source of additional income⁸.

^{8.} Increased demand for staycation from UK residents has spurred the conversion of properties into holiday lets potentially pricing local residents out of the housing market (Wales Online, 2021).

Section 8: Moving forward (Respondents' perspective)

Respondents were asked if they had any suggestions for Ceredigion to move forward while drawing lessons from the experience of the pandemic as well as dealing with its impacts. 46% gave the following suggestions which are grouped thematically below:

- There was a strong preference to prioritize
 the opening of leisure facilities, playgrounds,
 sports facilities and libraries. This was linked
 to supporting children's and young people's
 wellbeing, which included keeping the
 schools open and providing childcare support.
 Focusing on childcare provision and care in
 general was seen as a priority as both were key
 to how people fared during the lockdowns.
- Focussing on mental health for young people and the mental health of the general population was seen as important.
- While many commended the Ceredigion council's handling of the pandemic, there were calls for wider community participation in decision-making during the pandemic. Gold and Silver commands faced criticism, as respondents wanted elected members of the council to have a say in decision making in the county and there were calls for public consultation on major decisions.
- Moving forward, the council should concentrate on provision of public services including essential services for health and wellbeing, and "help those who really need it",
 for example provide support for vulnerable members of the community.
- Other concerns included economic recovery and support for and promotion of local businesses, including the self-employed.
 The most frequent suggestion was business rate relief. Others included supporting local food chains, more outdoor eating areas and encouraging businesses to move into empty shops.
- More accessible and pedestrianised town centres (pedestrian and safe zones) were welcomed by many while the impact of safe zones on businesses was questioned by some.

Road closures and shop closures in Ceredigion towns were highlighted as 'destroying the towns'. There were suggestions to carry out a review of Ceredigion towns, on the matter of accessibility, parking provision, and town layout and design. Promotion of cycle paths was advocated across the county.

- While tourism was seen as one of the important industries in this area, a cautious approach to opening up to tourism inflows during the pandemic was advocated.
- The "manage inflows" sentiment was also linked to fears of residents being priced out of the housing market during the pandemic. Suggestions included prioritising houses for local people and building more houses for young people.
- Pandemic-induced innovations such as the hybrid-working mode were viewed as a positive. More generally, learning from the experience of the pandemic and drawing action plans to respond to public health emergencies were seen as important.
- There was frequent mention of the need to improve broadband connectivity and digital skills for all. This was highlighted by a number of respondents, indicating that this posed a substantial problem for many during the pandemic and lockdowns when many Ceredigion residents were working from home and home-schooling children.

Section 9: Vulnerability

Section nine focuses on the vulnerability created by the COVID-19 pandemic in various aspects of the residents' socio-economic circumstances. This section examines the situation of low-paid workers, furloughed workers, those on benefits, general health and wellbeing, carers, and digital accessibility during the pandemic. This section is followed by the conclusion to the report.

The negative effects of the pandemic and the lockdowns were mostly felt by the vulnerable and disadvantaged workers in low productivity services (Fana et al., 2020). The pandemic increased the vulnerability of low-paid workers in a number of ways. They faced uncertainty as to whether closed workplaces would open after the restrictions were lifted and whether they would keep their jobs. Some Furlough payments would have contributed only 80% of their wage. These categories of workers and their families were at a higher risk of falling into income poverty and vulnerability during and after the lockdowns, especially, if they were made redundant and had to go on unemployment benefits.

According to the Which? (2020a) Consumer Insight Survey highlighting the financial difficulties faced by some workers on the government's Furlough Scheme, workers who were furloughed were three times more likely to have missed a household bill payment, loan, or credit card repayment in the past month of the customer insight survey. The study highlighted the increased financial difficulties faced by workers on the Furlough Scheme, those who were put on involuntary leave or had their working hours reduced. The authors found that these categories of workers had to change their spending habits to make ends meet or reduce essential spending, using overdrafts, or reduce their savings. The findings highlighted the unequal effect of the pandemic on personal finances and the potential disparity between those on the Furlough Scheme and those that continued to work. This disparity increased once the Furlough Scheme ended and the finances of those affected was further strained. This was worst for workers whose working hours were reduced permanently or were left unemployed (Which? 2020a).

Despite the government introducing various support schemes, many had to resort to applying for out-of-work benefits. Early in the pandemic, starting from April 2020, the Department of Work and Pension (DWP) raised the basic element of Universal Credit (UC) and Working Tax Credit (WTC) by £20 per week. Work search requirements for applicants were suspended for the UC, Employment and Support Allowance (ESA), and the Jobseeker's Allowance (JSA). The minimum income floor threshold for selfemployed people used to determine if one is gainfully self-employed was suspended temporarily from 13 March 2020 while the local housing allowance was raised to the 30th percentile of market rents (after the Local housing allowance rates four-year freeze in April 2016, DWP, 2020).

Out-of-work benefit claims numbers for the UK and Ceredigion indicated a steep increase in Universal credit uptake between February and May 2020 to reach 2800 recipients. Figures 16a and 16b are the UK and Ceredigion claimant levels - the trends are very similar for both. Universal Credit claims increased by 93% between February and May 2020 in Ceredigion, while the increase in the previous quarter (November 2019 to February 2020) was 21% and 33% and 32% in August 2019- November 2019 quarter and May 2019- August 2019 quarters, respectively.

Summers et al. (2021) report that pre-pandemic or legacy JSA/ESA claimants, who did not receive the £20 uplift, had the highest levels of food insecurity. Further, the authors find that there are important differences between new and existing claimants in terms of socio-demographic profile, occupational background, and housing tenure. Pandemic-related claimants tended to be younger, have had a history of recent employment and were in better health than pre-pandemic claimants. A wider issue for the policymakers is what happened to the level of poverty when the £20 uplift to Universal Credit was removed from 30 September 2021. Inflation rose significantly, and food price inflation was above 2% from July 2021 (ONS, 2021b). Inflation continued to rise, and the Consumer Prices Index (CPI) rose by 11.1% in the 12 months to October

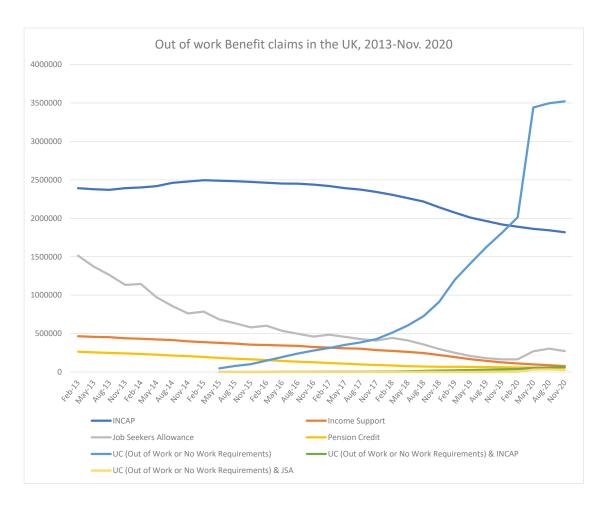


Figure 16a: A steep rise in UK Universal Credit claimant rolls (February to May 2020)

Source: Department of Work and Pensions (2022)

2022 (ONS, October 2022°). This eroded the value of the meagre Universal credit benefit support. The government announced a policy change decreasing the taper rate¹⁰ from 63% to 55%. This did not compensate for the loss of the £20 as only those who worked over 20 hours per week were able to make up the £20 and most Universal Credit recipients do not work.

The policy question is what happened to the lockdown-induced Universal Credit recipients – did they find employment or remain unemployed for a long time? While the trend in Figures 16a and 16b indicate an initial levelling off from March 2020 to November 2020, there is an upward trend for Ceredigion from November 2020 onwards. A more qualitative approach employing interviews and focus groups would be required to identify barriers that prevent

pandemic-induced claimants from returning to gainful employment.

In the survey, there was 1% of respondents who went on unemployment benefits during the pandemic and 2% receiving Universal Credit. As it is evident from other survey responses reviewed in the employment section, many more have experienced the loss or reduction in employment. The precarious position of freelance workers, those on zero-hour and short-term contracts, gig-economy and platform business workers became evident during the pandemic. Our survey results support the notion that there has been a churn or reallocation of workers across jobs, and industry sectors as well as a movement out of the labour force to pursue education, retirement, and into the welfare system (Carrillo-Tudela et al., 2021).

 $^{9.\} https://www.ons.gov.uk/economy/inflation and price indices/bulletins/consumer price inflation/october 2022.$

^{10.} The Universal Credit taper rate is the rate at which Universal Credit Claimants lose credits as they work and earn above a predetermined threshold known as the work allowance.

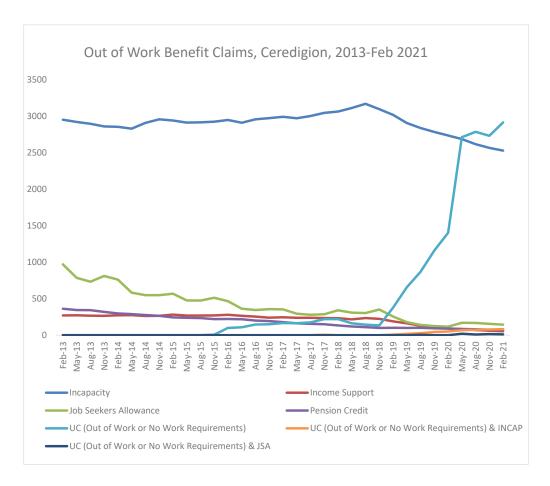


Figure 16b: A steep rise in Ceredigion Universal Credit claimant rolls (February to May 2020) Source: Department of Work and Pensions (2022)

A high number of responses in the survey indicated an atmosphere of a high level of economic insecurity as a result of the pandemic.

In addition, the DWP initiative "way to work" aimed to speed up the uptake of jobs by benefit recipients by requiring them to widen the search beyond their area of expertise or face benefit sanctions. "Under existing rules claimants have 3 months to find a job in their preferred sector before facing the prospect of sanctions. New rules mean that sanctions could begin 4 weeks after their initial UC claim if they are not making reasonable efforts to find and secure a job in any sector or turn down a job offer." (DWP, 2022). By essentially forcing the recipients to accept any job that comes along the initiative is not likely to match job seekers to jobs well in the first place. It may decrease unemployment in the short term but is unlikely to put recipients on a secure employment path and hence risks more unemployment in the future. This will have a negative impact overall at individual and firm level.

The negative effects of the pandemic on peoples' health include limited access to non-COVID-19 related health services and longer waiting times (Mansfield et al., 2021). 6% of respondents stated they had seen a decline in their general health as a result of restrictions on healthcare provision during the pandemic. Older people and those with underlying health conditions were particularly affected by the delay in attending to non-COVID-19 illnesses by the NHS. The pandemic has also resulted in increased mental health problems, that went on undetected behind closed doors and were not picked up by the authorities.

The pandemic adversely impacted vulnerable groups including people with disabilities beyond the health implications of restrictions on healthcare, shielding, and social distancing (Wong et al., 2022). The literature (Grant, 2011; Beatty and Fothergill, 2015) suggests that people with disabilities and health issues tend to be the first to be made redundant and have long spells of unemployment or they drop out of the labour

force because they face difficulties finding new employment. If they had to stop working during the pandemic, then they would likely face long job searches post-pandemic. Our survey did not capture direct evidence of loss of employment among disabled workers during the pandemic. However, the survey revealed that disabled respondents struggled with mental health issues, which were not helped by the isolation caused by the lockdowns.

The restrictions further increased the burden on those caring for their household members. It was observed that those who started providing care while in unrelated employment were more likely to reduce working hours or quit (Yeandle and Buckner, 2007). The pandemic exacerbated this tendency: Carers were particularly economically vulnerable because many would have had to quit their paid employment in order to limit outside contacts and continue to care for the vulnerable person in the household. Young carers faced a greater risk of poverty because the demands of caring leave them with less time to pursue their education and career (The Children Society, 2013). 14% of the respondents reported having to care for someone other than children during the pandemic. The issues relating to the UK care system were highlighted in some of our survey responses.

The survey results highlighted problems associated with digital accessibility and digital infrastructure provision and the need for additional training to cope with the rise in the use of digital platforms. The cost of internet access, slow broadband speed, unreliable broadband or mobile signal, and the lack of digital skills were reported by a number of respondents working from home or homeschooling children. In the future, a greater reliance on online forms of work, schooling, and public service provisions such as online health services, and support services for welfare recipients will further marginalise those without adequate online provision. This division is often location-determined, with more remote and sparsely populated areas lacking adequate broadband and mobile signal coverage.

Our survey responses, evidence from academic literature and administrative data point at the need for adequate support for families on a low income, who faced the combined insecurity of the pandemic and increased expenses on

everyday essentials like heating, housing, food resulting from supply chain interruptions and input price inflation.

Their plight is compounded by the welfare support system not keeping up with the increases in the cost of living and in many cases restrictions and the decline in benefits. For example, the removal of the £20 uplift to the Universal Credit that provided a lifeline during the pandemic, the introduction of "way to work" to shorten job search and the local housing allowance freeze leaving low-income private rental tenants facing increasing rents and lacking resources to pay them. This cost-of-living crisis may be especially pronounced in high price hotspots where increased demand for staycation from UK residents has spurred on the conversion of properties into holiday lets potentially pricing local residents out of the housing market.

For those on low and insecure income, falling into poverty and the inability to escape it was exacerbated by 2010-2019 austerity policies that resulted in significant funding cuts to the third sector - charities, NGOs, and voluntary organisations working with communities undermining their ability to deliver vital services to those in need of support.

The confluence of the effects on local economies and low-income households constitutes a regional and local policy issue that should be addressed not only at the national level but also at the regional and local level, with place-specific policies.

Conclusions

This report looked at the socio-economic impacts of the COVID-19 pandemic on households within Ceredigion. It provides evidence regarding the cumulative economic, social and health effects brought by the COVID-19 pandemic and how they affect different segments of the population in Ceredigion.

From the sections discussed above, the report focused on respondents' living conditions, and the potential impact of the pandemic on them, providing insights into the socioeconomic activities of the county. We looked at respondents' employment status and industry sector. Our survey results provided an understanding of Ceredigion residents' work situation before, during, and any plans for potential transition post-COVID-19 pandemic. Also, we examined the impact on respondents' incomes, consumption, and general health conditions of respondents. We sought to discover if respondents had caring responsibilities during the pandemic, the extent, and effects of home-schooling of children and whether there was access to useable computer equipment or digital connectivity issues within the household. Respondents were asked to report on any significant changes in routine weekly activities for the household and what they were worried about when the first lockdown was lifted and if their approach to subsequent lockdowns was similar to the first lockdown. Finally, they were asked if they thought there were any benefits or drawbacks to the lockdowns and if they had any suggestions to make to the government regarding future lockdowns.

From the results, a number of key issues were identified that need to be considered and addressed by employers, charities, Ceredigion County Council, the national government or a combination of these parties.

Due to the steep increase in the number of Universal Credit recipients during the pandemic, the policymakers should focus on poverty dynamics after the £20 uplift to Universal Credit was removed on 30 September 2021. Will these recipients return to employment or stay out of work for a long time? Additionally, inflation

is increasing, and this erodes the value of the existing Universal Credit benefit support. The decreasing taper rate from 63% to 55% will not compensate for the loss of £20, as only those who work over 20 hours per week were in a position to make up the £20. The removal of the £20 uplift will further contribute to the cost-of-living crisis.

The Department of Work and Pensions "way to work" initiative compelled benefits recipients to accept jobs that were not suited to their area of expertise and skillsets or face benefit sanctions. This may have decreased unemployment in the short term, but it is less likely to lead to secure employment and reduce benefit claims. Moreso, the adverse impact of this policy on the claimants' attitude to work and job satisfaction may result in interrupted work patterns. Poor job matches could result in the additional cost of high turnover of staff for the employers.

Some employees received statutory sick pay of £96.35 per week (correct as of 2021) due to self-isolation when they or a member of their household tested positive for COVID-19. This raised the question of whether this amount of weekly income was enough to meet their basic needs. Some employees were off work for many weeks due to COVID-19 symptoms and long-term side effects and were too ill to return to work. These employees needed additional support as extended periods receiving sick pay exacerbated their problems so there needs to be additional support over and above the statutory sick pay.

The pandemic increased the vulnerability of low-paid workers in a number of ways. There was uncertainty regarding whether closed workplaces would open when the restrictions were lifted and whether they would keep their jobs. This category of workers and their families were at a higher risk of falling into income poverty and vulnerability during and after the lockdowns. Their vulnerability increased if they were made redundant and depended on unemployment benefits for their main source of livelihood.

The COVID-19 pandemic had unequal effects on personal finances and the potential disparity

between those on the Furlough Scheme and those that continued to work. There needs to be support for furloughed workers and their families. The government should set up employment schemes to support those that lost their jobs to reskill and find employment to reduce their reliance on unemployment benefits.

The closure of businesses during the pandemic and resulting redundancies meant that employees on short-term and zero-hours contracts, with little job security, were in a more difficult situation. Moving forward additional support needs to be available for those employees as they are on insecure incomes and are likely to experience poverty.

The survey responses highlighted a growing demand for increased support for small businesses. The local businesses were essential for local communities and had to continue to operate in the business environment of closures, redundancies, social distancing measures and staff being put on furlough. Further support and promotion for these local businesses are essential, to continue to encourage local produce and food sales and give business rate relief for businesses to encourage movement into empty shops.

As shown in our survey, Ceredigion residents would like to see a review of town planning in the county. They would like to see a better layout of Ceredigion towns including accessibility, parking provision and pedestrianised areas in towns which is the responsibility of Ceredigion County Council.

A common response relating to the question on increased spending during the pandemic was rising household utility bills, including, electricity, heating, water, and gas. This was a direct result of working from home, homeschooling and restrictions in general. HMRC provides tax relief for job expenses. Individuals could claim tax relief for additional household costs if they had to work from home because of COVID-19 and could claim relief for gas and electricity, metered water and business phone calls and internet access. The maximum amount that could be claimed was £6 a week from 6 April 2020 (for previous tax years the rate was £4 a week). This does not appear to be sufficient compensation for the additional spending incurred. 'Working-from-home' office expenses

and the amount that can be claimed back needs to be revisited by employers, the Council, and the government whenever government mandates working from home in the future.

Employers also need to consider the effect on employees of screen fatigue and increased workloads. Of those working from home, 21% found an increase in time spent online using Microsoft Teams or Zoom to connect with work colleagues, attending online meetings, delivering and attending online lessons. Reports of increased workloads, preparing for and attending classes online, and screen fatigue were noted as additions to normal daily schedules. Employers need to consider these new trends and work habits in their workload allocation models and employee well-being moving forwards.

Further pressure on households, was caused by the closure of schools and childcare facilities for extended periods of time during the pandemic. Many parents juggled childcare and homeschooling responsibilities alongside their work, which added to the lockdown pressures. 30% of households surveyed were home-schooling children during the pandemic, whilst younger members, who were not yet at school, also remained at home. The boundary between home and work life became blurred. Employers need to factor this into employee well-being policies in the future.

Digital connectivity issues were also causing Ceredigion residents problems with the cost of internet access and the lack of digital skills or training opportunities to improve digital skills raised as key concerns. Employers could help with the cost of internet access if employees are/ were working from home. More training opportunities could also be provided moving forward to allow employees to develop and improve key digital skills to adapt to the developing digital environment.

Ceredigion County Council and national governments should review the impact and disruption caused by school closures on the education of children and young people to inform any future curriculum changes and general education policy.

Retrospectively, questions need to be asked, about whether the complete closure of schools and childcare centres was the best option. In addition to the disruptions to children's

education, the complete closure of schools brought more hardship and stress to families as parents had to home-school their children while working. So, additional educational and childcare support should have been made available to working parents. This is in addition to the support made available to critical-worker parents.

As discussed above, the pressure on families was further exacerbated by connectivity issues due to poor internet infrastructure and provision making life for many very challenging. This raises questions regarding the internet provision and infrastructure in Ceredigion and its ability to cope with the surge in usage seen during the pandemic. Children's education was further disrupted by poor internet connectivity and a lack of usable computing devices that had to be shared among family members.

When asked if respondents had experienced any digital connectivity issues during the COVID-19 pandemic, common responses included slow broadband speeds, a lack of reliable broadband or mobile signal, the cost of internet access and the lack of digital skills or training opportunities to improve digital skills. Digital accessibility was not only crucial for residents needing to work or home-school, but also for grocery and general online shopping. The number of residents that shopped online during the pandemic increased, and the digital connectivity issues made it difficult to shop online. Some residents who were not used to the internet and technology found online shopping difficult and would have benefited from training and support. Residents recommended more digital training opportunities for communities to increase their skillsets and optimise the use of digital platforms.

The cost of houses and housing shortages were other issues identified by local residents who wanted to move home during the pandemic. When asked for reasons for struggling to find a place to buy or rent 92% of respondents highlighted issues of affordability and a shortage of houses. The rising cost was seen to be one of the key issues impacting the ability to buy or rent a new property. This needs to be addressed by all public bodies including the local authority, who should use their influence to address the housing affordability issue and help Ceredigion residents buy or rent in the immediate future. There is a need to build more affordable houses for those starting off on the property market and prioritise houses for local people.

Ceredigion County Council and the national government need to consider the effects of the closure of sports facilities, parks, and footpaths during the pandemic. From the survey, 68% of the respondents stated that the lack, or loss of opportunities to attend social activities such as sports and social clubs, children's activities, swimming, and dance classes, impacted their day to day lives, and had a negative impact on their social lives and health. 37% of respondents felt they were unable to carry out their routine exercise and 42% felt that COVID-19 had negatively impacted their routine physical exercise, due to the closure of leisure centres and other community facilities in Ceredigion. These facilities were closed for a large proportion of the period from March 2020 to early 2022. The respondents wanted the facilities to be reopened and to be kept open.

Others found it difficult to exercise in their local area due to the inaccessibility of safe places to exercise, including many footpaths being closed and finding local roads too dangerous. In the event of future lockdowns, the council should consider the detrimental effects of curtailing exercise and footpaths should not be closed. Suggestions from residents for moving forwards included promoting cycling and introducing more cycle paths, which would make local roads and towns safer for exercise.

Parks and playgrounds in Ceredigion were also closed off to the public during the pandemic, coupled with footpath closures and leisure facilities being closed it became difficult for some to maintain children's physical exercise, which is vital for their health and wellbeing. Moving forward specific focus should be placed on supporting the development, health, and physical exercise of young people. If there are lockdowns in the future, their potential impacts on specific demographics need to be considered beforehand. The young people seemed to have been neglected during the pandemic and should be a priority.

Ceredigion residents reported restrictions to some health and social services due to the pandemic. This included difficulty in getting dental treatment or seeking non-COVID-19 related medical advice. Some respondents stated they had seen a decline in their health as a result of the restrictions.

The restrictions further increased the burden on those caring for their household members. Carers were particularly economically vulnerable because many had to quit their paid employment to limit outside contacts while they continued to care for the vulnerable in the household. Young carers faced a greater risk of poverty because the demand for care in their families left less time for them to pursue education or a career. 14% of respondents reported having to care for someone other than children during the pandemic. Issues relating to the care system in the UK were highlighted in narrative survey responses.

There is a need to continue to support clinically vulnerable, carers and young carers. This should include identifying areas of health and social care which have been adversely affected by the shift in focus to the treatment of COVID-19 patients and increasing the allocation of resources to them.

Feelings of isolation, loneliness, stress, work pressures, caring responsibilities and financial pressure caused by the lockdown have impacted many households and have had a detrimental effect on people's mental health and wellbeing. 55% of the respondents felt isolated and lonely during the pandemic. Mental health difficulties were experienced by 33% of respondents during the pandemic. The health and social care system need to cope with the increased demand for its services, in particular mental health services.

Although there was limited evidence of the use of foodbanks from the survey, other evidence indicates that the use of foodbanks had dramatically increased in Ceredigion during the COVID-19 pandemic. Factors such as the reduction in Universal Credit, the end of the Furlough Scheme, rising living costs and other effects of the pandemic resulted in more Ceredigion residents turning to foodbanks (Cambrian News, 2021). To cope with the increased demand at food banks, there is a need for a holistic approach to tackle the problem to help struggling families that do not have enough household income to survive. In the post-COVID-19 period, new policy initiatives to provide financial support to such families - for example, financial relief to cover household bills, council tax and other related expenses.

Finally, it is essential that there is support for NGOs and local charities that know local communities and provide targeted support to vulnerable members of the community and identify the needs within the community.

References

Advanced Television (2020) Survey: Connectivity Challenges During Pandemic https://advanced-television.com/2020/07/01/survey-connectivity-challenges-during-pandemic. Accessed on 12 November 2021.

Alon, T. Deopke, M., Olmstead-Rumsey, J. and Tertilt, M., (2020) The Impact of COVID-19 on Gender Equality – working paper.

Anand, K.B., Karade, S., Sen, S. and Gupta, R.M., 2020. SARS-CoV-2: Camazotz's curse. Medical Journal Armed Forces India, 76(2), pp.136-141.

Andersen, A.L., Hansen, E.T., Johannesen, N., Sheridan, A., 2020. "Pandemic, Shutdown and Consumer Spending: Lessons from Scandinavian Policy Responses to COVID-19." Working paper.

Bank of England (2020) How has COVID-19 affected the finances of UK households? | Bank of England. Accessed on 12 November 2021.

BBC (2020a) Food Bank Shortage Blamed on Coronavirus Panic, BBC News Available from https://www.bbc.com/news/uk-england-london-51837892. Accessed on 13 March 2020.

BBC (2020b) Stockpiling 'will Hit Vulnerable', Food Bank Warns, BBC News Available from: https://www.bbc.com/news/uk-england-beds-bucks-herts-51856592. Accessed on 13 March 2020.

BBC (2020c) Food parcels coming for vulnerable individuals [Internet]. BBC News Available from: https://www.bbc.com/news/av/uk-politics-51995298/coronavirus-minister-urges-food-shoppers-to-be-considerate. Accessed on 13 March 2020.

Bluedorn, J., Caselli, F., Hansen, N.J., Shibata, I. and Tavares, M.M., 2021. Gender and Employment in the COVID-19 Recession: Evidence on "She-cessions". IMF Working Papers, 95.

BMA (2022) COVID-19: Impact of the pandemic on healthcare delivery. https://www.bma.org.uk/advice-and-support/covid-19/what-the-bma-is-doing/covid-19-impact-of-the-pandemic-on-healthcare-delivery#:~:text=Health%20and%20care%20 systems%20across,unsuitable%20for%20effective%20 infection%20control. Accessed on 1 November 2022.

Cambrian News, 2021, Aberystwyth edition 11 November 2021. www.cambrian-news.co.uk Accessed on 12 November 2021.

Carrillo-Tudela, C., Clymo, A., Comunello, C., Jackle, A., Visschers, L. and Zentler-Munro, D., 2022. Search and Reallocation in the COVID-19 Pandemic: Evidence from the UK. Search and reallocation in the COVID-19 pandemic: Evidence from the UK - ScienceDirect. Accessed on 6 February 2023.

Cho, Seung Jin and Winters, John V., The Distributional Impacts of Early Employment Losses from COVID-19. Available at SSRN: https://ssrn.com/abstract=3602755. or http://dx.doi.org/10.2139/ssrn.3602755. Accessed on 16 May 2020.

De', R., Pandey, N., & Pal, A. (2020). Impact of digital surge during COVID-19 pandemic: A viewpoint on research and practice. International Journal of Information Management, 55, 102171.

Department of Work and Pensions (2022) Press release: New Mission to get 500 into work, https://www.gov.uk/government/news/new-jobs-mission-toget-500-000-into-work. Accessed on 5 March 2022.

Department of Work and Pensions (2022) Benefit Combinations data available from https://stat-xplore.dwp.gov.uk. Accessed on 5 March 2022.

Department of Work and Pensions (2020) Equality Analysis for uprating Local Housing Allowance rates to the 30th percentile of local rents https://www.gov.uk/government/publications/local-housing-allowance-uprating-equality-analysis-april-2020/equality-analysis-for-uprating-local-housing-allowance-rates-to-the-30th-percentile-of-local-rents. Accessed on 5 December 2022.

Fana, M., Torrejón Pérez, S. & Fernández-Macías, (2020) E. Employment impact of COVID-19 crisis: from short term effects to long terms prospects. Journal of Industrial and Business Economics 47, 391–410.

Furceri, D., Loungani, P., Ostry, J,D. And Pizzuto, P. (2020). COVID-19 will raise inequality if past pandemics are a guide. https://voxeu.org/article/COVID-19-will-raise-inequality-if-past-pandemics-are-guide. Accessed on 12 November 2021.

GOV.UK (2021) Claim tax relief for your job expenses https://www.gov.uk/tax-relief-for-employees/working-at-home. Accessed on 12 November 2021.

GOV.UK (2022) Guidance- Children of critical workers and vulnerable children who can access schools or educational settings https://www.gov.uk/government/publications/coronavirus-covid-19-maintaining-educational-provision/guidance-for-schools-colleges-and-local-authorities-on-maintaining-educational-provision#critical-workers. Accessed on 12 April 2022.

Grant, A. (2011) New Labour, welfare reform and conditionality: "Pathways to Work" for incapacity benefit claimants. PhD Thesis, Cardiff University.

HM Treasury (2020) Impact of COVID-19 on working household incomes: distributional analysis as of May 2020 Impact_of_COVID-19_on_working_household_incomes.pdf (publishing.service.gov.uk). Accessed on 6 February 2023.

HM Revenue and Customs (2021) Coronavirus Job Retention Scheme statistics https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-16-december-2021/coronavirus-job-retention-scheme-statistics-16-december-2021. Accessed on 6 February 2023.

Hossain MM, Tasnim S, Sultana A, Faizah F, Mazumder H, Zou L, McKyer ELJ, Ahmed HU, Ma P. Epidemiology of mental health problems in COVID-19: a review. F1000Res. 2020 Jun 23;9:636. doi: 10.12688/f1000research.24457.1. PMID: 33093946; PMCID: PMC7549174. Accessed on 6 February 2023.

Huremović, D., 2019. Brief history of pandemics (pandemics throughout history). In Psychiatry of pandemics (pp. 7-35). Springer, Cham.

IFS (2020) The effects of coronavirus on household finances and financial distress - Institute For Fiscal Studies - IFS. Accessed on 12 November 2021.

Kemp, P, A. and Davidson, J. (2010) Employability trajectories among new claimants of Incapacity Benefit, Policy Studies, 31:2, 203-221, DOI: 10.1080/01442870903429637. Accessed on 6 February 2023.

Knolle, F., Ronan, L. & Murray, G.K. The impact of the COVID-19 pandemic on mental health in the general population: a comparison between Germany and the UK. BMC Psychology9, 60 (2021). https://doi.org/10.1186/s40359-021-00565-y. Accessed on 6 February 2023.

Letzel, V., Pozas, M. and Schneider, C., 2020. Energetic students, stressed parents, and nervous teachers: A comprehensive exploration of inclusive homeschooling during the COVID-19 crisis. Open Education Studies, 2(1), pp.159-170.

Mansfield, K.E., Mathur, R., Tazare, J., Henderson, A.D., Mulick, A.R., Carreira, H., Matthews, A.A., Bidulka, P., Gayle, A., Forbes, H. and Cook, S., 2021. Indirect acute effects of the COVID-19 pandemic on physical and mental health in the UK: a population-based study. The Lancet Digital Health, 3(4), pp. e217-e230.

Mind (2022) What has the impact of coronavirus been on mental health? https://www.mind.org.uk/coronavirus-we-are-here-for-you/coronavirus-research. Accessed on 1 December 2022.

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M. and Agha, R., 2020. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. International Journal of Surgery, 78, pp.185-193.

ONS (2020a) Coronavirus and the social impacts on Great Britain - Office for National Statistics (ons.gov. uk). Accessed on 12 November 2021.

ONS (2020b) Coronavirus, the UK economy and society, faster indicators - Office for National Statistics (ons.gov.uk). Accessed on 12 November 2021.

ONS (2020c)Coronavirus and home-schooling in Great Britain (ons.gov.uk) Accessed on 12 November 2021.

ONS (2021a) Vacancies and jobs in the UK: September 2021 https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/jobsandvacanciesintheuk/september2021. Accessed on 21 October 2021.

ONS (2021b) RPI: Percentage change over 12 months - Food and catering https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/czbj/mm23. Accessed on 12 November 2021.

Palomino, J. C., Rodríguez, J. G., & Sebastian, R. (2020). Wage inequality and poverty effects of lockdown and social distancing in Europe. European Economic Review, 129, 103564.

Parnham, J.C., Laverty, A.A., Majeed, A. and Vamos, E.P., 2020. Half of the children entitled to free school meals did not have access to the scheme during the COVID-19 lockdown in the UK. Public health, 187, pp.161-164.

Platt, L. and Warwick, R., (2020). Are some ethnic groups more vulnerable to COVID-19 than others? The Institute for Fiscal Studies, pp.2020-2021.

Power, M., Doherty, B., Pybus, K. and Pickett, K., 2020. How COVID-19 has exposed inequalities in the UK food system: The case of UK food and poverty. Emerald Open Research, 2:11.

Sampath, S., Khedr, A., Qamar, S., Tekin, A., Singh, R., Green, R. and Kashyap, R., 2021. Pandemics throughout the history. Cureus, 13(9).

Serafini, G., Parmigiani, B., Amerio, A., Aguglia, A., Sher, L., & Amore, M. (2020). The psychological impact of COVID-19 on mental health in the general population. QJM: Monthly Journal of the Association of Physicians, 113(8), 531–537.

Statistics Wales (2021) Total social housing stock by local authority area and provider type, https://statswales.gov.wales/Catalogue/Housing/Social-Housing-Stock-and-Rents/totalsocialhousingstock-by-area-providertype. Accessed on 5 December 2022.

Statistics Wales (2022) Pupils eligible for free school meals by local authority, region and year https://statswales.gov.wales/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census/Provision-of-Meals-and-Milk/pupilseligibleforfreeschoolmeals-by-localauthorityregion-year. Accessed on 19 December 2022.

Summers, K., Scullion, L., Geiger, B, B. and Robertshaw, D. (2021) Claimants' experiences of the social security system during the first wave of COVID-19. Project report. Welfare at a Social Distance Project. https://www.researchgate.net/publication/349824872_Claimants'_experiences_of_the_social_security_system_during_the_first_wave_

of_COVID-19_PROJECT_REPORT_FEBRUARY_2021. Accessed on 8 February 2022.

The Children's Society, Hidden from view (2013): the experiences of young people living in England, May 2013. https://www.childrenssociety.org.uk/. Accessed on 5 March 2022.

The Guardian (2020) Cramped living conditions may be accelerating the UK spread of coronavirus Cramped living conditions may be accelerating the UK spread of coronavirus | Coronavirus | Accessed on 12 November 2021.

The Guardian (2021) Covid economic fallout leads to rise in postgraduate applications https://www.theguardian.com/education/2021/feb/16/covid-economic-fallout-leads-to-rise-in-postgraduate-applications. Accessed on 5 May 2022.

Thorell, L.B., Skoglund, C., de la Peña, A.G., Baeyens, D., Fuermaier, A., Groom, M.J., Mammarella, I.C., Van der Oord, S., van den Hoofdakker, B.J., Luman, M. and de Miranda, D.M., (2022). Parental experiences of home-schooling during the COVID-19 pandemic: Differences between seven European countries and between children with and without mental health conditions. European Child & Adolescent Psychiatry, 31(4), pp.649-661.

Trussell Trust (2021) Latest Stat - https://www. trusselltrust.org/wp-content/uploads/sites/2/2021/05/ State-of-Hunger-2021-Report-Final.pdf.

UK Parliament (2021) Clearing the backlog caused by the pandemic inquiry Health and Social Care Committee, House of Commons, https://committees.parliament.uk/work/1414/clearing-the-backlog-caused-by-the-pandemic. Accessed on 20 January 2022.

Van Lancker, W. and Parolin, Z., (2020). COVID-19, school closures, and child poverty: a social crisis in the making. The Lancet Public Health, 5(5), pp. e243-e244.

Wales Online (2021) More than one in five pupils in Wales receiving free school meals as thousands more became eligible during the pandemic, https://www.walesonline.co.uk/news/education/more-one-five-pupils-wales-20895136. Accessed on 12 November 2021.

Welsh Government (2021a) Labour Market Overview: November 2021, https://gov.wales/labour-market-overview-november-2021. Accessed on 22 November 2021.

Welsh Government (2021b) Students in higher education: September 2020 to August 2021 https://gov.wales/students-higher-education-september-2020-august-2021#:~:text=The%20number%20of%20 part%2Dtime%20undergraduate%20students%20 has%20increased%20by,compared%20to%20 23.6%25%20of%20undergraduates. Accessed on 9 May 2022.

Which? (2020a) Furloughed workers three times more likely to have missed bill payments https://www.which.co.uk/news/2020/08/furloughed-workers-three-times-more-likely-to-miss-bill-payments/. Accessed on 12 November 2021.

Which? (2020b) Banks banning furlough income on mortgage applications: what you need to know https://www.which.co.uk/news/2020/09/banks-banning-furlough-income-on-mortgage-applications-what-you-need-to-know/. Accessed on 12 November 2021.

Which? (2021) How is Coronavirus affecting house prices? https://www.which.co.uk/news/article/whats-happening-to-house-prices-aVCwl8l22pBe. Accessed on 12 November 2021.

Wong, J., Ezeife, N., Kudla, A., Crown, D., Trierweiler, R., Capraro, P., Tomazin, S., Su, H., Pham, T. and Heinemann, A.W., (2022). Employment Consequences of COVID-19 for People with Disabilities and Employers. Journal of Occupational Rehabilitation, pp.1-9.

Xiong, J., Lipsitz, O., Nasri, F., Lui, L.M., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A. and McIntyre, R.S., (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. Journal of Affective Disorders, 277, pp.55-64.

Yeandle, S. and Buckner, L. (2007) Carers, Employment and Services: time for a new social contract? London: Carers UK, https://wels.open.ac.uk/ research-project/caren/node/3092. Accessed on 25 January 2022.

Appendix 1: Definition of Critical Workers

The guidance below was taken from GOV.UK (2022).

Parents whose work was critical to the coronavirus (COVID-19) response included those who worked in health and social care and in other key sectors outlined in the following sections. Children with at least one parent or carer who was a critical worker could go to school or college if required, but parents and carers were encouraged to keep their children at home if they could.

1. Health and social care

This includes, but is not limited to, doctors, nurses, midwives, paramedics, social workers, care workers, and other frontline health and social care staff including volunteers; the support and specialist staff required to maintain the UK's health and social care sector; those working as part of the health and social care supply chain, including producers and distributors of medicines and medical and personal protective equipment.

2. Education and childcare

This includes childcare, support and teaching staff, social workers and specialist education professionals who remained active during the COVID-19 response.

3. Key public services

This includes those essential to the running of the justice system, religious staff, charities and workers delivering key frontline services, those responsible for management of the deceased and journalists and broadcasters who are providing public service broadcasting.

This includes: those essential to the running of the justice system, religious staff, charities and workers delivering key frontline services, those responsible for the management of the deceased and journalists and broadcasters who are providing public service broadcasting local and national government.

4. Local and National Government

This only includes those administrative occupations essential to the effective delivery of the COVID-19 response and essential public services, such as the payment of benefits

5. Food and other necessary goods

This includes those involved in food production, processing, distribution, sale and deliver, as well as those essential to the provision of other key goods (for example hygienic and veterinary medicines.

6. Public safety and national security

This includes police and support staff, Ministry of Defence civilians, contractor and armed forces personnel (those critical to the delivery of key defence and national security outputs and essential to the response to the COVID-19 pandemic), fire and rescue service employees (including support staff), National Crime Agency staff and those maintaining border security, prison and probation staff and other national security roles, including those overseas.

7. Transport

This includes those who kept the air, water, road and rail passenger and freight transport modes operating during the COVID-19 response, including those working on transport systems through which supply chains pass.

8. Utilities, communication, and financial services

This includes staff needed for essential financial services provision (including but not limited to workers in banks, building societies and financial market infrastructure), the oil, gas, electricity and water sectors (including sewerage), information technology and data infrastructure sector. Key staff working in the civil nuclear, chemicals, telecommunications (including but not limited to network operations, field engineering, call centre staff, IT, and data infrastructure, 999 and 111 critical services), postal services and delivery, payments providers and waste disposal sectors.

Appendix 2: The Impact of Covid-19 in Ceredigion: Household Survey

Section 1: Demographic Information	4. Which of the following best describes your ethnic group or background?
1. What is your age group?	○ White
O Under 16	Mixed or multiple ethnic groups
16 - 24 years	Asian or Asian British
25 - 44 years	Black, Black British, Caribbean or African
45 - 64 years	Other ethnic group
65+	Comer ething group
O Prefer not to say	5. In which town/city and country were you born?
2. What is your gender?	
O Male	6. How many children are there in your
○ Female	household?
Other	
O Prefer not to say	7. How many persons in your household are school-aged children?
3. What is your religion?	school-aged children:
Christian (all denominations)	
Buddhist	8. How many adults are there in your household?
Hindu	
Muslim	
Sikh	9. Do you live with your spouse/partner?
Jewish	Yes
Atheist	O No
O No religion	
Prefer not to say	10. How many adults aged 65 and above are
Other	there in your household?
	¬ L
	11. Are you retired?
	Yes
	O No

12.	Are you in full-time education?	17. Are you seeking to move to a new house?
\bigcirc	Yes	O Yes
\bigcirc	No	○ No
13.	What is your household income? Up to £15,000	18. If your answer to question 17 above is 'yes', please select the options below that apply to you:
	£16,000 to £25,000 £26,000 to £35,000 £36,000 to £45,000 £46,000 to £55,000 £56,000 to £65,000	Move closer to town Move further away from town Move into a bigger property Move into a smaller property Need more space for working from home Move to an area with a better broadband connectivity
Sec	ction 2: Living Conditions	More green spaces
	How would you describe your current ommodation? Owned outright Owned with a mortgage or loan Part-own and part-rent (shared ownership) Socially rented Privately rented Privately rented - living in house in multiple occupation Other	Onsite services in towns or villages 19. Please tick if any of these apply to you: (please tick all that apply) I am struggling to find a house to buy I am struggling to sell my current home I am struggling to find a home to rent 20. If you ticked 'yes' to any of the options in question 19, could you tell us the reasons for this?
15.	Do you live with your parents? Yes No	
	Which of the following best describes the where you live?	
\bigcirc	Countryside	
\bigcirc	Town	
\bigcirc	Village	

Sec	ction 3: Employment Status	Decided or asked to self-isolate on less than full company pay
	Were you in paid employment before the ID-19 pandemic began in March 2020?	Decided or asked to self-isolate with statutory sick pay
\bigcirc	Yes	Decided or asked to self-isolate without company or statutory pay
\cup	No	On parental leave
	Were you in self-employment before the /ID-19 pandemic began in March 2020?	Caring for children or other members of the family
\bigcirc	Yes	25. Have you registered for unemployment
\bigcirc	No	benefit?
		Yes
	Were you in both paid and self-employment ore the COVID-19 pandemic began in March O?	O No
\bigcirc	Yes	26. Are you on the government Universal Credit scheme?
\bigcirc	No	Yes
		O No
	If you were in paid employment or self-	
beg	ployment before the COVID-19 pandemic an in March 2020, please select which of the ons below apply to you since then:	Section 4: Industry Sector Information
beg	an in March 2020, please select which of the	
beg	an in March 2020, please select which of the ons below apply to you since then:	Section 4: Industry Sector Information 27. What is your occupation?
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall	27. What is your occupation? 28. Is your job classified as a 'key worker' during
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic?
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the employer with some prospect of a recall Permanently laid off or made redundant by	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic? Yes
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the employer with some prospect of a recall Permanently laid off or made redundant by employer	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic? Yes No
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the employer with some prospect of a recall Permanently laid off or made redundant by employer Employer cut work hours Continue to work the same hours as before	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic? Yes
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the employer with some prospect of a recall Permanently laid off or made redundant by employer Employer cut work hours Continue to work the same hours as before the COVID-19 pandemic outbreak Working from home since the COVID-19	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic? Yes No
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the employer with some prospect of a recall Permanently laid off or made redundant by employer Employer cut work hours Continue to work the same hours as before the COVID-19 pandemic outbreak Working from home since the COVID-19 pandemic began	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic? Yes No
beg	an in March 2020, please select which of the ons below apply to you since then: The company has folded/closed down Laid off by employer with a specific recall date Laid off or made redundant by the employer with some prospect of a recall Permanently laid off or made redundant by employer Employer cut work hours Continue to work the same hours as before the COVID-19 pandemic outbreak Working from home since the COVID-19 pandemic began Put on furlough and now returned to work	27. What is your occupation? 28. Is your job classified as a 'key worker' during the COVID-19 pandemic? Yes No 29. Which Industry sector are you employed?

due t	f you are currently working from home to the COVID-19 pandemic, will you be rning to your normal place of work after the lemic?	34. Are you eligible for any of the government's self-employment business support schemes? Yes
\bigcirc	Yes No	○ No
\bigcirc	Don't know	35. Have you applied for any of the government's self-employment business support schemes?
from	f not previously self-employed, has working home encouraged you to start your own ness?	○ Yes○ No
\bigcirc	Yes No	36. If your answer to question 35 above is 'yes', please list the schemes:
Sec	tion 5: Self-employment	
	f you are self-employed, please select all ons below which apply to you:	
	I closed my business permanently because of the COVID-19 pandemic	
	I applied for bankruptcy because of the COVID-19 pandemic	
	I closed my business temporarily because of the COVID-19 pandemic	
	My business customers have declined due to general COVID-19 restrictions	
	My business was directly affected by a shortage of supplies it needs to run	
	My business revenue declined due to reduced demand for my products or services during the COVID-19 pandemic	
	My business revenue has risen due to increased demand for my products or services during the COVID-19 pandemic	
	I am presently self-employed but seeking paid employment due to falling demand for my products or services	37. If your answer to question 35 above is 'yes', was your application successful? Yes
	I need access to work hubs/premises away from home, due to problems working from home	O No

38. If your answer to question 37 is 'yes', please list which of your applications were successful:	41. If you have not returned to your pre- COVID-19 job or do not plan to return, please tell us why:
Section 6: General Employment	42. If you have not returned to your pre-
39. Have you returned to your pre-COVID-19 job?	COVID-19 job or do not plan to return, have you secured new employment? Yes
○ Yes ○ No	O No
40. Do you plan to return to your pre-COVID-19 job? Yes No	43. If you have secured new employment, is it in the same industry sector? Yes No
O INO	44. If you have not secured new employment, do you plan to do so? Yes No

card repayment holidays because of the COVID-19 pandemic? 45. Has your household income increased during the COVID-19 pandemic? Yes Yes No No 51. Have you had to make use of food banks during the COVID-19 pandemic period? 46. Have you had to reduce your consumption because of the COVID-19 pandemic? Yes Yes No No 52. If your answer to question 51 above is 'yes', how often did you make use of food 47. Has your spending habit changed because of banks during the COVID-19 pandemic? the COVID-19 pandemic? Yes No 48. Please list what you are spending more on: Section 8: Health 53. Did you go into shielding because of 49. Please list what you are spending less on: COVID-19? Yes No 54. Have you experienced any mental health issues during the COVID-19 period? Yes No

50. Have you taken mortgage, loan, or credit

Section 7: Income and Consumption

pandemic?	Housing Support (Discretionary Housing Payments, Council Tax Reduction Scheme)
Yes	☐ Housing Advice Services
○ No	Food Banks
	Local Coronavirus Support Group
56. Has your family experienced hardship during the COVID-19 pandemic?	Other
O Yes	
O No	
	62. Were you using these services before the COVID-19 pandemic?
57. Were you able to do your routine physical	
exercise during this COVID-19 period?	○ Yes
○ Yes	○ No
O No	
	Section 9: Social Capital
58. Has the COVID-19 pandemic negatively impacted your routine physical exercise?	63. Are you caring for someone other than your
Yes	children since the COVID-19 pandemic?
O No	O Yes
	○ No
59. Have you developed any serious ailments during the COVID-19 pandemic?	64. If your answer to question 63 above is 'yes',
Yes	please select all the options below that apply to you:
○ No	☐ I am caring for adult children
60. Have you accessed community health	I am caring for aged parents, grandparents, or parents-in-law
services during the COVID-19 pandemic?	☐ I am caring for siblings
	8 8 8 8 8
Yes	☐ I am caring for a spouse or partner
○ Yes○ No	I am caring for a spouse or partner
No61. Have you used any of the following services	I am caring for a spouse or partner I am caring for a former spouse or partner I am caring for friends
O No	I am caring for a spouse or partner I am caring for a former spouse or partner I am caring for friends I am caring for neighbours
O No 61. Have you used any of the following services during the COVID-19 pandemic? (please tick all that apply)	 I am caring for a spouse or partner I am caring for a former spouse or partner I am caring for friends I am caring for neighbours I am caring for someone else I receive payment for caring for
No 61. Have you used any of the following services during the COVID-19 pandemic? (please tick all	 I am caring for a spouse or partner I am caring for a former spouse or partner I am caring for friends I am caring for neighbours I am caring for someone else

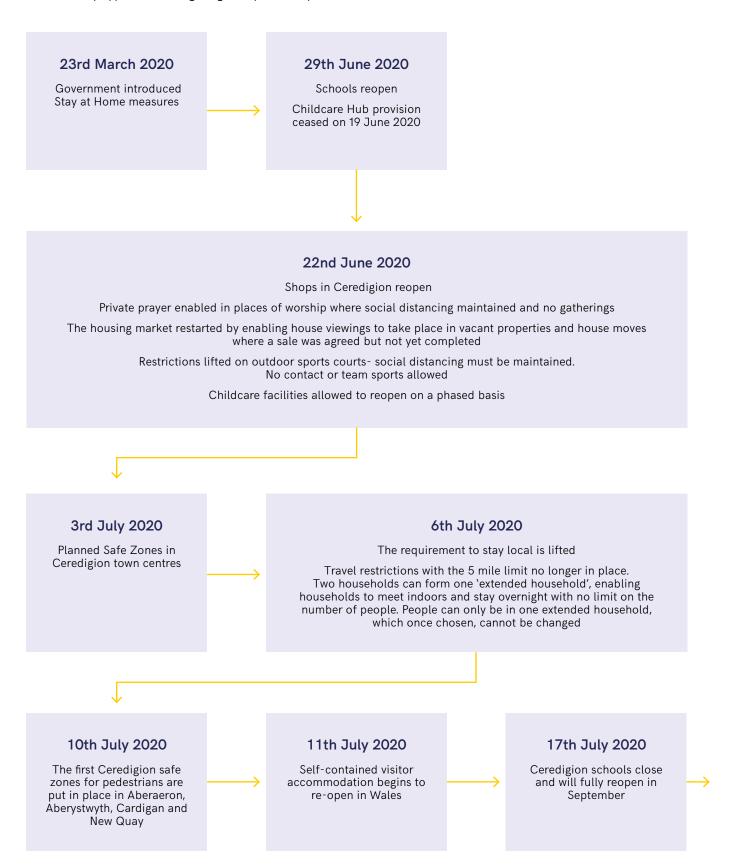
65. Did someone from outside of your household help you during the COVID-19 pandemic?	72. Do you have usable computer equipment in your household?
Yes	Yes
O No	O No
66. Did you shop for food online during the COVID-19 pandemic?	73. Do you have enough computers for everyone that needs them in your household during the day?
Yes	
○ No	Yes
	○ No
67. If your answer to question 66 above is 'yes', did you shop for foodstuffs online before the COVID-19 pandemic? Yes	74. Have you had to borrow computer equipment for home-schooling or work during the COVID-19 pandemic?
○ No	Yes
	○ No
68. Did you home-school your children during the COVID-19 pandemic?	75. Have you experienced any of the following digital connectivity issues during the COVID-19
Yes	pandemic?
O No	Slow broadband speed
69. If your answer to question 68 above is 'yes',	Lack of reliable broadband / mobile signal
please list the ages of the children you home-	Lack of digital skills
schooled	Lack of training opportunities in digital skills
70. And the simulation of the	Lack of awareness of schemes to help improve digital access
70. Are you a single parent with caring responsibilities?	Cost of broadband / mobile access
	Other
Yes	
○ No	
71. Are your children eligible for the government free school meal scheme?	76. Did your routine weekly activities change during the COVID-19 pandemic? Yes
Yes	
○ No	○ No

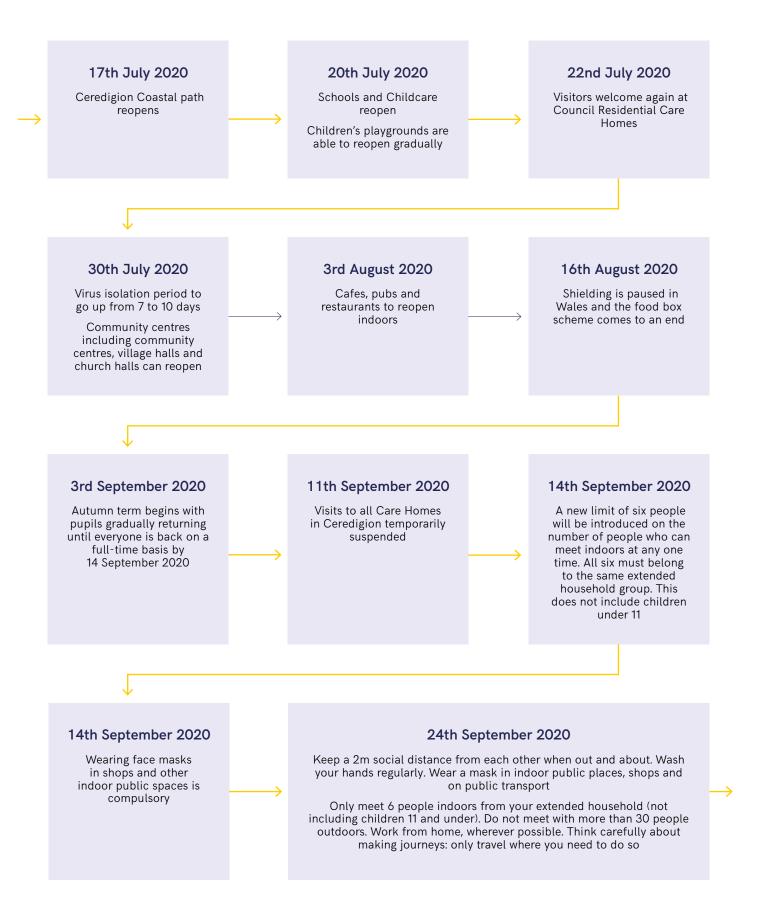
77. If your answer to question 76 is 'yes', please list the activities that you have added to your usual schedule:	80. If your answer to question 79 is 'yes', what were the things you were worried about? Please list them:
78. If your answer to question 76 is 'yes', please list the activities that you have removed from your usual schedule:	81. Did you treat the subsequent lockdowns the same as the first? Please explain:
Section 10: General Information	
79. Were you worried when the first lockdown was lifted?	
○ Yes ○ No	

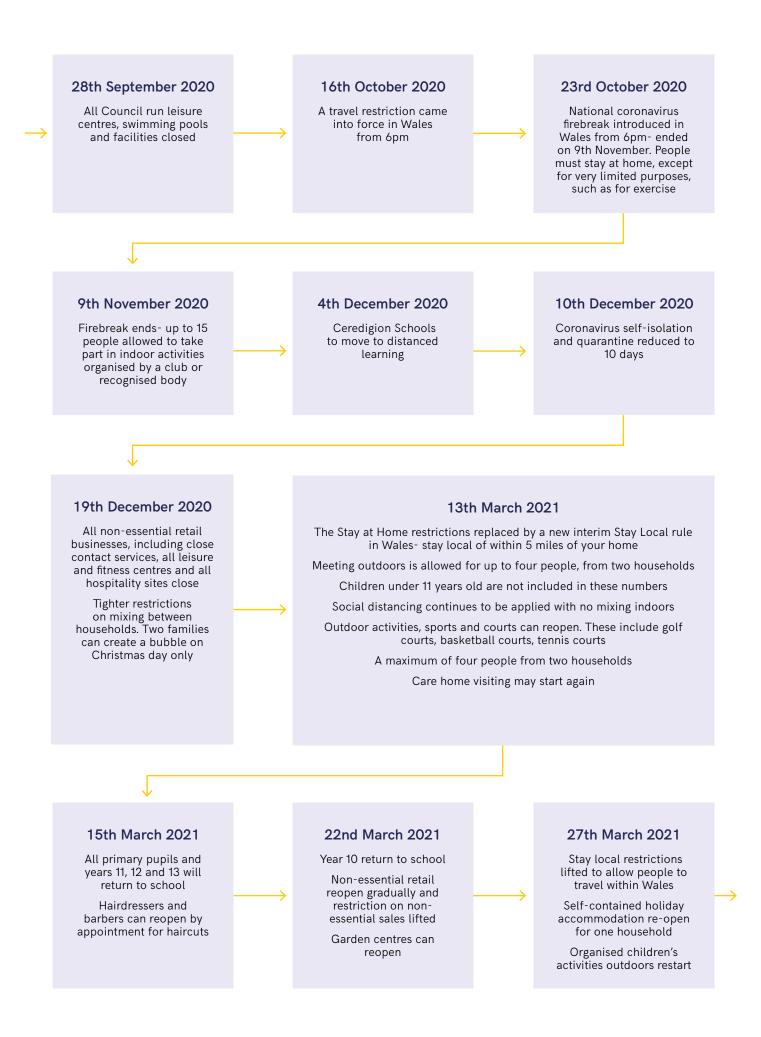
82. What did you find to be the benefits of the lockdown? Please list them:	84. Do you have any suggestions as to how Ceredigion moves forward to deal with the impacts of any future pandemic?
	Yes
	O No
	85. If your answer to question 84 above is 'yes', please list them:
83. What did you find to be the drawbacks of to lockdown? Please list them:	the
	86. Would you like to be involved in a focus group to explore some of the impacts of the COVID-19 pandemic in Ceredigion in more detail?
	Yes
	O No
	87. If you answered yes to question 86, please provide your contact details so we can contact you:

Appendix 3: Ceredigion County COVID-19 pandemic Timeline

(Source: https://www.ceredigion.gov.uk/resident/coronavirus-covid-19)







12th April 2021

All remaining nonessential retail and close contact services reopen

24th April 2021

Six people able to meet outdoors in Wales while outdoor hospitality allowed to reopen from 26th April 2021

17th May 2021

Wales will move into alert level Two

Indoor hospitality can re-open – 6 people from up to 6 households (not including children under 11) can book

All holiday accommodation can re-open fully

Entertainment venues, including cinemas, indoor-play centres and areas, amusement arcades, and theatres can re-open. Cinemas, theatres concert halls and sports grounds can sell food and drink as long as it is consumed in a seated area for watching the performance

Indoor visitor attractions, including museums and galleries can re-open

Up to 30 people can take part in organised indoor activities and up to 50 people in organised outdoor activities. This includes wedding receptions and wakes

International travel resumes

17th July 2021

Wales move fully into alert level One

Up to six people can meet indoors in private homes and holiday accommodation

Organised indoor events can take place for up to 1,000 seated and up to 200 standing

Ice rinks can reopen

New rules for children's residential activity centres so children in groups of up to 30 can visit

7th August 2021

All adults who have been fully-vaccinated no longer have to self-isolate if they are identified as close contacts of someone with coronavirus

7th August 2021

Wales moves to alert level Zero

At alert level zero, all restrictions on meeting with others removed and all businesses able to open

Everyone must continue to isolate for 10 days if they have COVID-19 symptoms or if they have a positive test result

Face coverings continue to be required in most indoor public places in Wales, including on public transport, in shops and in healthcare settings

5th September 2021

The daily road closures in Aberaeron, Aberystwyth, Cardigan and New Quay come to an end, and the 24 hour closure on Market Street, Aberystwyth

11th October 2021

People required to show the NHS COVID pass to prove they are either fully vaccinated or have a recent negative Lateral Flow Test to attend: nightclubs, indoor non-seated events where over 500 people are mixing closely for prolonged periods, outdoor non-seated events where over 4,000 people are mixing closely for prolonged periods, any event of more than 10,000 people

15th November 2021

Need a COVID Pass to go to the cinema, theatre, night clubs and large events in Wales

20th December 2021

Ceredigion Schools move to distanced learningreturn to school new school term in Ceredigion begins for pupils on 7th January 2022

26th December 2021

The alert level Two measures will mean:

A general requirement of 2m social distancing in all premises open to the public and workplaces, where reasonable. The rule of six will apply to gatherings in regulated premises, such as hospitality, cinemas and theatres

All licensed premises will need to take additional measures to protect customers and staff, including table service and collecting contact details

Large events will not be allowed indoors or outdoors. The maximum number of people who can gather at an indoor event will be 30 and 50 outdoors. There will be an exception for team sports, up to 50 spectators will be able to gather, in addition to those taking part. There is also an exception for events involving children

Nightclubs will also close on Boxing Day

Face coverings will be required in hospitality settings at all times apart from when seated

2nd January 2022

Self-isolation period reduced

People who test positive for Covid-19 able to leave self-isolation after five full days if they have two negative lateral flow tests

28th January 2022

Wales completes move to alert level Zero

Some important protections will remain in place at alert level Zero, including mandatory face coverings in most indoor public places, including on public transport

18th February 2022

It is no longer a legal requirement to show a COVID Pass to enter large indoor and outdoor events, nightclubs, cinemas, theatres and concert halls

